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External Review Team Charge

This self-study document was prepared by a faculty committee for the Academic Program Review (APR) of the Department of Agricultural Economics (AGECO). The committee drew data from many sources and engaged faculty, and staff in the process of identifying and analyzing the important issues outlined in the report. The Academic Program Review (APR) committee consulted members of the department’s various committees including Faculty Advisory Committee (FAC), Undergraduate Advisory Committee (UAC), Graduate Advisory Committee (GAC) and held meetings with Staff members of the graduate and undergraduate offices. In addition, suggestions by individual faculty as well as leaders of various undergraduate minor programs, specifically, the Weston Sales Marketing, Rural Entrepreneurship and Certified Financial Planning programs were solicited. This Academic Program Review includes the review of the Intercollegiate Faculty of Agribusiness (IFA) and is being conducted by one External Review Team so that the many program synergies, shared resources and joint engagements to achieve our common objectives can be evaluated in a more complete fashion.

There are four (4) degrees currently offered by the Department of Agricultural Economics: a Bachelor of Science in Agricultural Economics, a Bachelor of Science in Agribusiness, thesis and non-thesis options in the Master of Science in Agricultural Economics, and a Doctor of Philosophy in Agricultural Economics. The IFA offers two degrees, a Master of Agribusiness (MAB) and a Doctor of Philosophy in Agribusiness and Managerial Economics (ABME). The chart below provides information on the number of degrees the department has awarded over the last 5 years.

<table>
<thead>
<tr>
<th>Degree Offered</th>
<th>Degrees Awarded Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12-13</td>
</tr>
<tr>
<td>B.S.</td>
<td>253</td>
</tr>
<tr>
<td>M.S.</td>
<td>15</td>
</tr>
<tr>
<td>MAB</td>
<td>20</td>
</tr>
<tr>
<td>ABME</td>
<td>-</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>11</td>
</tr>
<tr>
<td>Totals</td>
<td>288</td>
</tr>
</tbody>
</table>

The review team is requested to examine the undergraduate program, the graduate program, and the teaching and research programs for graduate and undergraduate students of the Department of Agricultural Economics and the Intercollegiate Faculty of Agribusiness using the materials in this self-study, information you gain through personal interactions while visiting Texas A&M University, and any additional information that you might request. While evaluating the program, please consider the allocation of resources within the department and the IFA (both human and fiscal) and the absolute level of support the department and the IFA receives from the university. Within the broad charge of recommending ways the department can continue to improve are some specific questions that we would like you to address. These are listed below.
Charge to External Reviewers

- Based on the data / information provided in the self-study report or gathered by the review team, what are the department's overall strengths and weaknesses?

- How well do the department's strategic goals align with those of its college and with those of Texas A&M University?

- How would you compare this department with its peers? Specifically, is the curriculum directly related and appropriate to the mission and goals of the institution?

- What improvements (including student learning and faculty development) has the department made since the previous program review?

- With only current resources or a modest infusion of new ones, what specific recommendations could improve the department's performance, marginally or significantly?
Executive Summary

The faculty, staff, and students of the Department of Agricultural Economics (AGECO) are pleased to welcome you to Texas A&M University. We thank you for your time and commitments in not only undertaking this external review, but also the opportunities for the department members to be self-reflective of our commitments to the strategic goals and priorities. Through our self-assessment, our analysis has shown that our program’s strategic goals and priorities align with college and institutional strategic plans. Our research and extension impacts and student learning outcomes create a path forward for excellence. As a Land Grant institution, the department engages stakeholders in Teaching, Research, Extension, and Service. Our programs and initiatives have been developed to better prepare our students to become global leaders and shapers of the future of Texas, US agriculture and the global community. Our research programs are diverse and cutting-edge to provide producers, agribusiness managers, policy makers and other stakeholders with relevant, objective and timely results for decision making. In extension, we strive to provide businesses, community leaders, policy makers and other decision makers with high quality, relevant, objective and timely information and decision aids.

A number of highlights of this self-assessment are worth noting and are further detailed in the subsequent sections of the report:

1. Enrollment in AGEC and AGBU has grown from 577 in 2012 to 946 in 2017 where the majority of this growth is attributed to AGEC. However, it should be noted enrollment numbers to AGBU are capped at 400 by admission requirements at Mays Business School.

Figure 1. Growth of Undergraduate Programs in AGEC and AGBU, 2012 to 2017
2. An analysis of Student Learning outcomes (SLOs) by the Department of Agricultural Economics shows that the department has:
   a. An ongoing and integrated planning and evaluation in place
   b. An assessment process in place that promotes continued improvement of its programs
   c. Identifiable measures of expected outcomes
   d. Evidence of improvement based on analysis of results.

3. The department has exceeded the goal for the 3-year Full Time Transfer (FTT) undergraduate graduation rates, 5-year Full Time (FT) Doctoral graduation rates, and targets for student engagement in High Impact Practices.

4. Graduate enrollments are in general decline, especially those of the AGEC programs. The total number of PhD students has been maintained at the desired level. The PhD in AGEC has declined as more students have chosen the PhD in ABME. The MS student numbers in AGEC have declined in recent years as the university, college and department here put more emphasis and resources in recruiting PhD students.

Figure 2. Enrollment of Graduate Programs 2012-2017

5. There is a general decline in faculty numbers from approximately 80 FTEs from the previous self-assessment report to 68 FTEs reported in this current assessment. Such declines require a fundamental prioritization of its strategic objectives and goals. Such declines need to be also considered within the context of growth in the enrollment of the department’s undergraduate degree as well as current trends in the graduate program.
Introduction to Degree Program

History of Degree Programs

Agricultural Economics courses at Texas A&M University were first offered in the divisions of General Studies (Department of Economics) and Agriculture (Departments of Agronomy and Animal Science). In 1905, the Division of Agriculture offered a course in farm management which covered topics in farm equipment selection and labor management; offerings in 1908 included topics in cost of production; in 1912, with a course offering “A Comprehensive Study of the Farm from an Economic and Business Viewpoint.” In 1914, the Agronomy Department, within the Division of Agriculture, offered a four-year option labeled Farm Management and Marketing. In the Division of General Studies (Department of Economics), course offerings, as early as 1914, included agricultural economics courses in rural economics, cooperative credit and marketing, and rural problems.

The Department of Agricultural Economics at Texas A&M University came into existence in 1922 when a BS in Agricultural Economics was offered. A preexisting BS in Agricultural Administration became part of the new department’s offerings. Course offerings in the Agricultural Economics program included topics in accounting, agricultural economics, statistics, transportation, and marketing.

While the Department of Agricultural Economics at Texas A&M University was officially founded in 1922, it evolved and combined, like the profession, from other disciplines and departments. In subsequent years, it also fostered other departments and curricula at the university while staying solidly rooted in the land grant tradition. Our mission is to encourage people in the use of economic analysis for making decisions involving agriculture, agribusiness, natural resources, and communities. Today our department is home to approximately 44 faculty and 4 instructional / lectures / professor of practice involved in teaching, research and extension. Of the 44 faculty, 25 are ranked as full Professors with 12 of tenured rank; 10 associate professors with 4 with tenured rank; and 9 assistant professors with 3 that are tenure-track. The department offers undergraduate degrees in Agribusiness and five different options in Agricultural Economics. We also provide graduate programs at the MS and PhD level in both Agricultural Economics and Agribusiness. Our students come from many parts of the United States and from countries all over the world.

Undergraduate Program

The department offers two degree programs at the undergraduate level: Agribusiness (AGBU) and Agricultural Economics (AGEC). The Agribusiness (AGBU) degree program was added in 1992 to the existing Agricultural Economics (AGEC) degree program. The Agricultural Economics (AGEC) degree program was revised approximately fourteen years ago to include options to better inform prospective students of the potential career opportunities under this degree program. These options include: 1) Finance and Real Estate, (2) Food Marketing Systems, (3) Policy and Economic Analysis, and (4) Rural Entrepreneurship. In addition to these degree programs, the department offers a Certificate in International Trade and Agriculture that is open to all majors. In 2013, the department introduced a Financial Planning
certificate program that has been accredited by the Financial Planning Board of Standards. Due to its growth and demand, this certificate program became an academic minor in 2015. The undergraduate program organizes an honors program that has seen impressive growth over the years. The department has expanded professional opportunities for students by coordinating some of its programs with other departments and colleges. The department currently has a 3+2 arrangement with the George Bush School of Government that allows students to obtain a B.S. in Agricultural Economics in 3 years and to obtain a Master of Public Service and Administration (MPSA) graduate degree with a track emphasis in public policy analysis (PPA) in five years from the Bush School. A similar arrangement with the Mays School of Business allows our students to obtain a B.S. in Agricultural Economics and a Masters in Finance (M.S.) with emphasis in Banking. These joint undertakings have been immensely successful.

Graduate Program

Graduate degree programs of the department are well established and closely linked to research and extension education activities. The graduate degree program consists of Master and PhD degrees in Agricultural Economics and Agribusiness. The Agricultural Economics (AGEC) degree programs includes: 1) Masters of Science -both thesis and non-thesis- and 2), PhD in Agricultural Economics. The Master of Science degree provides professional training for students seeking the skills in marketing, policy analysis, and decision making needed in today's business world. The PhD degree in Agricultural Economics is tailored to produce highly skilled applied economists focused on quantitatively-based economic research and analyses.

With respect to the Agribusiness graduate degree programs, the Intercollegiate Faculty of Agribusiness (IFA) was established in 1999 to provide governance of the Master of Agribusiness (MAB) degree program and in 2008 the Agribusiness and Managerial Economics (ABME) PhD program. The Intercollegiate Faculty of Agribusiness is jointly administered by the College of Agriculture and Life Sciences and Mays Business School. The mission of the Master of Agribusiness program is to encourage the application of economic reasoning to the analysis and communication of issues involving the allocation of resources to the food, feed and fiber systems in Texas, the nation and worldwide. With the combination of rigorous course work, frequent interaction with industry, and professional development seminars, students graduate from the program with a strong foundation that prepares them to be leaders in the food and agribusiness sectors. The MAB program has maintained a consistent enrollment of approximately 40 students each fall semester. This PhD degree program accepted its first student in 2008 and currently there are 12 students enrolled in the fall 2017. In addition, the first two graduates have completed the Agribusiness PhD in May 2017 and August, 2017.
Details of these undergraduate and graduate programs are described in the later portion of this self-study.

While an important focus of the APR is in the assessment of the department’s degree program, it is also important to recognize the research and extension activities of this department. This is because the graduate programs, especially the PhD degree program, is strongly tied to the research and extension programs in the department.

**Research Program**

The research programs in the Department of Agricultural Economics are focused on the areas of natural resource and environmental economics, markets and information economics, experimental and behavioral economics, agricultural marketing, and finance agribusiness management. Research programs in the department are funded through the university, Texas A&M AgriLife Research, grants, and contracts. Many research projects have also emphasized multidisciplinary collaborations.

**Extension Program**

Extension education programs within the department respond to the increasing complexity of the issues facing agriculture, agribusiness, and rural communities. This complexity arises, in part, from the increased industrialization and globalization of the agricultural sector. On-going, in-depth programs to address needs of farmers, ranchers, agribusinesses, and communities are nationally recognized in agricultural policy, financial and risk management assistance, and marketing education. Success in obtaining external grants, contracts, and user fees has contributed to the development of these highly innovative programs.

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**Summary of Degree Programs**

- Bachelor of Science, Agricultural Economics (AGEC)
- Bachelor of Science, Agribusiness (AGBU)

- Master of Science, Agricultural Economics (MS)
- Masters of Agribusiness (MAB)

- Doctor of Philosophy, Agricultural Economics (PhD, AGEC)
- Doctor of Philosophy, Agribusiness and Managerial Economics (ABME)

- Bachelor of Science, Agricultural Economics (AGEC) and Master in Public Service and Administration (MPSA), Bush School.

- Bachelor of Science, Agricultural Economics (AGEC) and Master of Science (M.S.), Finance (Banking option), Mays School of Business.
Strategic Plans, Mission, and Goals

Texas A&M University Strategic Plan: Vision 2020

Mission
Texas A&M University’s strategic plan, “Vision 2020: Creating a Culture of Excellence,” outlines 12 imperatives in achieving its vision and mission. In 1999, the university identified 12 specific imperatives where the university plans to achieve these imperatives or goals target over the next two decades. In reaching a half way milestone of 2008, Texas A&M focused on the development of the Academic Master Plan 2010-2015, whose intention is to build on the accomplishments of the previous decade and to reinforce the university’s commitment to Vision 2020. A revised strategic plan supporting the ideas of Vision 2020 was created and can be found on the Office of Provost website, vision2020.tamu.edu.

The Twelve Imperatives

1. Elevate Our Faculty and Their Teaching, Research, and Scholarship
2. Strengthen Our Graduate Programs
3. Enhance the Undergraduate Academic Experience
4. Build the Letters, Arts, and Sciences Core
5. Build on the Tradition of Professional Education
6. Diversify and Globalize the A&M Community
7. Increase Access to Knowledge Resources
8. Enrich Our Campus
9. Build Community and Metropolitan Connections
10. Demand Enlightened Governance and Leadership
11. Attain Resource Parity with the Best Public Universities
12. Meet Our Commitment to Texas
Academic Master Plan 2010-2015

The Master Plan outlines three fundamental components: Teaching-Learning Roadmap, Research Roadmap, and Engagement Roadmap. Common to all three roadmaps will be overarching enablers of success, including:

- Developing human potential and diversity at Texas A&M
- Recruiting and mentoring for excellence
- Enhancing support systems (campus-wide research centers or institutes, interdisciplinary programs, learning communities, technology mediated instruction, etc.)
- Quality of life
- Engaging and integrating international programs and globalization endeavors
- Enhancing facilities and infrastructure
- Marshalling financial resources
- Providing comprehensive offerings in service of the state and beyond

Detailed information on Texas A&M University’s Strategic Plan, Vision 2020, is available at http://vision2020.tamu.edu/.

College of Agriculture and Life Sciences Strategic Plan

Mission

The vision of the College of Agriculture and Life Sciences (COALS) is to foster a stimulating educational environment that expands knowledge through discovery research and engages students in innovative learning experiences that empower them to serve and lead in our increasingly global society.

Vision

- Provide preeminent programs and people that are responsive to a diverse and growing clientele and fulfill our land-grant mission of teaching, research, and service.
- Engage outstanding faculty, staff, and students from a multitude of backgrounds and cultures in a positive and stimulating work environment.
- Create inspired teaching programs that motivate, excite, and reward students and prepare them to contribute to an ever-changing and increasingly global society.
- Foster impactful research that will draw on faculty excellence and involve student training to both increase basic knowledge as well as apply those discoveries to meet the needs of society.

The 2015-2020 College Strategic Plan highlights a commitment to the following strategic priorities:

- Feeding our world
- Protecting our environment
- Improving our health
• Enriching our youth
• Growing our economy

Detailed information on COALS Strategic Plan is available at http://aglifesciences.tamu.edu/gc2/wp-content/uploads/sites/25/2016/02/AgLifeSciences-StrategicPlan_2015.pdf

Department of Agricultural Economics Strategic Plan

Our Vision

The Department of Agricultural Economics vision is to be a premier institution developing people. There are 3 pillars to the departmental mission: education, research, and leadership.

Our Mission

The Department of Agricultural Economics mission is to engage people in the use of economic analysis for making decisions involving agribusinesses, natural resources, and communities through the pursuit of learning, leadership, diversity, professional development, and excellence.

Our Discipline

The discipline of agricultural economics is concerned with improving the economic rationality of decisions made within the agriculture, food, fiber, natural resource, and public sectors of the economy. This includes both group decision making and individual firm decision making. Policy analysis provides input into group decision making processes at the federal, state, and community levels. Work in management, marketing, and finance, for example, provides input to the decisions of individuals and business firms. In today's information-based economy, one of the department's most important roles is to create, apply, interpret and communicate new knowledge for the well-being of society. Economics also plays a key role in enhancing the value of publicly funded research. Economists provide research institutions with the tools and analysis they need to be accountable to society and better able to set research priorities and design research programs that are consistent with public policy objectives while meeting the standards of good science.

The department’s vision and mission statements are compatible with the University Strategic Plan and COALS 2015–2020 Strategic Plan.

Goals and Priority Objectives

1. Respond to high-priority issues facing society in agribusiness (including food and fiber production, supplying inputs, processing products, and marketing), natural resources, environmental quality, and communities.
2. Teach students how to use economic and business principles and develop their leadership and communication skills to prepare them for employment and to continue life-long learning.
3. Conduct applied research programs to analyze business and public policy issues and respond to high-priority societal needs.
4. Enhance the use of economic principles and research methods in solving economic problems through disciplinary research and graduate education.
5. Develop targeted extension and outreach educational programs to deliver relevant information and teach the use of economic and business principles in making decisions.
6. Collaborate with scientists and educators in other disciplines to incorporate economic analysis into multi-disciplinary programs.
7. Develop a network with former students to enhance student learning experiences and placement and to facilitate achievement of department goals.

Figure 3. Developing a Network with Former Students – Tyrus R. Timm Honor Registry
Priority Objectives

Several priority objectives will be targeted to support and implement the vision, mission, and goals outlined for the department. These objectives describe the targets for specific actions. They are quantifiable interim steps toward achieving the department’s mission and goals. They include teaching, research, and extension dimensions. The objectives are organized under two headings: Program Objectives and Operational Objectives. The Program Objectives relate to the changing needs and subject matter emphases for the future. They speak to changing program content and include university-related issues related to internationalization (student, faculty and staff) and information technology. These objectives are not listed in order of importance.

Program Objectives

1. Create a Center for Technology and Information Management Economics.
2. Establish a Natural Resource Economics and Policy Center.
4. Develop an Area of Emphasis in Rural Entrepreneurship.
6. Develop a Center for Agribusiness Studies.
7. Expand the Agribusiness Education in the Americas Program.
8. Emphasize the Knowledge and Skills Needed to Anticipate and Manage Change.

Operational Objectives

1. Develop discipline-based solutions to research problems while maintaining a strong customer-driven applied economics research.
2. Elevate the stature of the department’s graduate programs to the top ten among all institutions granting similar degrees.
3. Manage enrollment and respond to demand for service courses to enhance the quality of the department’s undergraduate teaching programs.
4. Enhance core extension programs and develop new programs to more effectively respond to the needs in agricultural producers, agribusinesses, food and fiber industries, and communities.
5. Integrate international dimensions into the department’s programs by fostering a supportive institutional environment.
6. Design the department’s administrative structure to enable the organizational agility needed for excellence.

Administrative Structure

The Department of Agricultural Economics is one of 14 departments in the College of Agriculture and Life Sciences and is a unit in the Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research. Dr. Parr Rosson served as Head of the Department from 2013 to April 2018. In April 2018, he was appointed to serve as interim director of the Texas A&M AgriLife Extension Service. Dr. Mark Waller, Professor and Associate Head for Extension of the Department was appointed in May 2018 as the Acting Department Head. An overview of the
department administrative structure is provided in Figure 4. Reporting directly to the Department Head are an Administrator I and a Business Administrator II. Six faculty members serve as the Administrative Team for research, instructional operations and development, graduate programs, undergraduate activities, graduate programs in agribusiness, and extension.

The department has a total of 45 faculty members and 4 teaching associates. Details for each the department’s faculty members can be found at http://agecon.tamu.edu/faculty-staff/faculty/.
Figure 4. Department of Agricultural Economics - Administrative Structure
Department Committees

Committees associated with the Department’s day-to-day operations are:

Faculty Advisory Committee  (FAC)
Staff Advisory Council  (SAC)
Grievance Committee  (GC)
Graduate Advisory Committee (GAC)
Undergraduate Advisory Committee (UAC)
Research Advisory Committee (RAC)
Extension Advisory Committee (EAC)
Department Seminar Committee (DSC)
Faculty Evaluation Committee (FEC)
Peer Evaluation of Teaching (PET)
Department Awards Committee (DAC)
Research and Publication (R&P)
Extension Awards (EA)
Teaching Awards (TA)
Fellows and Other (Fe)
Former Student Awards (FSA)
Commons Committee (CC)

Department Governance

The Department of Agricultural Economics practices ‘participatory governance’ to achieve its mission and objectives. The overall governance of the department is based on the University Rules and Standard Administrative Procedure (SAP) that details policies on (1) curricula and teaching programs; (2) academic standards and freedoms, including admission, graduation, and retention; (3) hiring, retention, tenure, promotion, and evaluation of faculty; and (4) allocation and utilization of resources, travel, ethics, leaves, and contracting. The SAP also provides procedures addressing faculty and student grievance resolution, peer and course evaluations, and support resources and procedures (http://rules-saps.tamu.edu/). Internal operating procedures must follow the university rules and procedures. The Department Head implements these policies and SAP using purposively designed communication channels, specifically a committee system that encourages input by faculty, staff, and our stakeholders in key governance decisions.

On a monthly basis, the Faculty Advisory Committee sends out an invitation to the faculty and related persons to submit issues, concerns, and suggestions to improve the operation of the Department. The Department Head meets with the FAC to discuss the input from the faculty. The deliberations with FAC and discussions at a meeting with the Administration Team (A-Team) form the basis of the faculty meeting agenda that is discussed openly at a faculty meeting usually held one week after the FAC meeting. The process does not preclude an individual faculty or staff from directly sending concerns to the Department Head. The Department Head also receives an update on all key programs – graduate, MAB, undergraduate, research, Extension, and staff during the meeting of the A-Team. Information from this participatory
process is used by the Department Head in proposing guidelines and procedures for implementing the collective decision by members of the department. The core of our governance system is transparency and accountability. The department head retains considerable discretion in implementing rules and procedures, for example, in cases where the privacy of a party is implicated. Our annual survey of graduating seniors shows that students find the management of their educational program outstanding. To date there has not been any university sanction or citation for any violation of university rules and SAP in operating our governance procedures.

Degree Program Appendices

Facilities

In June 2011, the department moved to a new building providing modern, professional workspace for teaching, research and extension programs. The Agriculture and Life Sciences Building (AGLS) also houses two other social science departments within the college and the administrative offices for the college and agencies. The department is the largest unit in AGLS and occupies 34,000 square feet of usable space covering 1.5 floors. The space design includes approximately 55 faculty offices; 27 staff offices; office space for 110 graduate students; five conference rooms; a graduate computing laboratory; undergraduate learning center (study area); several project and general use rooms; and three break rooms.

Photo 1. Agriculture and Life Sciences (AGLS) Building. AGEC occupies two floors in the building
Undergraduate and graduate program offices provide both waiting and advising space for students and professional advisors of the department. Also located in the building are seven state-of-the-art classrooms and a 72-station computer teaching classroom/open access lab. Other classrooms are available within walking distance on the “West Campus” allowing for appropriate adjustment in our class scheduling after the move. With budget-driven reductions in faculty and staff positions, the department now has space to comfortably accommodate some growth in programs in the future.

The AGLS building also has the advantage of proximity to our colleagues in the Department of Economics, located in the Bush School complex, and the Mays Business School located in the Wehner Building. Eleven of the 14 departments of the college are also located nearby, thus promoting opportunities for engagement and collaboration. Members of the Intercollegiate Faculty of Agribusiness are also faculty members of the Department or the Mays Business School. The IFA administrative office is co-located with the graduate office of the department.

Department Centers

The department houses four research centers to advance the department’s vision and mission. The goals for each of these centers are stated as follows:

**Agricultural and Food Policy Center (AFPC)** – This center conducts analyses of the impacts of government policy proposals and/or implementation procedures on farmers, farm organizations, agribusinesses, taxpayers, and consumers. Its primary constituency is the U.S. Congress, particularly the agricultural committees. Extension education of policy options and their economic impacts on farmers is an important aspect of the AFPC’s activities. In recent years, the AFPC has expanded its research to include additional topics of importance to agricultural industry participants such as economic feasibility studies of alternative renewable fuels, the impacts of renewable fuels on the prices of agricultural products, food prices, and energy prices, and an increased emphasis on crop insurance.

**Agribusiness, Food, and Consumer Economics Research Center (AFCERC)** – This center provides analyses, strategic planning, and forecasts of market conditions impacting domestic and global agricultural, agribusiness, and food industries. High-quality, objective, and timely research supports strategic decision making at all levels of the supply chain from producers to processors, wholesalers, retailers, and consumers. Expertise on consumer economics adds depth to AFCERC research on the behavioral and social aspects of health, nutrition, and food safety. Through research and outreach programs and industry collaborations, AFCERC has become a leading source of knowledge on how food reaches consumers efficiently and contributes to safe and healthy lives. The research goal of AFCERC is to enhance the flow and quality of information along the farm-to-consumer market channel to improve decision making and enhance the competitive position of our clients in national and global markets.

**Center for North American Studies (CNAS)** – This center was created by the Enterprise for the America’s Act of 1992 and was first funded in the FY1994 Agricultural Appropriations bill. CNAS meets high-priority national needs to provide objective analyses for rapid, precise
responses to emerging trade and international policy issues. Priority programs include (1) response to national and state priorities with economic impact analysis; (2) identification and analysis of crucial emerging international trade trends and issues; and (3) development and implementation of extension programs to educate key business and policy leaders.

The Center on Conflict and Development (ConDev) at Texas A&M University works to improve the effectiveness of development programs and policies for conflict-affected and fragile countries through multidisciplinary research and education. We use science and technology to: reduce armed conflict, sustain families and communities during conflict, and assist states to rapidly recover from conflict. In 2010, the Howard G. Buffett Foundation Chair on Conflict and Development was established at Texas A&M University to support teaching, research, and service for the advancement of the welfare of communities enduring conflict or emerging from conflict. In November 2011, Texas A&M University was selected to be a member of the U.S. Agency for International Development’s Higher Education Solutions Network (HESN), a partnership between USAID and seven top universities (The College of William and Mary, University of California—Berkeley, Duke University, Makerere University, Massachusetts Institute of Technology, Michigan State University, and Texas A&M University) designed to channel the ingenuity of university students, researchers, and faculty towards global development. ConDev has conducted research and outreach programs in Vietnam, Sudan, Liberia, Democratic Republic of the Congo, El Salvador, Guatemala, and Nepal. ConDev actively engages graduate and undergraduate students in international research and programs.

Photo 2. ConDev and Université Catholique du Graben in Butembo (DRC) manage a Peace Center with seating capacity of 600 to promote regional dialogue, conflict and development publications, and other activities with the goal of leading to stability. The Center was funded by the Howard G. Buffett Foundation.
Affiliated Programs

The department interfaces with a number of other academic units at the university. This includes Mays Business School, the Department of Economics, and the Bush School of Government. Many members of the Agricultural Economics faculty participate in a variety of intercollegiate/interdisciplinary faculties, including the Intercollegiate Faculty of Agribusiness, the Interdisciplinary Water Management and Hydrologic Science Faculty, and the Faculty of Food Science and Technology.

Intercollegiate Faculty of Agribusiness (IFA) – The Master of Agribusiness degree program and PhD in Agribusiness and Management Economics are intercollegiate degrees administered by the Intercollegiate Faculty of Agribusiness which comprise faculty members from the Department of Agricultural Economics and Mays Business School. The creation of the IFA was approved by the Texas Higher Education Coordinating Board in 1999. In accordance with University Faculty Guidelines governing interdisciplinary programs, all members of the IFA had to be graduate faculty members and be nominated for membership and accepted by majority vote of the IFA.¹ The Chair of the IFA and Director of the MAB positions are administratively located in the Department of Agricultural Economics and appointed by the Deans of the College of Agriculture and Life Sciences (COALS) and Mays Business School. The Dean of the COALS is designated as the lead Dean for the purposes of university oversight and administration. The IFA is one of 13 interdisciplinary programs (IDP) of which seven reside administratively in the COALS. The degrees awarded by the IFA, as an interdisciplinary program, are designated as university degrees as opposed to being awarded by either of the colleges separately.

Mays Business School – In addition to the IFA affiliation, the undergraduate Agribusiness degree program is jointly offered by the College of Agriculture and Life Sciences and Mays Business School. The Texas Higher Education Coordinating Board approved the degree program in 1992. At the undergraduate level, students may earn a joint degree in Agricultural Economics and finance (emphasis on Banking) under a 3+2 joint degree program. Students earn a B.S. in Agricultural Economics and an M.S. in Finance (Banking option) from the Mays Business School.

Department of Economics – The Department of Economics provides economic theory courses for all of our degrees, BS, MS, MAB, and PhD. Many Department of Economics faculty members serve on AGEC MS and PhD advisory committees. They also provide input for the PhD qualifying exam. Many of our faculty members serve as committee members for MS and PhD students in the Department of Economics.

Bush School of Government and Public Affairs – A few department faculty members have affiliations with the Bush School of Government and Public Affairs and teach courses in natural resources and international economic development. At the undergraduate level, students may

¹As a consequence of the separation of the Vice President for Research Office from the Provost’s Office, the rule guiding the creation and governance of interdisciplinary programs is currently being modified to refer only to interdisciplinary research groups. A new rule will be created to provide institutional recognition of interdisciplinary academic faculty groups. It is not clear at this time which rule the IFA will fall under or if it will have to report under both pathways.
earn a joint degree in Agricultural Economics and public policy under a 3+2 joint degree program. Students earn a B.S. in Agricultural Economics and an MPP in Public Policy from the Bush School.

*Human Behavior Laboratory (HBL).* The mission of the Human Behavior Laboratory (HBL) is to facilitate the integration of neurophysiological responses to traditional methods of studying human behavior in the social sciences. Specifically, it provides access to state of the art equipment to simultaneously collect psychophysiological data, including eye tracking, facial expression analysis to assess human emotions, neural signals (electroencephalography), galvanic skin response (GSR) heart and respiration rates through integrated stimulus presentation platforms. A total of 3,522 square feet are devoted to the HBL. The space includes the laboratory, office space for faculty and graduate students, and space to conduct real objective research. [http://hbl.tamu.edu](http://hbl.tamu.edu) The HBL is one of the largest laboratories in the world fully dedicated to implement economic experiments integrating neurophysiological responses.

*Photo 3. Subject in Human Behavior Lab. 2nd right is Dr. Marco Palma, Director of HBL*

*Other Affiliations* – A number of Agricultural Economics faculty members are members of the Interdisciplinary Water Management and Hydrologic Science Faculty. Students in that program often enroll in AGEC courses. Several Agricultural Economics faculty members are members of the Faculty of Food Science and Technology. Although they do not formally teach courses in Food Science, they have actively interacted and collaborated with colleagues within the Faculty of Food Science and Technology on various research, teaching, and outreach related activities.
Also, several faculty members work with the Texas Transportation Institute, and Texas A&M AgriLife Research and Extension Centers.

**Finances**

Fiscal year (September 1 – August 31) COALS’ budget allocations, gifts from foundations and private sector, and differential tuition dollars are the primary sources of the department’s budget. Figures 5-8 show the budget allocations to the teaching, research, extension, and graduate student programs from 2011 – 2018.

**Teaching:** The COALS appropriated budget is primarily allocated to the support of faculty and staff salaries with a portion directed toward operating expenditures. The appropriated funds are designated for faculty with teaching appointments. Relative to the base year of 2011, the department faced periods of a declining budget. The declines were due, in part, to overall fiscal pressures faced by the University as well as declines in state appropriated funds. By 2016, funding levels had returned to the 2011 levels and, the department experienced a 19% increase in appropriated expenditures between 2011 and 2018.

**Research:** The Texas A&M AgriLife Research appropriated budget is designated for faculty with research appointments. While COALS Agricultural Economic appropriations have experienced a 19% increase for teaching appointments from the 2011 base year, funding in support of research for this period has fallen by 12%.

**Extension:** While the function and responsibilities of the department’s extension programs are administratively separated from the teaching and research programs, extension faculty have nevertheless supported the department’s teaching and research. Hence, it is important to provide an assessment of the department’s extension budget and activities. From 2011, the department’s extension budget declined in 2012 and 2013 and then rose in the 2014 and 2015 period. The budget has declined slightly since 2015. The declines in FY 2012-13 occurred during periods in which the department was under fiscal pressure.

**Graduate Student Support:** The support of Graduate students through assistantships is important to growing the department’s research excellence and reputation. The graduate budget consists of all funding for graduate stipends where the majority of the stipends are in support of PhD students and to a considerably lesser extent Masters students. Relative to the 2011 base year, graduate budget has declined by 63% from 2011 to 2014. One explanation for the decline is the fiscal pressures at the university level where reductions in the overall department budget were offset by funds from the graduate budget. Such loss of funds however has been more than offset by differential tuition funds. Graduate students who are not supported by the graduate budget are covered under this differential tuition account. This differential tuition fund has remained relatively fixed where for the fiscal period FY15 and onwards, the department was allocated $322,681 in differential tuition funds annually to yield a total graduate budget of $394,866 for the remaining periods. In addition, for the period (FY15 and beyond), the graduate budget also includes Interdisciplinary Degree Program (IDP) that were generated through the MAB/ABME program. These funds are used in support of graduate student scholarships and enhancement activities such as professional training and travel.
Figure 5. Texas A&M AgriLife Research Budget Allocation

Figure 6. COALS Allocation to Teaching

Figure 7. Graduate Budget

Figure 8. Extension Budget
Other Sources of Income and Expenditures: In addition to the appropriated funds, the department is also supported by endowed accounts totaling approximately $3.2 million. The three largest endowments are the Southwest Dairy Marketing Chair, Donald S. Moore Fund, and Shirley and Joe Swinbank Rural Entrepreneurship accounts, which account for more than $2 million of the endowments. Disbursements from endowments and yearly gifts vary by year, but average more than $100,000 per year. The majority of expenditures go toward scholarships. Other external funds involving industry and private donations include those of the Agribusiness Entrepreneurship, Financial Planning, and Weston Sales Marketing programs. These programs have generated $2.7 million since 2013.

Photo 4. Swinbank Plaque

Photo 5. Donald S. Moore Estate Citation
**External Program Accreditation**

Texas A&M University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, and doctoral degrees. AGEC academic programs are in good academic standing and accredited by the Southern Association of Colleges and Schools Commission on Colleges (See Institutional Profile). Texas A&M Institutional Profile-March 2018). In addition, the department’s certified financial planning (CFP) certificate program was accredited in 2013 by the Financial Planning Board of Standards. Due to its growth and demand, this certificate program became an academic minor in 2015 where it has also been certified by the CFP Board of Standards (See Appendix 1.)

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**CFP BOARD**

Texas A&M University- College Station is accredited by the Southern Association of Colleges and Schools, Commission on Colleges and the Association to Advance Collegiate Schools of Business (AACSB) This classroom and web-delivered program consists of 6 courses with 18 credit hours, This program contains the required 72 topics per CFP Board criteria and is taught at the upper division baccalaureate level. The learning resources and faculty meet or exceed CFP Board criteria.

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**SACS/COC**

Classified by the Carnegie Foundation as a Research Doctoral University (Highest Research Activity), Texas A&M embraces its mission of the advancement of knowledge and human achievement in all its dimensions. The research mission is a key to advancing economic development in both public and private sectors. Integration of research with teaching prepares students to compete in a knowledge-based society and to continue developing their own creativity, learning, and skills beyond graduation.
Date of Last APR External Review

The last Academic program review was conducted in Feb 12-15, 2012. As part of the ongoing program review processes at Texas A&M University, a program evaluation of the Agricultural Economics (AGEC) and the Intercollegiate Faculty of Agribusiness (IFA) were conducted covering February 2005 to February 15, 2012. Although both programs depend largely on resources administered by the Department of Agricultural Economics, the AE and IFA were reviewed as two separate entities. The reviews were conducted at the request of Dr. J. Martyn Gunn, Special Advisor to the Provost on behalf of the Office of the Provost. The external reviewers consisted of 6 members: Helen H. Jensen (Chair), Iowa State University, James Beierlein, Penn State University, Patricia Duffy, Auburn University, Allen Featherstone, Kansas State University, Tim Haab, Ohio State University, and Tim Richards, Arizona State University.

The review was conducted at a time of substantial budget stress and several recent changes in the university administration. In addition, the comments and recommendations were presented under the forward looking assumption of continued budget stress or a flat state resource base.

In light of these challenges, the reviewers nevertheless noted that the department had the advantage of strong staff support, a new building and excellent facilities in one location. They also noted that the department supports the core missions of the university and is well respected in the college. Of particular note, the department had developed a formal relationship with the Mays Business School in support of the IFA Program, and has developed partnerships to collaborate across disciplines to address problems involving natural resources, agricultural and food policy, nutrition and food safety, as examples. The department is noted especially for having strong research programs in natural resource and environmental economics, agricultural policy, agribusiness, economics of markets and demand, and managerial economics.

In addition, the department was noted for a number of strengths that made it unique among departments of agricultural economics where it offer the potential for future specialization and development of quality areas. This strength included a relatively large number of faculty that cover areas of teaching, research and extension. The recent move to a new building allows good proximity of faculty and staff offices with core department activities. The department has also been recognized for its number of highly respected, senior faculty members who are actively engaged in instructional activities of the department’s programs. The reviewers had also noted that the department has several promising junior faculty members at the associate and assistant professor levels.

In the assessment of the department’s extension programs, reviewers pointed to the department’s large Extension Economics program that addresses outreach needs in the state in areas of production economics, marketing, agricultural policy, finance and risk management, and community economics, among others. The Extension program has expanded its funding base to include more fees, grants and contracts and receives support from a number of commodity organizations and private companies. Its program areas are well aligned with the teaching and research functions in the department. The extension economics program is well respected nationally by academia and clientele.
In light of these strengths, however, the external reviewers team (ERT) identified a number of challenges / concerns. The ERT has made general recommendation to the department as well recommendation to the four related degree programs (AGEC, AGBU, MS, PhD). The ERT recommendations and the department’s responses are outlined as follows:

**ERT Recommendations to Department**

1. The department should develop a common vision and mission to support the development of priorities in the allocation of resources to the departmental functions while maintaining core departmental strengths consistent with the university’s strategic plan and college priorities.

Response: The current vision statement is simple and well reflects the ideals of the faculty with regard to the role of applied economics in relation to informing decision-makers, both private and public, in the agriculture, food and environmental and natural resources sector of the economy. However, as noted in the self-study, the faculty plans to review the current vision and mission statements for the department. This will be completed as part of a strategic planning effort by the end of the fall 2012 semester.

2. Careful considerations need to be made of the resources available and implications for departmental commitment to the academic programs. COALS and university funding of department research and teaching components is not driven by tuition or student numbers.

Response: Resource availability will be considered as part of the revised strategic plan and in concert with college priorities.

3. The department should carefully consider its priorities and direct requests for budget, faculty support and faculty lines to meet its priorities. Careful consideration of faculty funding is important as the department aligns its resources to the more competitive external research funding environment and away from earmark sources of funding. In order to improve the department’s ranking and achieve excellence, the department may need to place more weight on priority areas and areas identified for growth for both teaching and research, and relatively less weight on other areas. At the same time, this effort should be consistent with efforts to improve relative faculty salaries and to compete successfully for additional funding from the college.

Response: Priorities will be identified within the strategic planning process and conditioned on college and university goals.

4. As the department plans future faculty hires, consider targeting advanced assistant professor or associate level and those with promise of pursuing high quality publications and external funding. The department has a relatively small share of junior (assistant and associate) faculty now. And, at the same time, there is evidence that existing faculty are stretched to meet the needs of teaching and directing students in the graduate program. Building and maintaining the core faculty resources is a critical need in the near future.

Response: In recent years the department has focused on hiring at the entry-level. Due to unfortunate budget conditions over the past three years three assistant professors left for other opportunities. Budget reductions prevented replacement. With these and other departures plus
the VSP and other retirements, the department has reduced tenure track positions by seven since January 2009. The strategic plan described above will guide future hires.

**ERT Undergraduate Recommendations**

1. Consider reorganization of the Agricultural Economics major to allow more flexibility of allocation of course resources in meeting the students’ needs. The four options might be concentration or informal areas of interest in a set of dedicated electives. At the same time, the options might be reviewed in light of current resources to rationalize course offerings. Undergraduate international study and travel courses should complement the coursework within the students’ major programs of study.

Response: The department last completed a comprehensive revision of the BS in AGEC in the early 2000s. The resulting new options have served the students and department well, but we agree that new conditions, including changing student and employer expectations and, in the context of budget imperatives, requires a complete curriculum review. This review, along with consideration of learning outcomes, budget, staffing, and related department strategic priorities, is planned for completion by May 2013. The ideas of the ERT are appropriate and will be strongly considered as part of this review. Although not noted in the ERT report, the department has already embarked on the development of increased international experiences for undergraduates as part of the “Reallocation funding” focused on high-impact learning.

2. Meeting the gap in freshman to late sophomore exposure to AGEC courses needs to be addressed. One way to do that would be to shift some 300 courses that do not require prerequisites to the 200 level. Examples identified by students were AGEC 340 (Agribusiness Management) and AGEC 315 (Food and Agricultural Sales). Although this change may have implications for the course weight in overall university allocation, more consistent contact with the department would better meet the needs of students and allow more flexibility for coursework to students later in their program.

Response: The department recognizes the underlying concern. However, we do not agree with the wholesale solution recommended. Aside from the budgetary implications associated with weighted semester credit hours, many of the 300-level courses serve a specific need in the degree programs of other departments. Much care would need to be exercised in making significant changes. As part of the curriculum review the faculty will consider adding a new course at the 200-level to contribute to our learning objectives and maintain contact with students during their sophomore year. We note however, that our students are engaged in studying economics, applied business and foundations of mathematics and statistics during this period though it may be taught in other departments/colleges. An increased emphasis on student participation in clubs, honors programs and other department-based student activities will also be considered as part of the high-impact learning initiative.

3. Faculty should consider using a subset of courses -- those that best predict success in the program -- as criteria for entry in the Agricultural Economics and Agribusiness programs instead of reliance primarily on the overall GPA. Overall GPA may not provide a good indicator of students’ likely success in the departmental majors.
Response: The ERT may have misunderstood our transfer requirements. We do consider the performance of students in courses and we have added a requirement for completion of the equivalent of Math 141-142 before they transfer. This shift in math requirements was instituted deliberately in order to improve the probability of success and completion of graduation in a timely manner. We will continue to monitor our transfer GPA requirements and review as appropriate.

4. Review and revise the requirements for the honors programs to make the program better fit the needs of high achieving students, including transfer students. The honors program offers a good opportunity for talented undergraduate students. However, the program is relatively new and there is still a need to work out specific requirements, sequence and timing of courses. Students transferring into the program during their sophomore or junior year may struggle to complete the current plan. The department could revise the program to make it more accessible for transfers by substituting a 300/400 level course for the 100 level course and by deleting the MATH 151 requirement. One option would be for the program to focus more on upper division courses, as done in the Agricultural Leadership Honor program. Failure to address problems may cause attrition of students at the end of their program.

Response: The honors program has been in place for less than a year and is still in the process of establishment. There is not enough information about the performance of the program at this point to make any adjustments. Furthermore, the specific requirement of the MATH151 was intentionally included in the honors program after a very extensive discussion by the UAC. The purpose of this requirement is to ensure that the honors program indeed provides a unique and meaningful experience for the students. It is too early to tell whether this criterion is a substantial detriment to participation. The department will continue to monitor the performance of the program, in particular the enrollment and completion rates. The issue will be reconsidered as part of the curriculum review noted above.

**ERT M.S. Recommendations**

1. Increase communication among faculty to facilitate a more focused M.S. program, with a higher number of students doing publishable quality work.

Response: The overall ERT report indicates that the MS degree program is in high demand, well thought out, and rigorous. The department agrees that greater faculty involvement would improve the program. The degree serves a dual role as terminal specialized training and for some as preparation for pursuing a PhD. The faculty will review the role of the MS degree in the context of overall department goals as part of the strategic planning process in fall 2012. Based on the new strategic plan, the graduate faculty will review and revise the degree program goals, learning outcomes and strategy in this context and within department resource constraints.

2. Increase interaction with agribusiness in the state or out of the state. This is possible given the high number of alumni who are well placed in these organizations and would strengthen support for the program and placement of students.

Response: The IFA organizes two industry symposia for the MAB students. All graduate students in agricultural economics are invited to participate in this networking and career
development activity. Special emphasis will be given in the future to engage MS students in this activity.

3. Explore the possibility for leveraging opportunities with agribusiness firms for funding Masters students through internships, assistantships or other academic products

Response: Some MS students are funded through projects related to industry grants and contracts under the direction of faculty with applied research and extension appointments. The department will continue to seek additional opportunities.

**ERT Ph.D. Recommendations**

1. Reduce the size of the incoming PhD class and renew emphasis on selective admissions to ensure student success in the PhD program. Reducing the size of the PhD incoming class will allow the department to spread the available centralized funds for teaching assistantships across fewer students for longer periods of time thereby reducing the pressure on students and faculty to find funding matches. The reduced cohort size also allows the department to focus on selective admission of PhD students to pick the best students, match students to areas of department strengths, and ensure a higher probability of success for the students in the program. Longer funding offers can serve as a powerful recruiting tool to improve the quality of the pool of applicants to the program.

Response: We agree that the size of our PhD program has been too large in recent years. Our target has been 60 to 65 students enrolled at any one time. However, the admission protocol did not account carefully enough for unfunded students actually enrolling so our numbers increased to 80. The department has already undertaken changes in our admissions evaluation process in an effort to control the size of the program and improve probable success rates. A new admissions rubric was instituted in 2011 designed to provide a basis for better and tighter evaluation. A sub-group of our Graduate Advisory Committee (GAC) is now involved in admissions review providing input to the decisions of the Associate Head for Graduate Programs.

2. Consider enhanced opportunities to introduce graduate students with an interest in academic positions to the undergraduate classroom with the goal of having more PhD students as the instructor of record. The academic job market more and more requires teaching experience for new PhD’s to be considered for teaching/research positions. Our practice engages a graduate student first as a TA a course in one semester and then teach the course the next semester provides valuable teaching experience for the PhD students and helps alleviate the increasing teaching pressures on teaching/research faculty. Care must be taken to ensure proper mentoring and supervision of the PhD students to ensure a quality experience for the undergraduate students.

Response: The department has regularly included graduate students as instructors of record over the past several years. The ERT may not have been aware of it, but we have had at least one advanced PhD student serving as instructor of record most semesters (including summer) since 2009. While the opportunity has been mostly driven by need for instructors given the reduction in our faculty numbers, we have endeavored to identify potential student instructors through advertising the opportunity and interviewing qualified graduate students before finalizing the
arrangements. The department will consider formalizing the opportunity more clearly, but is also very proud of its record of having senior faculty teaching most of our undergraduate courses.

4. Add a research requirement in the second year of the PhD program to prepare students for research careers. A second year research requirements (for example, a publication quality manuscript) provides students with the opportunity to experience a research project and produces an output that can be moved toward publication in the student’s tenure in the PhD program. Evidence of research/publication abilities enhances the students’ job market prospects.

Response: The department will consider ways to address this issue. We agree that PhD students should have strong encouragement to prepare and present professional work prior to the development of their dissertation research. This might be easier to manage once the enrollment is reduced to better match the faculty and research assistantship resources available.

5. Encourage assistant and associate professors to be major (or co-major) advisor to the PhD students. Without control of funding, there is limited opportunity for more junior faculty to direct students. Co-direction of the student work would enable the faculty to get more directly involved with the students and help with publications.

Response: Subject to budget constraints, the department will consider allocating more IDC and excellence funds to support a few targeted research assistantships that will follow the student. This will allow for faculty with smaller sponsored research programs to serve as chair or co-chair of graduate committees. Senior faculty members have been involved in providing some opportunities in the past, but more can be done.

**Learning Outcomes Recommendations**

**Undergraduate**

1. While the assessment plan is a good start on a difficult process, the review team believes that the assessment process could be refined to more clearly target measurable student learning outcomes specific to the different options, so that data collected can be used most effectively for program improvement within each option.

Response: The department has an action plan in place for learning outcomes. We adopted the guidelines from the university to focus on degree program learning outcomes, not more detailed options. In devising our specific learning outcomes, we were guided by the overall learning outcomes established for all undergraduates of Texas A&M University. Program level assessment allows us to articulate our shared mission and values. We are engaged in a process of continuous improvement and we will review the options as we move forward. In fact, as noted in response to UG recommendation 1 above, we plan a major curriculum review next year. The learning outcomes provide us one way to assess whether there are truly different outcomes expected for each option. If the assessment suggests that the outcomes are not significantly different then we will meld them together, define some new directions, or make other changes as indicated by the assessment.
**Master of Science**

2. Bringing a written Assessment Plan into better alignment with the outcomes reflected in the Report would be helpful. If not already developed, written and consistent rubrics for evaluation should be developed by the assessment committee so assessment can be consistent over time.

Response: The department will review the learning outcomes for the Master of Science degree program and assessment rubrics. A written rubric will be developed and implemented by the end of the 2013 academic year.

**PhD in Agricultural Economics**

3. It may be helpful for the department to have a clear set of student learning outcomes for all doctoral students and a standard means of assessing these outcomes. For example, rather than using overall pass rates on the prelims, a more directed measure might involve matching specific questions on preliminary examinations to specific learning outcomes. Then, the answers on those particular questions could be assessed for attainment of that outcome using a standard rubric.

Response: The department believes that the appropriate level of assessing learning outcomes is in the examining process which requires standardized qualifying and field preliminary examinations. As a continuous improvement process we will review the outcomes and consider adding others which better match the evolving career opportunities for our graduates.

**ERT review of IFA and programs**

In addition to the departmental and program review, the Intercollegiate Faculty of Agribusiness (IFA) depends to a significant degree on the resources administered by the Department of Agricultural Economics. A subcommittee of the ERT consisting of Profs. Featherstone (Kansas Stat) and Tim Richards (Arizona State) had conducted a review of the Intercollegiate Faculty of Agribusiness (IFA)

Like the AE departmental review, IFA review was conducted at a time of substantial budget stress and several recent changes in the university administration. In addition, the comments and recommendations were presented under the forward looking assumption of continued budget stress or a flat state resource base. An important distinction made during the time of the IFA review was that an important component of the IFA, the Ph.D. in Agribusiness and Managerial Economics, is relatively new so there is little institutional history to evaluate, or outcomes to assess. Much of our review of this program, therefore, is based on design and conceptualization and not on revealed performance.

The IFA was established in 1999 to provide governance to the Master of Agribusiness (MAB) degree program. In 2008, the IFA was expanded to offering a Ph.D. in Agribusiness and Managerial Economics. Since 1999, 233 MAB degrees were granted. As of this review one student had been admitted to the Ph.D. program.

**Status of the IFA**

The IFA provides administrative leadership to the Master of Agribusiness degree program and the PhD in Agribusiness and Managerial Economics. The IFA was established to foster the intercollegiate development of the Master of Agribusiness degree program, enhance
communication between the faculty members in the College of Agriculture and Life Sciences (Department of Agricultural Economics) and the Mays Business School (Departments of Marketing, Management, Finance, Accounting, and Information Systems and Operations Management) utilize faculty expertise in business and agribusiness to strengthen the Master of Agribusiness degree program, and capitalize on the contacts that Faculty members have made with firms and leaders within the food and agribusiness industry for student recruitment, placement, and internships.

At the time of the review, the IFA consists of 19 members. Of these members, 14 are from agricultural economics, 2 from marketing, 2 from accounting, and one from finance. In general, the IFA had successfully achieved the primary objective of the Masters of Agribusiness degree program as it is one of the few on-campus agribusiness programs at the Masters level. The peers of this program would include the M.S. in agribusiness at Arizona State University, the Master of Agribusiness at the University of Florida, and an MBA in Agribusiness at the University of Nebraska. In addition, two executive online programs exist at Kansas State University (Masters of Agribusiness) and Purdue/Indiana University (MBA in Agribusiness). None of the programs cited above has established an intercollegiate faculty, thus the organization structure at Texas A&M is unique. At this point it appears that progress on the other goals of the IFA has been slower developing; especially the communication between the faculty members in the two colleges.

Assessment of Learning-Based Outcomes
Texas A&M University is accredited by SACS. Hence, SACS standard 3.3.1 was used by the review team in evaluating the department's assessment of academic programs. These standard states: "The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of the results…"

Master of Agribusiness Program:
The review team considered the relevance and usefulness of the outcomes-based assessment plan (OBAP) for the MAB program summarized in the IFA self-study document (note that there are currently no Ph.D. in Agribusiness students, so no OBAP data are yet available). Under the heading “Assessment of Student Learning Outcomes” the self-study report describes studies of the learning objectives conducted in 2003 – 2005 as part of the Quality Enhancement Project (QEP) initiative. These studies consisted of surveys conducted in AGEC 625 (Environment of Agribusiness) and AGEC 629 (Strategic Agribusiness Management) that sought to determine student’s progress throughout the term on specific objectives and outcomes describe in each course syllabus. The surveys required students to check the most appropriate column from headings of: “Unchanged from Beginning of Semester,” “Improved,” “I am now Reasonably Confident in this Area,” and “Not Applicable (I already had, and was confident in this area).” These surveys were completed early in their second semester, at the end of the second semester and the end of their third semester, following completion of the capstone courses. Each teaching tool (Topic Research, Topic Presentations, etc.) was also assessed as either “Ineffective,” “Effective, but not preferred,” or “Effective.”

The self-study document did not contain any data gathered during the 2003-2005 cycle. However, subsequent communication from the chair of the IFA indicated that the surveys were
indeed carried out and the data were collected from AGEC 625 and 629 in 2005 and again in 2010. The raw data were sent to the review team during completion of this report, but the data were not summarized or interpreted. Based on the evidence in the report and the data sent to the review team, it was not clear whether these data were synthesized or used to forge “improvement based on analysis of the results”.

Summary of Strengths and Weaknesses
The IFA has a number of strengths upon which it can draw. The IFA review team identified the following strengths based on evidence presented in the review document, through meeting with students and meeting with faculty and administrators.

Strengths of the IFA:
1. National reputation for teaching quality in the Department of Agricultural Economics and national ranking of the Mays School of Business.
2. Number of Agricultural Economics department faculty participating in the MAB program.
3. Breadth and depth of expertise among the faculty in the Agricultural Economics and Mays School of Business.
4. Institutional experience at the college and university levels with successful interdisciplinary programs (IDP), such as the Water Program, Genetics Program and Materials Science.
5. Technical background of the participating Agricultural Economics department faculty.
6. Number, quality and diversity MAB-graduate placements.
7. Commitment from industry, alumni and university communities.
8. Strength of relationship between current chair and vice-chair of executive committee of the IFA.
9. Physical facilities of each unit participating in the IFA.
10. Research funding generated by faculty from the Agricultural Economics department.
11. Approval of the MAB program fee which will add a stable funding mechanism for the Masters of Agribusiness program.

While there are a numbers of strengths, there are areas that could be improved to continue to move the intercollegiate faculty of agribusiness to national preeminence. The following weaknesses were identified in the review document, meeting with students, or meeting with faculty and administrators.

Weaknesses of the IFA:
1. The number of Mays School of Business faculty committed to either component of the IFA program is low.
2. There appears to be low selectivity of the MAB program regarding students admitted.
3. Currently the student numbers in the MAB program are lower than an optimal size.
4. Lack of access to MBA courses in the Mays School of Business for qualified MAB students. While the condensed timeline of the MBA courses would need to be considered, students have a desire to access some of the MBA courses.
5. No or limited access to Ph.D. courses in Mays School of Business for qualified PhD in Agribusiness students.
6. Duplication of content between the Mays School MS-level courses and Agricultural Economics MS-level courses in agribusiness.
7. Inconsistent content of Agricultural Economics courses used in MAB program.
8. Lack of clear funding stream for the PhD in Agribusiness.
9. Little evidence of commitment to publish in quality journals from most agribusiness faculty in the IFA.
10. Absence of cooperation between Agricultural Economics and Mays School of Business faculty in attracting external research funding.
11. No clear disciplinary distinction between the Mays School and Agribusiness-focused faculty of the Agricultural Economics department.
12. Departure of the vice-chair of the executive committee of the IFA.
13. Uncertainty regarding the governance structure of IDPs in general (VP Research vs Provost).
14. Lack of evidence that learning

In light the ERT review, the then IFA’s chair’s (Prof. Eluned Jones) specific responses to the ERT recommendations are outlined as follows:

IFA

#1: Commitment and engagement of faculty from both Agricultural Economics and Mays Business School to initiate research projects.

Initial membership of faculty in the IFA had greater representation from Mays Business School. However, changes in annual review policies for faculty required that members indicate their level of involvement i.e. full membership, associate membership. Full members were required to report on their activities with the IDP and the Chair, or a committee, would also provide a supporting letter for promotion and tenure outlining the members contributions. Several members resigned from the IFA at that time but indicated they would like to remain involved informally. Junior faculty in the Department of Agricultural Economics and in Mays Business School opted for informal association until they are successfully promoted, based on their perception of the risk of being associated with an IDP. Consequently there are informal research activities and exchanges occurring but they are not being fully leveraged. The lack of clarity and transparency of policies and procedures relating to IDP’s is a deterrent to interdisciplinary activity.

There is a related issue raised as a weakness, but not included directly in the recommendations, of research publication by IFA faculty. The debate of what is an appropriate publication outlet, and what counts as a relevant publication in support of an agribusiness program is not unique to TAMU and probably not unique in the professional degree and interdisciplinary program environment. Journals that are appropriate venues for firm level food and agribusiness applied research are not considered to be top ranked journals for agricultural economists. This creates mixed signals from annual review committees to junior faculty regarding the appropriate outlets for their research output. In addition, building industry knowledge is essential to the teaching quality, and relevance, of a professional degree program. Consulting and advisory work with leading firms and industry associations have significant value both in terms of the class content and the credibility of the program in the talent acquisition market. Clear policies regarding how these contributions should be valued in annual review, promotion and tenure is essential to junior
faculty if they are not going to be deterred from participating in IDP’s or whose creative energy is not split by mixed signals.

# 12: The Director of the PhD and the Director of the MAB program should be two separate individuals.

Oversight of the two degrees is provided in the IFA governance via separate Operations Committees that include members of the IFA from both the Agricultural Economics department and Mays Business School. Mays representation has been via the Executive and Associate Deans for the past three years but should also include faculty representation according to the by-laws. The Director of the MAB serves as an advisor to all MAB students and is, de facto, their ‘committee’. The IFA PhD students would form their advisory committee as per Graduate Handbook policies so there is no parallel role for a Director. The MAB operations committee was active informally prior to the restructuring of the by-laws and has continued to be very active. The Agricultural Economics operations committee representatives are at the end of their 3-year commitment and there will be an opportunity to address concerns about more active engagement of the IFA PhD committee at that time.

Master of Agribusiness

#2: Access to MBA courses.

The program structure of the MBA changed around 2004 to a lock-step, cohort driven term structure. In addition, classes are 1 ¾ hours in length so there is a double conflict in fitting classes that are 50 minutes or 1 ¼ hours in length and structured on a semester basis. Although the original agreement stated that MAB students would have access to MBA courses, the structural change did not provide continued access. The MBA structure is in the process of change to condense the timeline of the degree program even further.

MAB students have considerable choice of relevant and challenging electives in all Mays Business School disciplines as well as courses in Agricultural Economics, the Bush School, as well as Life Science disciplines where they meet the pre-requisites based on their undergraduate degree.

#3: Increased flexibility in the MAB degree program

There are 9 credit hours of electives that should be used by the students to differentiate themselves from their colleagues, i.e. to position themselves for careers in financial management, marketing, supply chain analysis and management etc. In contrast with typical MBA degree programs there is considerable flexibility in the MAB. Based on the lack of restrictions placed on our students in taking classes in Mays Business School, students who have already acquired the basic (survey) skills in the business curriculum are able to substitute a higher level course for the survey course. In contrast with typical MBA degree programs does not provide the opportunity to substitute courses or take previous academic qualifications into consideration. The flexibility to consider the degree plan of each student individually is a benefit of having a small cohort.
Unfortunately, students do not always follow advice, or take the courses that are on their degree plan, and they opt to take elective courses with their colleagues rather than the courses that will add to their portfolio of skills. This may result in them being out of their depth due to lack of prerequisite skills, or in a course in which they already have the skills; both outcomes are less than desirable. Increased advising should mitigate many of these problems and will be possible with the increased support from the Program Manager (MAB program fee supported position).

#4 and #7: Expansion of the MAB from approximately 20 students per cohort to 30-35 per cohort.

Expanding the size of the MAB cohort would require changing the teaching format of the MAB designated courses (AGEC 625, 629 and 630). These courses are team focused and faculty intensive. Our experience has indicated that 20 students is workable, but even 24 or 25 pushes the limit on the level of feedback that forms the basis, or hallmark, of the transformational experience. Furthermore, the structure of the MAB was designed to integrate with the MS degree program quantitative methods courses such that 50% of the students in those courses are MS and 50% are MAB. There is concern among the IFA members teaching these courses that reducing the level of engagement and feedback would negatively impact the rigor and quality of the program on which market demand for graduates is based.

#6: Appropriateness of MAB and MS students enrolling in the same theory and methods classes.

MS students take their micro-economic theory course from the economics department, whereas the MAB students take AGEC 619 Managerial Economics, thus there should not be a problem in the different objectives of preparing students for an independent research degree and professional degree. As indicated above, all Masters level students take the same quantitative methods classes. The MAB students are expected to use regression, forecasting and simulation tools in the two capstone courses so the outcomes for AGEC 621 and AGEC 622 are equivalent. Depending on the cohort, there may be 50% of the MAB students with a stronger quantitative methods background than those in the MS research career path based on their undergraduate degree. In most cohorts there will be several students with an engineering or Biosystems engineering undergraduate degree, and up to ½ the cohort may have a life science degree. Consequently they are equally well prepared.

#5: Learning outcomes assessment.

The university documentation of assessment is currently based on program level outcomes. The supporting documentation for these outcomes uses measures that were developed through the QEP program and CTE program sessions between 2003 and 2005. The measures were developed in conjunction with changes in the delivery of the courses to meet the demands of the market, as indicated by our early MAB industry partners and former students. These changes explicitly incorporated the global nature of the agribusiness and food industry, the necessity for graduates to be able to perform in multicultural teams, and the necessity for students to have the confidence to apply their skills immediately on employment.
We recognize that it is time to review the changes that were made 8-10 years ago, and there will be opportunity to engage former students of the program and industry partners in a broader review process once the program manager is hired. The review would be an ideal opportunity for the program manager to connect with the network of former students and industry partners and establish rapport with this critical group.

PhD Agribusiness and Managerial Economics

#8: Opportunities for IFA PhD students to gain teaching experience.
The expansion of the MAB industry partners’ engagement, involving the Agribusiness, Food, and Consumer Economics Research Center (AFCERC), provides opportunities for graduate student training. Several MAB students have worked with research projects and advanced methods training programs with industry. In addition, doctoral students would be able to gain experience through assisting with graduate agribusiness courses.

One of the greatest ‘hurdles’ in the success of an agribusiness doctoral program is the (mis)perception, by both students and (non-agribusiness) faculty, that agribusiness is a less rigorous discipline than agricultural economics. Business School doctoral programs are very similar in their requirements of a strong theoretical base from which to build applied research. Finance and Accounting have required the same micro- and macro-economic theory courses as Agricultural Economics and TAMU’s Marketing program has moved in a similar direction in the past decade. This is not only an issue at TAMU but is a profession-wide perception that has been slow to change. As indicated in the external review report the IFA structure is unique across all agribusiness programs in the US and the MAB is highly regarded as a rigorous, high quality degree. This brand recognition is the result of over ten years of investment. The IFA recognizes that, as a cutting-edge leader, it may take at least that amount of time to change perceptions regarding the PhD in Agribusiness and Managerial Economics; which is currently the only such degree in the US.

#9: Stable and adequate funding for IFA PhD students.
We were successful in obtaining National Needs Fellowship funding for the first 3 incoming IFA PhD students in fall 2009. These fellowships require that the students are US citizens. None of the three students successfully completed the economic theory qualifying exam. Three students, two US and one international, were admitted in 2010 who applied specifically to do the IFA PhD. Two of the three students were on teaching assistantships and the third student had resigned from a position as economist/analyst for an industry association and chose to self-fund. One member of this cohort passed the qualifier on the 2nd attempt and opted to follow the ‘shorter’ route to a PhD regardless of his area of interest.

The IFA members will need further discussions on the first year program of study and whether the first year curriculum needs to be revisited; it currently parallels the PhD in Agricultural Economics.

Funding is not expected to be a problem for students who maintain a GPA>3.0 and who successfully complete the economic theory qualifier. Students have been considered for assistantship funding in the same pool as Agricultural Economics students thus far.
#10: Admission of students to Mays Business School.

The proposal approved by the Texas Higher Education Coordinating Board outlined an admission process that was an outcome of the task force to consider this intercollegiate PhD. There were concerns that students admitted to Mays Business School doctoral seminars needed to have successfully completed the economics theory qualifier. In essence, the qualifier was designated as a ‘gate-keeper’. The protocol at the time of the task force allowed students to take the qualifier in May for the first time and to repeat in the following January if they were not successful December. Students successfully completing the qualifier in May would then apply to the desired department, via the Associate Dean for Graduate Programs, for fall admission to the doctoral seminars. Students who had to re-take would potentially have a 6 months delay in starting the doctoral seminars. However, Agricultural Economics subsequently changed the timing of the qualifier retake to August which does not provide sufficient time for students to be admitted to the Mays Business School.

The PhD Operating Committee members have discussed the need to admit students directly into the IFA PhD with contingencies if the students fail to meet the requirements for entry into the disciplinary fields of Mays Business School. Preliminary discussions have occurred with graduate coordinators in two fields to develop criteria for admission. However, students are sometimes reluctant to recognize that they may need prerequisite courses prior to taking the doctoral seminar series which may add a semester to their degree program.

In summary, the IFA has achieved a key objective for the MAB degree of national recognition by academia and industry. By fall 2012 physical and financial support should be in place to ensure sustainability of this degree program. The PhD program is still in early evolution and has experienced a slower initiation than anticipated. This can be attributed in part to the anticipation of a quick approval process (1-2 years) that took nearly 6 years to complete, during which time the faculty had redirected their interests and energy. The IFA faculty still believes in and supports the objectives of this degree. As the full review team indicated, this is a unique degree and if TAMU cannot sustain this degree with the institutional platform for IDP’s then there is low probability that any other Land Grant University will be able to succeed.

Analysis

Much has changed since the last external review in 2012. We have operationalized annual assessment of student learning outcomes, the undergraduate program has expanded considerably, and the graduate programs have maintained agricultural economics and agribusiness degree options at both the Masters and the Ph.D. levels. This analysis provides information on the alignment of the academic programs with the department’s strategic plan, and with college and institutional goals and priorities; and, describes the improvements made since the previous academic program review.

Growing Excellence
Our faculty members are nationally and internationally recognized and are the recipients of numerous academic awards and recognitions. Our faculty have made disciplinary contributions with the publication of 390 peer reviewed journals for the period 2012-2018, ranked good or above according to our internal department criteria. The top three areas of distinction –based on internal departmental criteria and number of faculty publications- appear in the quantitative, resource economics, and agribusiness disciplines. We believe a continued commitment to these research strengths will elevate the department’s graduate program to the top ten among its peer institutions (to achieve the department’s operational objective 2). The success of our faculty in winning competitive grants and contracts with government and private sector entities is added testimony to the confidence, respect and value that the market places on the research information from the department.

The faculty and staff prepared students for employment and lifelong learning through the teaching of economic and business principles. For the academic years 2012-2016, the number of degrees conferred was:

- 1,153 undergraduates;
- 180 Masters degrees (96 MAB and 84 MS); and
- 54 Doctoral degrees (52 AGEC, 2 ABME).

The Extension program is well-recognized at both the national and regional levels and is the recipient of numerous awards (both individual and group). The department’s goal 5 seeks to deepen the extension program’s role in the advancement of economic / business principles to stakeholders outside of academic institutions. This goal has been achieved. The community economics and agricultural law units were re-invigorated and an energy emphasis was pursued. These steps achieved the department’s strategic program objective 5 (expand efforts in community economics and policy), while also achieving operational objective 4 (enhance core extension programs). The outcome of these efforts is notable success. During 2017 Extension personnel generated nearly $1.4 million in grants to support outreach programs and a total of 89,849 attendees in group meetings for over 267,000 contact hours. In addition, media viewing audience reached overall 10 million people.

The teaching, research, and extension programs remain highly integrated, as they were at the time of the previous academic program review. Some Extension professors teach courses at both the graduate and undergraduate levels. Research collaboration between teaching and research professors and the extension program professors is common.

At the undergraduate level, entry requirements for transfers to our program have been tightened by raising entry GPR and closer examination of student essays. The tighter requirements have not deterred applicants as shown by the 67% increase in undergraduate enrollment between 2012 and 2018. We rank very high as one of the undergraduate programs within the College of Agriculture with the fewest number of students on probation or other academic deficiency.

Furthermore, we have pursued a path for excellence by defining measurable student learning outcomes. The annual assessment process of SLOs over a five year period shows that the department has consistently met targets for expected outcomes defined in the assessments. The
college assessment program review has rated the metrics, targets, and the action plans for academic improvement and found that, with a few exceptions, the assessment activities meet expectations or are considered exemplary.

Alignment of the Department’s priorities with College and University Priorities

The department’s vision and mission align very well with the priorities of the university and the college. Imperative 3 defined under the university’s Vision 2020 seeks to “enhance the undergraduate academic experience.” This imperative has been captured under the college’s strategic priorities under the broad heading, “Enriching our youth.” The enhancement of the academic experience and the enrichment of the youth entail opportunities for experiential learning through government and private industry internships, study abroad, membership in leadership, college, and departmental student organizations, Honors program participation, and service.

Among undergraduates and Master of Agribusiness students, the number completing internships has grown and many more potential employers endorse the curriculum and support programs than was the case at the last review. Study abroad program offerings, both in terms of numbers and destinations, and leadership positions and awards respond to the department’s priority objective to “develop a network with former students to enhance student learning experiences and placement and to facilitate achievement of department goals” (AGEC, Strategic objective 7), and to “teach students how to use economic and business principles and develop their leadership and communication skills to prepare them for employment and to continue life-long learning (AGEC, Strategic objective 2).
Improvements made since the previous APR and the results of those improvements

Several innovations have occurred both in terms of course content and also in the teaching of the courses. The improvements are elaborated further in the sections entitled “Analysis” under the section on “Academic Programs and Curricula” and “Student Profile.” Highlights include:

- A formal process for graduate student involvement in teaching undergraduate classes.
- Restructuring of the quantitative economics sequence in the undergraduate program.
- Minors in rural entrepreneurship and Certified Financial Planner were established.
- Processes for ABME students to be admitted to Mays Business School have been resolved so that the size of the doctoral programs in AGEC and ABME are stabilized.

There are several issues of concern as the department enters a new phase of engagement to remain as a recognized contributor to achieving the land grant mission of the university. From the previous self-assessment, there were 80 FTEs across a number of different faculty designations while in this reporting period, the number of comparable FTEs has declined to approximately 69. This includes all full-time budgeted positions that hold a teaching, research and or extension position. The faculty members of the IFA have also declined, largely due to retirements. Such declines raise potential concerns surrounding the sustainability of the department’s signature programs, and raises significant challenges in achieving the department’s operational objective 2. The decline in personnel along with the higher complexity of modern problems point to a need for a fundamental re-focus of the department’s strategic objectives and goals.
Academic Programs and Curricula

Undergraduate Academic Program

The department offers two degree programs - Agribusiness (AGBU) and Agricultural Economics (AGEC) at the undergraduate level.

*The Agribusiness Program (AGBU)* combines the Core Business Knowledge requirements of a degree in business with coursework emphasizing the understanding of the unique institutional and managerial challenges facing agribusiness firms. Students integrate business management principles with technical knowledge to develop practical decision making skills. This breadth and depth of training allows graduates of the program to find employment in non-ag firms as well as with more traditional agribusiness companies. The B.S. degree in Agribusiness prepares students for careers in the nation’s growing agribusiness sector which provides products and services for the production, processing, and distribution of food and fiber. With the increased consumption of food away from home, the increased packaging and meals-ready-to-eat categories, and potential for expanded export opportunities, the need for graduates to fill agribusiness positions is increasing.

*The Agricultural Economics (AGEC)* degree program includes four options: (1) Finance and Real Estate, (2) Food Marketing Systems, (3) Policy and Economic Analysis, or (4) Rural Entrepreneurship.

(1) *The Finance and Real Estate* option provides those students interested in pursuing careers in either the banking or real estate industry tools for understanding issues unique to lending, real estate appraisal, real estate investment, development, and brokerage. Students enrolled in this option develop an in-depth knowledge of how loans are made, how land is valued, and how it is transacted. Additionally, those students interested in pursuing a graduate degree in real estate or finance have access to coursework which will prepare them for programs like MRE (the Master of Real Estate graduate program), the master of Finance, and the MBA. Students will develop a strong background in the following areas: finance, real estate, accounting, and management.

(2) *The Food Marketing Systems* option provides those students interested in pursuing careers in the food marketing and sales sector of the food supply industry tools for understanding issues unique to the development, advertising, distribution, and sales of food products. Students enrolled in this option develop an in-depth knowledge of how food is priced, traded, and sold, both in the United States and abroad. Students develop a strong background in the following areas: agribusiness management, international agricultural issues, food sales, and food marketing.

(3) *The Policy and Economic Analysis* option provides those students interested in pursuing graduate or law degrees, as well as careers in local, state, and federal government and policy the tools for understanding the issues unique to in-depth examination of government policies and the economy. Students enrolled in this option gain an understanding of what being involved in research, the legal profession, and the government entails. Students interested in
graduate education may focus on developing a strong background in the following areas: quantitative analysis, economic theory, and applied economics. Those interested in entering law school may focus on courses in law, political science, and technical writing. Furthermore, those students interested in careers in government and policy may focus on courses in policy, political science, and management.

(4) The Rural Entrepreneurship option provides those students with interest in owning, managing, or lending to rural, innovative business enterprises the tools for understanding the issues unique to the start-up of rural, innovative businesses. The Rural Entrepreneurship option plan of study integrates the technical skills required for involvement in rural business with application-based experience provided by the program’s capstone courses. More specifically, students who pursue the rural entrepreneurship option will develop a strong background in the following fields: economics, accounting, management, finance, and policy.

Undergraduate Program Curricula

Both of the department’s undergraduate degrees require 120 hours of course work, with 43 hours of that credit associated with the University’s Core Curriculum defined by the Faculty Senate. The Agribusiness degree is oriented toward preparing students for employment in the corporate world, with a rigid curriculum that contains seven to 10 hours of general electives. The Agricultural Economics degree includes 24 hours of general and directed electives, enabling students’ flexibility in course selection associated with career-oriented options: Finance and Real Estate, Food Marketing Systems, Policy and Economic Analysis, and Rural Entrepreneurship. These programs/options span more than 25 course offerings that include international and internship-related learning experiences.
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<tr>
<th>University</th>
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<th>Programs Offered (Undergraduate)</th>
<th>Minors</th>
<th>Programs offered (Graduate)</th>
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<td>Agribusiness Agricultural Economics Farm Management Sales/marketing</td>
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<td>Agribusiness</td>
<td>Agricultural Economics and Agribusiness</td>
<td>Agricultural Real Estate Appraisal, Environmental Economics, Politics and Policy</td>
</tr>
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**Academic Enhancements / High-impact Opportunities for Students**

**Undergraduate Program**

The department provides students high impact learning opportunities through many enriching activities including study abroad, undergraduate research and faculty directed studies, internship programs, academic and professional conferences, and competitions. We also provide other high-impact learning activities such as inviting academic researchers, business professionals, and community leaders to visit our classrooms, and hold meetings with students one-on-one and in small groups. Figure 9 shows the number of students who participated in high impact learning activities such as study abroad, student research, internships, conferences and competitions from 2013 to 2018, and the number of guest speakers invited to the classrooms from 2016-2018.

**Figure 9. Undergraduate High Impact Learning Activities**

Source: Department of Agricultural Economics (Note: Number of guest speakers was not tracked before 2016)
Agricultural Economics Undergraduate Honors Programs

The department offers an honors program to qualified, academically talented, and highly motivated students. An honors student’s college experience is enriched by following a challenging curriculum, engaging in inquiry-based learning, and discovery. Honors students work closely with the renowned faculty at Texas A&M University, acquiring the discipline and skills to engage in independent research that can be particularly useful if planning to attend graduate or professional school. Since honors class sizes are usually small, students get an opportunity to develop the vital problem solving and critical thinking skills that are needed in the search for solutions to the myriad of problems facing the global community. Honors students are encouraged to compete for such prestigious scholarships as the Rhodes, Marshall, Goldwater, and the Fulbright. The honors program offers students an effective entry into a fruitful and rewarding professional career through participation in innovative co-curricular and leadership activities.

Students enter the Honors program with an expression of interest and the proper qualifications. To meet TAMU Honors eligibility requirements, an incoming freshman must graduate in the top 10% of their high school class and have an SAT of at least 1310 (reading/writing + math, with minimums of 660 and 620, respectively) or a composite 28 on the ACT (minimum score of 27 each on verbal and math) OR 2) at their regularly scheduled registration time as a current student if they have earned a cumulative GPR of 3.5 or better. The requirements in the Department of Agricultural Economics are more stringent, and requires an Honor’s student (1) maintain a cumulative TAMU GPR of at least 3.50, a GPR in honors class of at least 3.25, and no grade in an honors course below a “C”; (2) 18 hours minimum of Honors courses; (3) must take Math 151 in place of Math 142; (4) Attend two professional development events per semester including, but not limited to - Participation in the National Agri-Marketing Association (NAMA) Marketing Team, Professional development trips (Produce Marketing Association – PMA for example), Participation in the Academic Quiz Bowl Competition, The Wiley Lecture Series, The University Distinguished Lecture Series, Leadership in a state or national organization (FFA, Beefmaster’s, etc.), internships, and study abroad programs.

AGEC Honors Courses Requirement (18 hours minimum)

- AGEC 105H or AGEC 217H (3 hours) Introduction to Agricultural Economics or Fundamentals of Agricultural Economics Analysis.
- AGEC 317H (3 hours) Economic Analysis for Agribusiness and Management
- AGEC 491H (3 to 6 hours) Research. Students must submit a research statement and advisor authorization form at least one month prior to registering for 491H. Enrollment in 491H is available only to honors candidates (see below).
- Three (3) hours of additional honors credits either outside the department or inside the department as a second semester of AGEC 491H or through an honors contract. If AGEC 105H and AGEC 217H are both taken, this would count toward satisfying this requirement.
- Six (6) hours of honors course work outside the Department of Agricultural Economics.

Figure 10 shows that the annual enrollment in the AGEC honors program has increased steadily in recent years. Table 2 shows Honors students’ enrollment in High Impact Practices courses.
The increasing enrollment is evidence of commitment to excellence in the AGEC program. A strong honors program provides a pathway to a top graduate school program and involvement in teaching and research.

**Figure 10. Annual Enrollment of the AGEC Undergraduate Honors Program**

![Graph showing annual enrollment of the AGEC Undergraduate Honors Program from 2013-2014 to 2017-2018.](source)

Source: Department of Agricultural Economics
Table 2. Honors Student Enrollment in AGEC High Impact Practices Courses

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<th>Course Number</th>
<th>Course Title</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<td>Introduction of Agricultural Economics</td>
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<td>AGEC 484</td>
<td>Internship</td>
<td></td>
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<tr>
<td>AGEC 485</td>
<td>Directed Studies</td>
<td>1</td>
<td>2</td>
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<tr>
<td>AGEC 491</td>
<td>Research</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>6</td>
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</tr>
</tbody>
</table>
Photo 6. Honors students participate in the neural economic research on consumers’ decision making using brain monitoring and eye-tracking devices (co-investigated by Dr. Yvette Zhang and Dr. Marco Palma).

Internships

Students in our department have the opportunity to participate in both government and industry internships. The major government internship programs are the Agricultural and Natural Resources Program (ANRP) Congressional and State Legislature Internships and the Industry Internship Program. Both programs allow students to receive up to 6 hours of academic credit and are offered during the fall, spring, and 10-week summer semesters. Industry internships provide opportunities for students in the Department of Agricultural Economics to gain work experience related to their academic area of study while earning academic credit at Texas A&M University. Students are typically paid during their internship and some companies even provide housing. Students receive academic credit, explore career options, and gain valuable work experience and professional career skills as part of the internship. An industry internship is a work-based learning experience intended to complement the classroom learning outcomes of students. Figure 11 shows that the annual enrollment in the department’s internship course (AGEC 484) has increased in recent years.
Figure 11. Annual Internship Enrollment

Source: Department of Agricultural Economics

Photo 7. Kiara Jaraczewski (Left) at her industry internship and Kent McLeroy (Right) at Helena Chemical as an Intern. He now serves as the Manager.

*Study Abroad*
The globalization of agriculture is a significant trend in the food and agricultural industry, which requires today and the future’s scientists, economists, and entrepreneurs to have a much better understanding of the world than ever before. The department has offered study abroad opportunities in 8 countries (China, Costa Rica, France, Ghana, Ireland, Mongolia, Scotland, and Swaziland) for a total of 248 students from 2013 to 2018. These study abroad trips provide students with unique learning experience and foster global perspective.

Picture 8. “Selfie” Experience - Ghana

Undergraduate Student Organizations

Clubs and student activities are part of our departmental culture and provide leadership and service opportunities for students. Several organizations in the department are available to undergraduate students to hone their leadership skills; network with other students, faculty, and potential employers; build relationship with professionals; participate in social events and local community service projects; and socialize: Agricultural Economics Society (Ag Econ Society); Society of Finance, Insurance, and Real Estate (FIRE); Financial Planning Student Association (FPSA); Professional Sales Student Association (PSAA); National Agri-Marketing Association (NAMA); Aggie Recruiting Exceptional Prospective Students (Aggie REPS).
Participations in Professional Conferences and Competitions

The undergraduate students in our department have opportunities to continue their learning outside of the classroom through attending professional meetings and participating in national competitions, and our students have received significant recognition in these events (Figure 5). Our Students actively participated in professional development trips and regularly attended regional and national conferences, including Applied and Agricultural Economics Association Conference (AAEA), National Agri-Marketing Association (NAMA) Conference, Food Distribution Research Society (FDRS) conference, Produce Marketing Association (PMA) Conference, TD Ameritrade Conference, National Association of Government Defined Contribution Administrators (NAGDCA) Conference, Financial Planning Association (FPA) Conference, Southwest Agriculture Summit, and International Leadership Symposium. Our students’ participation in Academic Quiz Bowl in AAEA annual meetings has been almost an annual event with teams winning or placing highly against peer universities. Our undergraduate students have also successfully competed in NAMA Student Marketing Competition and the FDRS Food Marketing Challenges.
**Admission Criteria (Doctoral Students) and Graduate Curricula**

Acceptance into the Department is based on consideration of the following:

- Professional statement of purpose and career goals
- Reference letters
- Work experience/Internships
- Research and Teaching Experience
- Personal Statement
- Grade Point Average both Undergraduate and Graduate (If applicable)
- Graduate Record Examination

The information above is used to determine a rubric score that is used to measure the likelihood of success in our graduate programs. The rubric score uses the following weighted categories:

- Past Academic Performance (30%)
- Indicators of Future Success (55%)
- Experience Outside of the Classroom (15%)

Students who meet admission requirements as defined by the College of Agriculture and Life Sciences will be admitted to graduate studies in agricultural economics. The PhD degree requires a minimum of 64 credit hours for the “traditional” program and 96 credit hours for the “straight-through” program, not including prerequisites. The curriculum is composed of four fundamental components:

1. Economic Theory and Applications

A theoretical component, taught by the highly ranked TAMU Department of Economics, consists of classes in macroeconomics, microeconomics, and econometric theory. The microeconomic component covers neoclassical theory, game theory, and risk analysis. This component may be complemented by additional economics courses depending on the student’s interests.

The agricultural economics core component brings together theory and quantitative methods in the context of applied research and managerial and policy analysis. Classes in this area cover analysis of economic problems concerning firm production, household consumption, markets, industrial organization, and distribution of welfare.

2. Quantitative Methods

An applied quantitative methods component, taught within the Department of Agricultural Economics, covers research applications supported by tools from econometrics, mathematical programming, dynamic and stochastic programming, optimal control, and simulation.

3. Primary Field Areas
The primary field area requires 6 credit hours. Two departmentally-defined field areas are available to choose from: Markets and Information Economics or Environmental and Resource Economics.

4. Supporting Field Areas

In addition to two required primary field courses, students must take two field elective courses (6 credit hours) which will (1) provide greater depth in their primary field area or (2) constitute a second field. The field elective courses may be selected from AGEC courses in policy, consumption, resources, trade, production, and industrial organization, as well as from broader university offerings in finance, operations research, econometrics, statistics, and water resources, among many others.
Master of Science – Thesis Option: Degree Planning Guide

Student’s Name

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Description</th>
<th>Credits</th>
<th>Semester Offered</th>
<th>Year Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREREQUISITES OR EQUIVALENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 322</td>
<td>Microeconomic Theory</td>
<td>3</td>
<td>F.S.SSI</td>
<td></td>
</tr>
<tr>
<td>ECON 410*</td>
<td>Macroeconomic Theory</td>
<td>3</td>
<td>F.S.SSI</td>
<td></td>
</tr>
<tr>
<td>MATH 142*</td>
<td>Business Mathematics II (Multivariate Calculus)</td>
<td>3</td>
<td>F.S.SSSI,SSII</td>
<td></td>
</tr>
<tr>
<td>STAT 303*</td>
<td>Statistical Methods</td>
<td>3</td>
<td>F.S.SSSI,SSII</td>
<td></td>
</tr>
<tr>
<td><strong>REQUIRED COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 607*</td>
<td>Foundations of Microeconomic Theory</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>ECON 611*</td>
<td>Foundations of Macroeconomic Theory</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative Methods:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGEC 621†</td>
<td>Econometrics for Agribusiness</td>
<td>3</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AGEC 622†</td>
<td>Agribusiness Analysis and Forecasting</td>
<td>3</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td><strong>Field Requirements (6 credits of AGEC Field Courses):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research Requirements:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGEC 607</td>
<td>Research Methodology</td>
<td>3</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>AGEC 691*</td>
<td>Research</td>
<td>8</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td><strong>Elective Courses (3 credits required):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student’s Advisory Committee:

<table>
<thead>
<tr>
<th>Chair</th>
<th>Member</th>
<th>Outside Member</th>
</tr>
</thead>
</table>

Minimum Credit Required: 32. Departures from courses listed above require written justification and approval by the student's proposed Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

* Or ECON 311 or AGEC 430.
† Or Math 131, 151 or 171.
‡ Or INFO 303.
§ Or ECON 629 Microeconomic Theory I (Fall).
* Or ECON 636 Macroeconomic Theory I (Spring).
† Or AGEC 661 Applied Econometric Methods in Agriculture (Spring).
§ Or AGEC 641 Operations Research Methods in Agricultural Economics (Fall) or AGEC 643 Applied Simulation in Agricultural Economics (Fall).
* Research credits may be replaced by course credits.
## Master of Science – Non-Thesis Option: Degree Planning Guide

**Student’s Name:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Description</th>
<th>Credits</th>
<th>Semester Offered</th>
<th>Year Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 323</td>
<td>Microeconomic Theory</td>
<td>Credit 3</td>
<td>F,S,SSI</td>
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</tr>
<tr>
<td>ECON 410*</td>
<td>Macroeconomic Theory</td>
<td>Credit 3</td>
<td>F, S, SSI</td>
<td></td>
</tr>
<tr>
<td>MATH 142*</td>
<td>Business Mathematics II (Multivariate Calculus)</td>
<td>Credit 3</td>
<td>F, S, SSI, SS II</td>
<td></td>
</tr>
<tr>
<td>STAT 303*</td>
<td>Statistical Methods</td>
<td>Credit 3</td>
<td>F, S, SSI, SS II</td>
<td></td>
</tr>
</tbody>
</table>

### REQUIRED COURSES

**Economic Theory:**
- AGEC 619* Managerial Economics for Agribusiness Credit 3 Fall
- ECON 611* Foundations of Macroeconomic Theory Credit 3 Fall

**Quantitative Methods:**
- AGEC 621* Econometrics for Agribusiness Credit 3 Fall
- AGEC 622* Agribusiness Analysis and Forecasting Credit 3 Spring

### Field Requirements (9 Credits of AGEC Field Courses):

### Research Requirements:
- AGEC 693* Professional Study Credit 3 All

### Elective Courses (12 Credits Required):

**Student’s Advisory Committee:**

<table>
<thead>
<tr>
<th>Chair</th>
<th>Member</th>
<th>Outside Member</th>
</tr>
</thead>
</table>

**Minimum Credits Required:** 36. Departures from courses listed above require written justification and approval by the student’s proposed Advisory Committee Chair and the Associate Head for Graduate Programs at the time the degree plan is filed.

* Or ECON 311 or AGEC 430.
* Or MATH 131, 151 or 171.
* Or INFO 303
* Or ECON 607 Foundations of Microeconomic Theory (Fall) or ECON 629 Microeconomic Theory I (Fall).
* Or ECON 636 Macroeconomic Theory I (Spring).
* Or AGEC 661 Applied Econometric Methods in Agriculture (Spring).
* Or AGEC 641 Operations Research Methods in Agricultural Economics (Fall) or AGEC 643 Aplied Simulation in Agricultural Economics (Fall)
* Or an elective course approved by the Student’s Advisor (if this option is chosen, the final exam will be over MS course work.)
Master of Agribusiness: Degree Planning Guide

Student's Name ___________________________

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Description</th>
<th>Credits</th>
<th>Semester Offered</th>
<th>Year Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 323</td>
<td>Microeconomic Theory</td>
<td>Credit 3</td>
<td>F, S, SSI</td>
<td></td>
</tr>
<tr>
<td>ECON 410¹</td>
<td>Macroeconomic Theory</td>
<td>Credit 3</td>
<td>F, S, SSI</td>
<td></td>
</tr>
<tr>
<td>MATH 142²</td>
<td>Business Mathematics II (Multivariate)</td>
<td>Credit 3</td>
<td>F, S, SSI, SSI1</td>
<td></td>
</tr>
<tr>
<td>STAT 303³</td>
<td>Statistical Methods</td>
<td>Credit 3</td>
<td>F, S, SSI, SSI1</td>
<td></td>
</tr>
</tbody>
</table>

**PREREQUISITES OR EQUIVALENTS**

**REQUIRED COURSES**

**Foundation Courses**:  
- ACCT 640 Accounting Concepts and Procedures  
- AGEC 619 Managerial Economics in Agribusiness  
- FINC 635 Survey of Finance  
- MKTG 621 Survey of Marketing

**Quantitative Courses**:  
- AGEC 621 Econometrics for Agribusiness  
- AGEC 622 Agribusiness Analysis and Forecasting

**Field Course Requirements**:  
- AGEC 629 Agribusiness Strategic Management  
- AGEC 630 Financial Analysis for Agribusiness Firms

**Elective Courses (9 Credits required)**:  
- Credit 3  
- Credit 3  
- Credit 3

Student’s Advisory Committee: Chair ___________________________________________  
Director, Master of Agribusiness Program

Minimum Credits Required: 39. Departures from listed courses require approval of the MAB Program Director at the time the degree plan is filed.

¹ Some Mays Business School classes may be offered in the summer term.
² or ECON 311 or AGEC 430
³ or MATH 131, 151 or 171
⁴ or INFO 303
⁵ Students may elect to take a more advanced course in ACCT, FINC, MKTG, or MGMT with the approval of the MAB Program Director.
Number of Degrees Awarded per Year

Figure 12. Five-Year Degree Profile

![Degree Count (Undergraduate)](image)

Source: Data and Research Services

The agricultural economics major has consistently graduated more students than the agribusiness major. The agribusiness student numbers are capped at 400 per agreement with the Mays Business School. The agricultural economics major is becoming more popular as shown by the rising graduation numbers.

Average Time to Degree

Figure 13. Average Years to Degree

![Year to Degree (Undergraduate)](image)

*Includes only “Came in as First-Time in College” and does not include Transfer students.

Source: Data and Research Services
The average time to graduation in the agricultural economics program is lower than the university average of above 4 years. One explanation is that some students are entering our program with significant hours from AP courses taken while in high school. Students usually register at a local community college and obtain college credits while still in high school.

**Assessment of Student Learning Outcomes**

*Undergraduate Program*

The department uses SLO assessment guidelines from the Office of Institutional Effectiveness & Evaluation (OIEE) under the Office of the Provost to measure how well we are responding to our land grant teaching mission in our undergraduate and graduate education. The SLO Mission states, “The mission of the Office of Institutional Effectiveness & Evaluation is to foster assessment practices university-wide by supporting the collection, analysis, management and use of data. We facilitate efforts of continuous improvement to enhance student learning and strengthen the university’s programs, services, operations, and processes.” The department and IFA also measure SLO of the core curriculum (CC) to meet graduation requirements. The core curriculum focuses on the development of six skills that have been shown to be effective in preparing students for the job market and their role in a diverse world and democratic society. Metrics for measuring these skills are defined by the department in consultation with the OIEE and the Dean’s office. The data and analysis of the department’s SLO are entered into the university assessment system.

The department has been measuring the six skills of University Core Curriculum Development since 2012-2013 to 2016-2017.

- Critical Thinking Skills – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- Communication Skills – to include effective development, interpretation and expression of ideas through written, oral and visual communication.
- Empirical and Quantitative Skills – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- Teamwork – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- Personal Responsibility – to include the ability to connect choices, actions and consequences to ethical decision making.
- Social Responsibility – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.

An analysis of measurement and analysis of SLOs by the Department of Agricultural Economics show that the department has:

1. An ongoing and integrated planning and evaluation in place
2. An assessment process in place that promote continued improvement of its programs
3. Identifiable measures of expected outcomes
4. Evidence of improvement leading to the achievement of the department’s land grant teaching mission.

(A detailed analysis of Student Learning Outcome is provided in Appendix 2)

**Graduate Program**

Students’ Learning Outcomes for the 2015-16 and 2016–17 reporting cycles measured a student’s ability to teach or explain the Subject matter in their Discipline to a broad range of audiences; skill and ability to prepare and present Oral/Poster presentations made at conferences and workshops; ability to apply discipline-specific knowledge in a range of contexts to solve problems, and to make and justify decisions; publish in refereed or peer-reviewed Scientific publication; and a student’s ability to communicate effectively. The Masters program achieved all the targets set to measure outcomes in the program.

While all targets were met, the graduate program considered students’ communication skills to be of high priority and area where improvements can be made. One change that was motivated by our analysis of SLO data from the two cycles was the implementation of a standard that all incoming Graduate Students (Whether Funded or not) to take the Center for Teaching Excellence (CTE) Teaching Assistant Training, this will include all MS students. This will help give the student the stepping stones into opening communication and helping build the ability to teach and explain their subject matter in a more coherent way.

There were also structural changes to our courses and sequence in which they are taught. The Masters program met all the set targets indicating that we have our students on the right path to being knowledgeable professionals. The structural changes in our course sequencing were to help ensure that our students maintain this high quality of knowledge in their discipline. The conclusion from our analysis is that the Masters program is subject to well defined and measurable targets, and these targets provide a path for continued improvements in the program.
### AGEC Masters Degree Learning Outcomes Assessment Results

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>2015-16 Cycle</th>
<th>2016–17 Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teaches or Explains the Subject matter in their Discipline to a broad range of audiences</td>
<td>Meets¹</td>
<td>Meets²</td>
</tr>
<tr>
<td>2. Oral/Poster presentations made at each of the following venues</td>
<td>Meets</td>
<td>Meets</td>
</tr>
<tr>
<td>3. Students will apply discipline-specific knowledge in a range of contexts to solve problems, and to make and justify decisions.</td>
<td>Meets</td>
<td>Meets</td>
</tr>
<tr>
<td>4. Refereed or Peer-reviewed Scientific publications.</td>
<td>Meets</td>
<td>Meets</td>
</tr>
<tr>
<td>5. Students will communicate effectively.</td>
<td>Meets</td>
<td>Meets</td>
</tr>
</tbody>
</table>

¹ **Action Plan:** Student Communication: Despite meeting the target this is an area of high priority for the department and students can always improve. We will implement a standard that all incoming Graduate Students be required (Whether Funded or not) to take the Center for Teaching Excellence (CTE) Teaching Assistant Training, this will include all MS students. This will help give the student the stepping stones into opening communication and helping build the ability to teach and explain their subject matter in a more coherent way.

² **Action Plan:** Structural Changes to Curriculum: Having met all of our targets for the last reporting cycles indicates that we have our students on the right path to being knowledgeable professionals. To help ensure that our students maintain this high quality of knowledge in their discipline, we are in the process of doing some structural changes to our courses and the sequence in which they are taught so that we can give our students a greater knowledge base inside of their discipline.

---

**Master of Agribusiness Learning Outcomes Assessment Process**

The Intercollegiate Faculty of Agribusiness have established the following target outcomes for MAB students, so that upon completion of the Master of Agribusiness degree, graduates will be able to:

1. Apply economics and management reasoning to describe situations and opportunities, interpret market signals, and analyze the forces that create and support change in the global agribusiness sector.
2. Effectively communicate their decisions to professional business audiences.
3. Demonstrate awareness of professional choices that involve ethical dilemmas.
4. Interact with competence in a group setting that requires collaboration and negotiation of competing interests to reach a common goal.
5. Recognize and respect the complexity of people’s diversity and individual differences.
In the current cycle, we implemented action plans to reinforce quantitative skills development and to enhance the students’ ability to express their level of economic analysis skill. The evidence from the students' own reporting is that quantitative skills are at the top of their mind as they take the first step in professional placement (during internship). The proportion of students who achieve a learning level of "Transfer" was 80% and on track, even though we are not entirely satisfied with the achievements toward the Action Plan in the cycle just completed (entitled Economic and Market Analysis Training).

Beginning in fall 2017, after a pilot test in 2016, a seminar series called "Quant+" was initiated to reinforce skills in Excel and related quantitative modeling tools. The Quant+ content served as a leveling workshop series for students who had not received significant exposure to spreadsheet skills, thereby increasing the chance of success in AGEC 622 (Forecasting and Simulation). Further, the Quant+ series had the intent of making all students aware of software and techniques for advanced quantitative modeling as used in the career path that is typical for our discipline of Agribusiness.

The faculty and staff used an approach to implementing the Action Plan that engaged 7 Master of Agribusiness students as developers / presenters in the out-of-class workshop series, called Quant+. The low attendance at these seminars during the pilot phase in 2016 indicated that deeper engagement was needed. To enhance student engagement, students who were on assistantships conducted the workshops during 2017, and other students received scholarships for curriculum development for the workshop series. It was a success to have seven students engaged in developing and delivering the workshops and in completing an evaluation process for the attendees. We expected that this group of students would encourage other classmates to attend in a peer-to-peer reinforcement. In spite of the formal engagement, the overall attendance was less than 40% of the total number of MAB students. At the advanced “challenge” workshops, covering Python programming, none of the MABs participated.

Students stated that time constraints were the obstacle to participation. To work around this challenge, the Action Plan for the upcoming cycle will implement some of the needed activities during classroom time or as classroom assignments. Further, we will produce video instruction materials for use when the students’ time allows. Other workshops will continue to be held during times that do not conflict with students’ classes so that face-to-face training can be provided through a Quant+ workshop series.

Seven students were engaged in the Quant+ workshop series as content developers. The workshops were offered outside of class time between September 2017 and April 2018 and various methods were used to generate interest and attendance. Notwithstanding these efforts, relatively few Master of Agribusiness students attended. Those who participated expressed that the workshops were valuable.

In addition to quantitative skill enhancement, the completed assessment cycle had the intention of checking students’ progress as life-long learners. The evidence used was the internship reports. We found that students are aware of personal growth and change during their internship, yet they are not planning explicitly for changes in academic plans and in stretch assignments for the subsequent capstone semester. To respond, we have made plans for articulation of personal learning objectives through mentoring, through resume-building workshops, and with in-class
exercises during the capstone course sequence (AGEC 629 and AGEC 630). The formal Action Plan for this endeavor is called “Improve Rubrics on Economics Presentations and Test Their Implementation.”

We believe the Action Plan will improve future assessment results because we will be more intentional and clear in communicating expectations to students. There will be course assignments and out-of-class peer mentor group work that will engage students in the final development of the rubrics. The implementation will be monitored with students’ peer review of practice presentations, with staff and faculty assessments, and with invited external judges who participate in the Case Study Competitions. Thus there will be variety in the assessors applying the rubric on various types of business presentations. Ultimately, we expect to have a strong instrument and data that can be used in future scholarship to make us confident about improved student learning in this behavioral attribute of success.

**Ph.D. Program**

Students’ Learning Outcomes for the 2015-16 and 2016–17 reporting cycles measured a student’s ability to conduct valid, data-supported and theoretically consistent research; skill and ability to prepare and present Oral/Poster presentations made at conferences and workshops; ability to teach or explain the subject matter in their discipline to a broad range of audiences; exhibit a coherent understanding of discipline-specific knowledge; publish in refereed or peer-reviewed Scientific publication. The Doctoral program achieved all the targets set to measure outcomes in the program.

Even though the program met all targets, there were concerns about students’ teaching and communication skills. Faculty evaluation of students’ teaching reported on average a 1.0/4.0 when measuring student's ability to teach or explain the subject matter in their discipline to a broad range of audiences. The faculty report showed that students were meeting learning outcome assessment goals, but the faculty saw room for improvement. The program implemented a standard requirement that all incoming Graduate Students (Whether Funded or not) to take the Center for Teaching Excellence (CTE) Teaching Assistant Training. This requirement is to help give the student the stepping stones into opening communication and helping build the ability to teach and explain their subject matter in a more coherent way.
### Ph.D. Degree Learning Assessment Outcomes

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>2015-16 Cycle</th>
<th>2016-17 Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students conduct valid, data-supported and theoretically consistent research</td>
<td>Meets¹</td>
<td>Meets²</td>
</tr>
<tr>
<td>2. Oral Presentations and Poster Presentations</td>
<td>Meets</td>
<td>Meets</td>
</tr>
<tr>
<td>3. Students will teach or explain the subject matter in their discipline to a broad range of audiences</td>
<td>Meets</td>
<td>Meets</td>
</tr>
<tr>
<td>4. Students will exhibit a coherent understanding of discipline-specific knowledge</td>
<td>Meets</td>
<td>Meets</td>
</tr>
<tr>
<td>5. Refereed or Peer-reviewed Scientific publications</td>
<td>Meets</td>
<td>Meets</td>
</tr>
</tbody>
</table>

¹ **Action Plan:** Student Teaching/Communication: Based on our findings that Faculty reported on average a 1.0 when measuring student's ability to teach or explain the subject matter in their discipline to a broad range of audiences which indicates that students are performing below faculty Expectations, we will implement a standard that all incoming Graduate Students be required (Whether Funded or not) to take the Center for Teaching Excellence (CTE) Teaching Assistant Training. This will help give the student the stepping stones into opening communication and helping build the ability to teach and explain their subject matter in a more coherent way.

² **Action Plan:** Continued Enhancements: Having met and exceeded all of our targets for the last reporting cycles indicates that we have our students on the right path to being knowledgeable professionals. To help ensure that our students maintain this high quality of knowledge in their discipline, we are in the process of doing some structural changes to our courses and the sequence in which they are taught so that we can give our students a greater knowledge base inside of their discipline. We are in the implementation phase for restructuring several of our core curriculum courses that will build and enhance their foundational knowledge. Our Findings have shown that we are already making great strides in how the students are able to show a better comprehension of their knowledge.

- Students are meeting measurable learning assessment targets
- We are continually making improvements and revisions to how the Graduate office is operating to ensure that all students receive the maximum potential on their learning efforts; this includes communicating effectively about significant progress toward completion degrees by placing students on probation with requirement of creating and sticking to an action plan of their own or being dismissed from the programs.
Analysis

MS Program

The information from the assessment of the Masters SLO is captured in the Action Plans for improving the Masters program and have focused on the need to accommodate students’ interest in a broader context. As a result of interest in international food security, two new courses were created - *Economics of Foreign Intervention, Conflict and Development* and *Food Security, Climate, and Conflict*, both taught by Dr. Edwin Price, who holds the Howard G. Buffett Foundation Endowed Chair on Conflict and Development. These classes have been patronized by students in our program and from others in the Bush School, International Studies. We maintain our relationship with the Borlaug Institute by offering a class in International Development taught by Professor Roger Norton, who doubles as Regional Director for Africa at the Borlaug Institute.

MAB Program

The MAB program has a reputation for excellence internationally and, from that strong foundation, it is not surprising that Action Plans for continuous improvement are very intensive for faculty and professional staff. The financial and physical resources for intensive interaction with students toward professional development are available; the motivations and incentives to engage widespread participation remain a challenge. Course curricula and the implementation of the courses are satisfactory in delivering the knowledge and skills that employers require.

PhD Program

PhD students have organized an annual symposium where they have an opportunity to present their research to faculty and students. This provides an opportunity to help students teach and explain subject matter. It also helps them when they present at professional meetings. Some of our students now have an opportunity to be graduate instructors under the supervision of faculty who can help them improve their teaching and communication skills. It is planned to offer this opportunity to more graduate students. Graduate students are also in charge of bringing in speakers for the Departmental Seminar Series. This provides students an opportunity to observe presentations by professionals. Moreover, students have an opportunity to present their research and practice their communication skills at some of the departmental seminars.

The primary change in doctoral classes is the sequencing of econometrics courses. Previously, PhD students took Applied Econometrics in their first year and Demand Analysis in their second year. First, the demand class was changed to a second econometrics class that includes the econometric models needed in demand research. The sequence is designed to present the theoretical methodology of econometrics in Econometrics I and to present the application of econometric models in Econometrics II. In Econometrics II, students are trained to obtain data, clean the data, use the appropriate econometric model, and analyze the results. This sequence better prepares the students for research. PhD students now take Econometrics I in the first
semester, and Econometrics II in the second semester. Both courses are now covered in the Qualifier Examination.

### Faculty Profile

#### Core Faculty

Faculty in the department are defined as “core faculty” if their appointment is greater than 50% in teaching, research, extension or a combination of these three that amounts to greater than 50% in the department of Agricultural Economics. Because of less than 12-month appointments, a faculty FTE does not necessarily translate into one faculty position. Details on each faculty member can be found on the department’s webpage at: [http://agecon.tamu.edu/faculty-staff/faculty/](http://agecon.tamu.edu/faculty-staff/faculty/).

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<td>5.8</td>
<td>21.5</td>
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</table>

Core Faculty/Student Ratio - Entire University UG Average vs AGECO
### Faculty Publications (last 5 calendar years)

<table>
<thead>
<tr>
<th>Publication</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018*</th>
</tr>
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<tbody>
<tr>
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<td>51</td>
<td>45</td>
<td>47</td>
<td>62</td>
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<tr>
<td>Published Abstracts</td>
<td>10</td>
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<td>0</td>
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<tr>
<td>Books</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Book Chapters</td>
<td>16</td>
<td>4</td>
<td>2</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Govt/Univ/Research Reports</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>5</td>
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<tr>
<td>Invited Papers</td>
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<td>28</td>
<td>42</td>
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<td>6</td>
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<tr>
<td>Departmental Papers</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>1</td>
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<td>Center Papers</td>
<td>13</td>
<td>0</td>
<td>140</td>
<td>8</td>
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<td>Extension Publications</td>
<td>75</td>
<td>6</td>
<td>162</td>
<td>55</td>
<td>2</td>
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</table>

*2018 is incomplete for the year

### External Grants (last 5 years)

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<thead>
<tr>
<th>Grants</th>
<th>Total</th>
<th>Grant Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extension</td>
<td>Research</td>
</tr>
<tr>
<td>2017</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>2016</td>
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<td>2015</td>
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<td>15</td>
</tr>
<tr>
<td>2014</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>2013</td>
<td>39</td>
<td>15</td>
</tr>
</tbody>
</table>
Teaching Load (last 5 years)

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Credit Hours (SCH)</th>
<th>Weighted Student Credit Hours (WSCH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>20,213</td>
<td>64,456</td>
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<tr>
<td>2016</td>
<td>18,754</td>
<td>64,448</td>
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<tr>
<td>2015</td>
<td>17,070</td>
<td>58,071</td>
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<tr>
<td>2014</td>
<td>15,251</td>
<td>50,519</td>
</tr>
<tr>
<td>2013</td>
<td>15,485</td>
<td>49,635</td>
</tr>
</tbody>
</table>
Faculty Diversity

Diversity among the faculty is a desired objective and the Department of Agricultural Economics explicitly pursues a commitment to diversity in gender, ethnicity, education, work experience, age and other differentiating characteristic. The department pursues its commitment by following well established ‘rules of practice’. For example, the department explicitly includes persons of different backgrounds (gender, ethnicity, and educational backgrounds) in filling new faculty positions.

Despite efforts to improve diversity in the program, the various metrics used by the university to measure diversity point to a need to deepen the effort to recruit minority groups into the program. The department must diversify in gender, ethnicity, and national origin in response to the need for a diversified work environment in a globalized world to increase productivity. The majority of the faculty is male and white. There are six female faculty. There are five Asian, four Hispanic, one Eastern European, and one Black faculty.

Faculty Qualifications

All instructors in the Department of Agricultural Economics meet and in most cases far exceed the qualifications required to teach in our program. We follow the Southern Association of College and Schools Commission on Colleges (SACSCOC) Faculty Credentials Guidelines, which is used by the office of the Dean of Students at TAMU. The guideline states inter alia, "What is Diversity?" “The inclusions, welcome, and support of individuals from all groups, encompassing the various characteristics of persons in our community. The characteristics can include, but are not limited to: age, background, citizenship, disability, education, ethnicity, family status, gender, gender identity/expression, geographical location, language, military experience, political views, race, religion, sexual orientation, socioeconomic status, and work experience.”
https://diversity.tamu.edu/What-is-Diversity

“When an institution defines faculty qualifications using faculty credentials, institutions should use the following as credential guidelines:
a) Faculty teaching general education courses at the undergraduate level: doctorate or masters degree in the teaching discipline or masters degree with a concentration in the teaching discipline (a minimum of 18 graduate semester hours in the teaching discipline).
See, Texas A&M University, Office of the Dean of Faculties, “Guidelines for Validating Instructor Credentials to Teach: SACS Requirements and University Expectations,”
All members of our teaching faculty meet the 18 graduate hours requirement along with an individual’s work experience. Our program leaders in Financial Planning and the Sales programs have utilized the flexibility in the credentialing guideline to attract unique teaching talents to reach a bigger audience. For example, the financial planning program designed a course to introduce financial planning to persons in the Corps of Cadets. This course is taught by a person who has military background and is also a certified financial planner. This is an occasion where wise balancing of academic background and experience has yielded tremendous benefits as shown by the astronomical growth of the financial planning program.

**Faculty Analysis**

The department completes an annual performance review that is provided to the Provost’s Office to determine efficacy of contribution towards the university’s excellence. The Provost provides feedback that is captured in the Performance Scorecard for the 2017 – 2018 academic cycles, which is shown on the following two pages.

The department has numerous areas of excellence and some areas of needed improvement to meet departmental goals. Some highlights are the timely graduation rates for the department, where the department exceeded the goal for 3-year FTT undergraduate graduation rates, 5-year FT doctoral graduation rates, and High Impact Practices student experience.

Opportunities for growth include citations per faculty, diversity of student body, and service engagement. Faculty published 390 peer-reviewed articles over the reported periods (2012-2018), down from the 464 peer reviewed publications reported in the 2012 self-assessment report (p. 7). The decline in faculty is an issue distinctly recognized by various faculty members who gave input to this self-study document. This findings of success on the academic scorecard for graduation rates and student experiential learning, in spite of fewer faculty, suggest that the instructional goals have been achieved at a trade-offs in research productivity.
Agricultural Economics 2017-2018

RESEARCH AND SCHOLARSHIP

5. Professions and Experts Cite and Use our scholars’ work

Experts in the field positively cite our faculty members on average more than 30 times per year per faculty member. Source: Academic Analytics. Academic Analytics value for citations per faculty is divided by 5 to annualize the number.

\[
\text{Experts' Cite Faculty} = \frac{\text{Number of Citations}}{5}
\]

25% of our scholars’ works in the form of patents, copyrights, procedures, textbooks, and art are adopted or displayed prominently

\[
\text{Adoption/Display} = \frac{\text{Number of Adopted/Displayed}}{\text{Total Works}} \times 100\%
\]

6. Organizations and agencies commission and fund scholars’ work

Grant dollars per faculty-Academic Analytics | Academic Analytics Percentile | Research Expenditures (VPR) per TT Faculty FTE (in thousands)

\[
\text{Grant Dollars} = \frac{\text{Total Grant Dollars}}{\text{Total Faculty Faculty FTE}}
\]

30% of our faculty members were in a external commission or invited to contribute to important works, studies, and presentations

\[
\text{Contributions} = \frac{\text{Number of Contributions}}{\text{Total Faculty Faculty FTE}} \times 100\%
\]

7. Experts and the Public recognize and award our scholars’ work

Over 40 of our faculty members are Federal National Academies

\[
\text{Academies} = \frac{\text{Number of Academies}}{\text{Total Faculty Faculty FTE}} \times 100\%
\]

RESEARCH AND SCHOLARSHIP

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\]

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Over 40 of our faculty members are Federal National Academies

\[
\text{Academies} = \frac{\text{Number of Academies}}{\text{Total Faculty Faculty FTE}} \times 100\%
\]
We graduate a student body that is over 8% African American, 25% Latino/a and 50% women.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Faculty</th>
<th>Citations</th>
<th>Articles</th>
<th>Awards</th>
<th>Books</th>
<th>Conf Prac</th>
<th>Grants</th>
<th>Artic Grant Dollars</th>
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<tr>
<td>1</td>
<td>168</td>
<td>134.73</td>
<td>141.4</td>
<td>0.85</td>
<td>m/a</td>
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<td>11.6</td>
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<td>341/3.3</td>
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<td>3</td>
<td>171</td>
<td>16.48</td>
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<td>4</td>
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<td>166</td>
<td>0.15</td>
<td>0.29</td>
<td>0.3</td>
<td>m/a</td>
<td>135/5.5</td>
<td>0.15</td>
<td>$16,532.30</td>
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</tbody>
</table>

Total Grant Dollars

Percentage of Faculty With a Grant

Citations per Faculty Member

Number of Faculty Members With a Citation

Percentage of Faculty With a Citation

Total Citations

Citations per Publication

Number of Authors With a Citation

Percentage of Faculty With an Article

Total Number of Articles

Articles per Author

Number of Articles per Faculty Member

Percentage of Faculty With an Article

Total Awards

Awards per Faculty Member

Number of Faculty Members With an Award

Percentage of Faculty With an Award

Total Number of Grants

Number of Grants per Award

Grants per Faculty Member

Percentage of Faculty With a Grant

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Agricultural Economics Award Summary 2013-2018

2018
- Capps and Salin-FDRS Presidential Award in Excellence in Research and Communication
- Ishdorj-Dean’s Outstanding Achievement Award in Educational Enrichment and Innovation
- Lacewell-Vice Chancellor’s Award in Excellence for Special Services
- Moore-Texas A&M AgriLife Extension Service, Office Support Award for Superior Service
- Outlaw-Western Agricultural Economics Association, Fellow
- Ribera-Council of Food and Agricultural Resource Economics, Board Member
- Robinson-Texas A&M AgriLife Extension Service, Specialist Award for Superior Service
- Robinson-Southern Agricultural Economics Association, Outstanding Extension Program Award
- Zhang - Texas A&M AgriLife Extension Superior Service Team Award

2017
- Bessler-National Center for Food and Agricultural Policy, Senior Fellow
- Bessler-Phi Kappa Phi Honor Society, Faculty Inductee
- Dudensing-Southern Region Development Center, Bonnie Teater Early Career Achievement Award
- Lashmet-Southern Risk Management Education Center Advisory Council Project of Excellence
- Lashmet-Texas A&M AgriLife Extension Service, Panhandle District Leadership Award
- Lashmet-Texas A&M AgriLife Extension Service, Panhandle Team Teaching Award
- Lashmet-Texas A&M AgriLife Extension Service, Team Award for Superior Service
- McCarl-Texas A&M University, Presidential Impact Fellow
- McCarl et al-International Scientific Agriculture Symposium, Best Poster Presentation Award
- McCorkle, Hanselka-Texas A&M AgriLife Extension Service, Team Award for Superior Service (Regulatory Impact Analysis)
- McCorkle-World Academy of Science, Engineering and Technology, Best Presentation Award (Precision mechanization economics in grape production)
- Park-Texas Agricultural Cooperative Council, Distinguished Service Award
- Young-Texas Commission on Environmental Quality, Environmental Excellence Agriculture Team Award
- Young-SRMEC Project of Excellence Award (Sugarcane Aphid Excel Tool Project)
- Young-Texas Section, Society for Range Management, Popular Publication Award
- Young-Southwestern Branch, Entomological Society of America, Poster Award
- Zapata-Texas A&M AgriLife Extension Service, District 12 Outstanding Specialist Award
2016

- Bessler-Texas A&M University, Association of Former Students Award for Distinguished Achievement in Research
- Dudensing-Agricultural and Applied Economics Association, Distinguished Outreach Program Award-Individual Less than Ten Years’ Experience
- Dudensing- Mid-Continent Region Science Association Leadership Award
- Dudensing-Southern Agricultural Economics Association, Emerging Scholar Award
- Extension Faculty Farm Bill Education Team-Texas A&M AgriLife Extension Service, Team Award for Superior Service
- Johnson-Texas A&M AgriLife Extension Service, District 8 Distinguished Specialist Award
- Jones-Texas A&M AgriLife Extension Service, District 1 Award for Excellence
- Lacewell-Ray Smith Leadership Award, Texas Plant Protection Association
- Lashmet-Texas County Ag Agent Association State Specialist of the Year
- Lashmet-American Bar Association “Blawg 100” Honoree
- Mjelde-Western Agricultural Economics Association, Fellow
- Outlaw-Agricultural and Applied Economics Association, Distinguished Outreach Program Award-Individual Greater than Ten Years Experience
- Outlaw, Bryant, Herbst, Knapek, Raulston, Richardson, et al.-Agricultural and Applied Economics Association, Distinguished Outreach Program Award-Team (Farm Policy Decision Aid)
- Pate-Irrigation Association, National Energy and Conservation Team Award
- Salin-College of Agriculture and Life Sciences, Texas A&M University Association of Former Students Award for Distinguished Teaching
- Young-Friends of Southern IPM, Pulling Together Award (Sugarcane Aphid Team)
- Young-Texas A&M AgriLife Extension Service, Program Specialist Award for Superior Service

2015

- AFPC-TAMU Vice Chancellor for Agriculture Award for Partnership Collaboration
- Capps et al.-Journal of Agricultural and Resource Economics Outstanding Article Award (Beverage sweeteners)
- Jones-Texas A&M AgriLife Extension Service, District 1 Team Teaching Award
- Lashmet-American Bar Association “Blawg 100” Honoree
- McCorkle et al.-USDA NIFA, National Extension Diversity Team Award
- Palma-Texas A&M AgriLife Extension Service, Team Award for Superior Service
- Pate-Texas Commission on Environmental Quality, Texas Environmental and Conservation Team Award
- Ropicki-Marine Resource Economics Journal, Outstanding Article (co-authored)

2014

- Capps-Agriculture and Resource Economics Review, Fellow
- Lashmet-American Bar Association “Blawg 100” Honoree
- McCarl-TAMU Vice Chancellor for Agriculture Award for Excellence, Research

2013

- Anderson-ASAS Southern Section, National Pork Board Award
- Anderson-Livestock Marketing Information Center, Award for Superior Service
• Anderson, Hanselka, Klose, McCorkle, Robinson, Waller-Southern Agricultural Economics Association, Outstanding Extension Program Team Award
• Bessler-Southern Agricultural Economics Association, Lifetime Achievement Award
• Jones-Texas A&M AgriLife Extension Service, District 1 Team Ethics Award
• McCorkle et al.-Texas A&M AgriLife Extension Service, Team Award for Superior Service (Nutrition)
• Palma-Extension Section, Agricultural and Applied Economics Association, Outstanding Electronic Media Education Award
• Park-Food Distribution Research Society, Frank Panyko Award for Distinguished Service
• Woodward-Dean’s Outstanding Achievement in Interdisciplinary Team Research
• Young-Southern Agricultural Economics Association, Distinguished Professional Contribution Award-Poster

Extension Education and Outreach Activities

Overview

In addition to the department’s teaching and research faculty, the department has a large extension economics program unit with specialized faculty involved in crop and livestock production economics, crop and livestock marketing, international trade, agricultural policy, agricultural finance, risk management, agricultural law, marine economics, and community economics. Relative to other states around the country, and especially across the southern U.S., our Extension Economics program unit has more FTE's than many of the other states (currently 29 professorial rank faculty and program specialists). While the size of the Extension program is partially due to the size of the state, it may be more closely tied to the success of our extension program efforts and expanded funding in specific areas resulting from the development and delivery of creative, effective, successful extension programs. The Extension unit has sufficient faculty to have a critical mass, allowing some faculty to specialize in more narrowly defined areas. That ability to specialize has allowed some faculty to attain a stature of regional/national prominence and leadership. In addition, a strong off-campus faculty keeps us close to our clientele, and in touch with their educational and applied analysis needs.

To provide some historic perspective, District and campus-based positions were lost in budget cuts during the 1980's and 1990's, reducing the unit’s ability to have effective contact with clientele and maintain expertise in necessary areas of specialization. A Risk Management Initiative, funded by a special state initiative, helped reduce the effect of FTE erosion. The Risk Management Initiative, which was piloted in 1997, and expanded statewide in 1998, helped to offset some of the 10 plus years of erosion of FTE's experienced during the 1980's/1990's. The trend of erosion of positions, however, has resumed in the 2000's, as budget cuts are again taking a toll, but the Extension unit is working from a larger base.

The Extension unit has developed a reputation for quality in-depth educational programs and strong applied Centers. In-depth educational programs/efforts such as the Master Marketer
program, FARM Assistance, The Executive Program for Agricultural Producers (TEPAP), Farm Bill training, and Standardized Performance Analysis (SPA) have been highly successful because they were developed based on clientele/industry input regarding educational needs, clientele/industry/academic input on program/product design, and extensive evaluation/industry feedback and reporting of educational impacts and economic benefits.

Faculty in the Extension unit have been active and successful in obtaining grant and contract funding to support educational programs, applied research, and the operation of Centers. Extension Economics faculty generated over $1,786,177 in Texas A&M AgriLife Extension Service grant funds in FY2018. In addition, there are extensive registrations and sponsorship fees generated each year. These Texas A&M AgriLife Extension Service grant funds represented only a portion of the total funds acquired since many of the program units’ faculty are involved in larger grants/contracts that are administered through Texas A&M AgriLife Research, the Texas Transportation Institute, and other entities. Given the trend in federal and state support, Extension faculty members understand that grant and contract funding will continue to be a larger portion of our overall budget in the future. Without those additional resources to support operating expenses, hire technical support, replace/upgrade equipment, etc., our educational effectiveness could be sharply reduced. There may be a concern about the impact on base program activities as more and more effort is directed to grant and contract funded projects.

In addition to grant and contract support, extension faculty are expected to contribute a portion of the workshop fees generated, back to Extension Administration, to help maintain Extension funding levels. Most fee-based workshops are assessed the greater of $10 or 10% of registration. These funds are returned to Central Extension Administration and become part of the future revenue pool to be distributed across Extension.

Extension faculty members utilize many outlets to provide education, analysis, and information to clientele. The Extension unit develops and distributes educational training, applied analysis, and information in various forms, through numerous outlets to clientele across the state, the U.S., and internationally.

Extension economics faculty provide numerous contact hours of educational training through their own specialist driven programs, and in a support role for county programs. Extension faculty also generate numerous types of publications for varying audiences, and rely to an increasing degree, on e-mail, social media, and the Internet to get products to clientele in the most timely, cost-effective manner.

Quality Indicators – Individuals and teams within the Extension Economics program unit have earned state/region/national reputations for developing innovative programs aimed at addressing clientele needs. The quality of those programs is reflected in the number of awards individuals and teams from the program unit have accumulated, and in the number of invitations faculty have received to make presentations at regional, national, and international meetings/events. While some of the awards won can be credited to faculty members who have retired or otherwise moved on to other endeavors, the tradition of excellence is expected to continue with new faculty members that have been hired in recent years. Some of the
newer faculty are already beginning to receive regional and national recognition for extension programming and applied research efforts.

*Future Directions/Priorities* – The keys to future success of the Extension Economics program unit will continue to be tied to identifying needs, developing forward-looking innovative educational programs/analysis/information, and utilizing the most cost-efficient, timely, effective means of distributing those products. Increased emphasis/resources will likely need to be directed to; (1) agricultural policy, risk management, changing consumer/producer perceptions, and community economics; and (2) improving capacity/skills/support for the optimal use of evolving technology to provide our outputs/products and services to clientele in the most timely, effective, and efficient manner.
Student Profile

Undergraduate Student Profile

Enrollment, including % Full-Time Students*

Figure 14 shows that the total enrollment in the undergraduate program continuously increased from 577 students in Fall 2012 to 946 students in Fall 2017. Figure 15 shows the total enrollment by degree program. Over 90% of students each year were full-time students (90% in 2012, 96% in 2013, 92% in 2014, 93% in 2015, 93% in 2016 and 92% in 2017).

Figure 14. Total Fall Undergraduate Enrollment

Figure 15. Total Fall Undergraduate Enrollment by Degree Program
Table 3. Freshman Admission

<table>
<thead>
<tr>
<th>Year</th>
<th>Applied</th>
<th>Admitted</th>
<th>Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>147</td>
<td>68</td>
<td>45</td>
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<td>2013</td>
<td>208</td>
<td>114</td>
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<tr>
<td>2014</td>
<td>202</td>
<td>120</td>
<td>94</td>
</tr>
<tr>
<td>2015</td>
<td>262</td>
<td>140</td>
<td>112</td>
</tr>
<tr>
<td>2016</td>
<td>275</td>
<td>144</td>
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<tr>
<td>2017</td>
<td>318</td>
<td>171</td>
<td>122</td>
</tr>
</tbody>
</table>

Source: Accountability: Measuring the Pursuit of Excellence

Table 4. Transfer Admission

<table>
<thead>
<tr>
<th>Year</th>
<th>Applied</th>
<th>Admitted</th>
<th>Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>117</td>
<td>55</td>
<td>54</td>
</tr>
<tr>
<td>2013</td>
<td>155</td>
<td>96</td>
<td>91</td>
</tr>
<tr>
<td>2014</td>
<td>166</td>
<td>118</td>
<td>107</td>
</tr>
<tr>
<td>2015</td>
<td>186</td>
<td>102</td>
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</tr>
<tr>
<td>2016</td>
<td>209</td>
<td>137</td>
<td>114</td>
</tr>
<tr>
<td>2017</td>
<td>203</td>
<td>120</td>
<td>112</td>
</tr>
</tbody>
</table>

Source: Accountability: Measuring the Pursuit of Excellence

Student Diversity/Demographics

The overall student population in the undergraduate program is diverse in a number of ways. The following figures and tables regarding the proportion of the underrepresented groups in our student body shows that we are committed to increasing the diversity of our program. The number of female students increased from 177 in Fall 2012 to 343 in Fall 2017, which comprises 36.26% of our undergraduate student body, up from 30.78% in Fall 2012 (Figures 16 and 17). Figures 18 and 19 show the ethnic composition of the undergraduate program.
Figure 16. Five-year Degree Profile by Gender, Number of students

Source: Data and Research Services

Figure 17. Five-year Degree Profile by Gender, Percentage

Source: Data and Research Services
Figure 18. Five-year Degree Profile by Ethnicity, Number of Students

Source: Data and Research Services

Figure 19. Five-year Degree Profile by Ethnicity, Percentage

Source: Data and Research Services
Retention and Graduation Rates

Tables 5 and 6 detail the retention and university graduation rates of the undergraduate program. The retention rate of 1st year retention rate of the first-time-in-college students is 66%, and the 1st year retention rate of the transfer students is 88% in 2016.

Table 5. Full-time Incoming Undergraduate Retention and University Graduation Rates

<table>
<thead>
<tr>
<th>Initial Cohort Count</th>
<th>1st Year Retention</th>
<th>4 Year Graduation</th>
<th>5 Year Graduation</th>
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<tbody>
<tr>
<td>2008</td>
<td>64</td>
<td>63</td>
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<td>2009</td>
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<tr>
<td>2010</td>
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<tr>
<td>2011</td>
<td>55</td>
<td>52</td>
<td>95%</td>
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<td>2012</td>
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<td>44</td>
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<td>2013</td>
<td>81</td>
<td>77</td>
<td>94%</td>
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<tr>
<td>2014</td>
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<td>88</td>
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</tr>
<tr>
<td>2015</td>
<td>111</td>
<td>101</td>
<td>91%</td>
</tr>
<tr>
<td>2016</td>
<td>101</td>
<td>95</td>
<td>94%</td>
</tr>
</tbody>
</table>

Source: Accountability: Measuring the Pursuit of Excellence

Table 6. Full-time Transfer Retention and University Graduation Rates

<table>
<thead>
<tr>
<th>Initial Cohort Count</th>
<th>1st Year Retention</th>
<th>2 Year Graduation</th>
<th>3 Year Graduation</th>
<th>4 Year Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>75</td>
<td>70</td>
<td>93%</td>
<td>23</td>
</tr>
<tr>
<td>2009</td>
<td>80</td>
<td>76</td>
<td>95%</td>
<td>28</td>
</tr>
<tr>
<td>2010</td>
<td>101</td>
<td>95</td>
<td>94%</td>
<td>35</td>
</tr>
<tr>
<td>2011</td>
<td>53</td>
<td>53</td>
<td>100%</td>
<td>24</td>
</tr>
<tr>
<td>2012</td>
<td>54</td>
<td>52</td>
<td>96%</td>
<td>23</td>
</tr>
<tr>
<td>2013</td>
<td>91</td>
<td>89</td>
<td>98%</td>
<td>38</td>
</tr>
<tr>
<td>2014</td>
<td>107</td>
<td>106</td>
<td>99%</td>
<td>34</td>
</tr>
<tr>
<td>2015</td>
<td>93</td>
<td>89</td>
<td>96%</td>
<td>34</td>
</tr>
<tr>
<td>2016</td>
<td>114</td>
<td>112</td>
<td>98%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Accountability: Measuring the Pursuit of Excellence
**Number of Degrees per Year**

Figure 20 shows the number of undergraduate degrees awarded from the Department of Agricultural Economics.

**Figure 20. Five-Year Degree Profile**

![Degree Count (Undergraduate)](chart)

Source: Data and Research Services

**Average Time to Degree (most recent 5 years)**

**Figure 21. Average Year to Degree**

![Year to Degree (Undergraduate)](chart)

*Includes only “Came in as First-Time in College” and does not include Transfer students.

Source: Data and Research Services
**Average Institutional Financial Support Provided**

Figure 22 shows the proportion of undergraduate students with financial support by degree program. There was a slight increase in the total percentage of undergraduate students with some type of financial support (42.16% in 2012-2013 to 45.11% in 2016-2017).

**Figure 22. Proportion of Students with Financial Services by Degree**

![Proportion of Students with Financial Services by Degree](image)

Source: Data and Research Services

The average financial support provided to students ranged from $4,552 in 2013-2014 to $5,503 in 2016-2017. Figure 23 shows the average amount of financial support provided to undergraduate students by degree program.

**Figure 23. Average Financial Support for Undergraduate Students by Degree**

![Average Financial Support for Undergraduate Students by Degree](image)

Source: Data and Research Services
Student Publications

Several Professors require a research paper as part of meeting the requirements for their courses. We do not track these individual research engagements in different courses. We track student research engagements that follow the university research guidelines. The university research program is a year-long commitment by a student under the supervision of a faculty member. The student presents their research during Research Week held at Texas A&M University. Our students have performed well in these research university research activities. Students have won recognitions at both the university and regional levels. An Honors Faculty member, Dr. Senarath Dharmasena has directed students’ research over the last 5 years. Table 7 shows a list of students, topics addressed in their research, and any public presentation and recognitions for the research.

Table 7. Undergraduate Research Scholars of the Department of Agricultural Economics, Texas A&M University; Thesis advisor Dr. Senarath Dharmasena

<table>
<thead>
<tr>
<th>Name of the Student</th>
<th>Thesis Title</th>
<th>Scientific Presentations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Texas A&amp;M University Student Research Week, 2015 (poster presentation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Agricultural Economics Annual Research Symposium, 2015 (poster presentation)</td>
</tr>
<tr>
<td>Ashley K. Carpenter</td>
<td>Effects of Social Media Marketing on Small-Scale Horse Farms in the United States</td>
<td>Southern Agricultural Economics Association (SAEA) annual meetings, San Antonio, TX 2016 (oral presentation)</td>
</tr>
<tr>
<td>(2015-2016)</td>
<td></td>
<td>Texas A&amp;M University Student Research Week, 2016 (poster presentation)</td>
</tr>
<tr>
<td>Rachel Victoria (2015-2016)</td>
<td>Economic and Demographic Factors Affecting the Consumer Demand for Superfruit Beverages in the United States</td>
<td>Southern Agricultural Economics Association (SAEA) annual meetings, San Antonio, TX 2016 (oral presentation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Texas A&amp;M University Student Research Week, 2016 (poster presentation)</td>
</tr>
<tr>
<td>Madilyn Holmes (2015-2016)</td>
<td>Dynamics of Macroeconomic Shocks on Food Assistance Programs in the United States</td>
<td>Southern Agricultural Economics Association (SAEA) annual meetings, San Antonio, TX 2016 (oral presentation)</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Conference/Meeting</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Maggie Branch (2017-2018) | Economic and Demographic Factors Affecting the Propensity to Consume Specialty Eggs in the United States | Food Distribution Research Society annual meeting, Honolulu, HI, 2017 (Student won the 1st place for the best undergraduate research paper)  
Published in the Journal of Food Distribution Research, JFDR, March 2018 |
publication forthcoming in the Journal of Food Distribution Research, JFDR, March 2019 |
| Hannah Hawkins (2018-2019) | Price Discovery and Integration of the Peanut Markets in the United States | Accepted presentation for the upcoming Southern Agricultural Economics Association (SAEA) annual meetings, Birmingham, AL, February, 2019 |
Employment Profile

AGECO undergraduate program prepares students for a wide variety of career paths.

Table 8. Plans after Graduation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you accepted a permanent</td>
<td>86</td>
<td>88</td>
<td>84</td>
<td>76</td>
<td>96</td>
</tr>
<tr>
<td>employment position</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you been accepted into</td>
<td>30</td>
<td>14</td>
<td>16</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>graduate or professional school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still Seeking Employment</td>
<td>114</td>
<td>60</td>
<td>82</td>
<td>95</td>
<td>93</td>
</tr>
<tr>
<td>Military (What branch?)</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>If you will be employed within</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>the next 90 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>16</td>
<td>12</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>179</td>
<td>202</td>
<td>237</td>
<td>257</td>
</tr>
</tbody>
</table>

Source: Department’s survey of graduates.

Table 9. Distribution of Self-Reported Employment Types

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag Producer</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Analyst</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Banking/Finance</td>
<td>5</td>
<td>10</td>
<td>9</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Construction Industry</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Consultant</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Management</td>
<td>16</td>
<td>11</td>
<td>7</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Marketing</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Public Service</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Real Estate/Appraiser</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Sales</td>
<td>20</td>
<td>23</td>
<td>29</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Oil and Gas Industry</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>20</td>
<td>7</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>94</strong></td>
<td><strong>85</strong></td>
<td><strong>85</strong></td>
<td><strong>92</strong></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>

Source: Department’s survey of graduates.
Graduate Student Profile

Enrollment

Figure 24 shows the enrollment of all the graduate programs in the Department of Agricultural Economics. The number of PhD students in AGEC shows a decreasing trend, going from 69 in 2012-2013 to 51 in 2017-2018. This represents a 26.1% reduction in the PhD in AGEC students over the five-year period. The reduction in the PhD AGEC enrollment can be explained, at least in part, by the increase in the number of students choosing to enroll in the PhD in ABME. The total number of PhD in ABME went from 1 in the early stages of the program in 2012-2013 to 13 in 2017-2018. Combing the two programs the total number of PhD students enrolled was 70 in 2012-2013 and 64 in 2017-2018, representing a reduction of 8.6% over the five year period.

The total number of Masters students enrolled in the Department of Agricultural Economics went from 75 in 2013-2013 to 56 in 2017-2018, representing a reduction of 25.3%. The Master of Agricultural Economics went from 31 students in 2012-2013 to a peak of 51 in 2015-2016 and experienced a pronounced reduction to 40 in 2016-2017 and a low point of 17 in 2017-2018. The enrollment in the Master of Agribusiness program shows a slight reduction from 44 to 39 students from 2012-2013 to 2017-2018.

Figure 24. Annual Enrollment in Agricultural Economics Graduate Program
Student Diversity/ Demographics

Figure 25 shows the breakdown of students by gender for all the graduate programs in the Department of Agricultural Economics. In 2012-2013, the proportion of male and female students in the PhD program was 54.8% and 45.2%, respectively. There was a similar breakdown in the demographics of PhD students in 2017-2018 with 58.7% males and 41.3% females. For Masters programs, there were 52.7% males and 47.3% females in 2012-2013. In 2017-2018, the proportion of male master students was 56.1% while the proportion of female students was 43.9%. The number of female doctoral students increased in the 2014-2015 academic year, but in 2016-2017 it almost reverted to its 2013-2014 level. The number of male doctoral students shows an upward trend until 2015-2016. The number of male and female master students was relatively stable throughout the period, except for a slight decrease in female students in 2014-2015.

Figure 26 shows the composition of graduate students for the masters programs and Figure 27 for the PhD program. The number of White students in the Masters program was relatively stable for the five year period and around 50%. International students accounted for about 40% of Masters students over the five year period. The proportion of Hispanic students went from a low of 2.7% in 2012-2013 to 12.7% in 2016-2017 and then dropped to 9.3%. This level is still well above the proportion of Hispanic students in 2012-2013. Students in the PhD program are predominantly international with a proportion of around 70% over the 2012-2018 period. White PhD students represent about 20% of the PhD student population.

Figure 25. Proportion of Graduate Students by Gender
Figure 26. Masters Students Ethnicity in the Department of Agricultural Economics

Figure 27. PhD Students Ethnicity in the Department of Agricultural Economics
Retention Rates

Tables 10 and 11 show the retention rates for Doctoral and Master Students from 2011 to 2016. The retention rates for Doctoral students are relatively high for the first year and went from a low of 69% in 2012 to a high of 94% in 2015 and 2016. The retention rates of PhD students by the third year ranged from a low of 46% in 2012 to a high of 54% in 2013. For Masters students the retention rates during the first year ranged from 81% in 2014 to 97% in 2012.

Table 10. Master Retention, AGEC. (Retained in the same department as initially enrolled)

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>Initial Cohort Count</th>
<th>1 - Yr Percent Retained within Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>28</td>
<td>92%</td>
</tr>
<tr>
<td>2012</td>
<td>34</td>
<td>97%</td>
</tr>
<tr>
<td>2013</td>
<td>27</td>
<td>88%</td>
</tr>
<tr>
<td>2014</td>
<td>32</td>
<td>81%</td>
</tr>
<tr>
<td>2015</td>
<td>46</td>
<td>95%</td>
</tr>
<tr>
<td>2016</td>
<td>31</td>
<td>90%</td>
</tr>
</tbody>
</table>

Table 11. Doctoral Retention, AGEC (Retained in the same department as initially enrolled)

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>Initial Cohort Count</th>
<th>1 - Yr Percent Retained within Department</th>
<th>3 - Yr Percent Retained within Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>17</td>
<td>82%</td>
<td>52%</td>
</tr>
<tr>
<td>2012</td>
<td>13</td>
<td>69%</td>
<td>46%</td>
</tr>
<tr>
<td>2013</td>
<td>11</td>
<td>81%</td>
<td>54%</td>
</tr>
<tr>
<td>2014</td>
<td>18</td>
<td>77%</td>
<td>50%</td>
</tr>
<tr>
<td>2015</td>
<td>19</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>17</td>
<td>94%</td>
<td></td>
</tr>
</tbody>
</table>
Number of Degrees Awarded

Figure 28 shows the number of awarded Masters degrees for the agricultural economics and agribusiness programs. During the 2011-2012 academic year each program (AGBU and AGEC) awarded 20 Masters degrees. While there is some year to year variation, the number of Masters degrees is around 20 for both programs. In the 2016-2017 academic year the Agribusiness program conferred 20 degrees, while the Agricultural Economics program had 16 degrees.

Figure 28. Number of Awarded Master’s Degrees

Figure 29 shows the number of awarded doctoral degrees in the department of agricultural economics. The number of awarded doctoral degrees in agricultural economics (AGEC) sharply dropped in 2012-2013 compared to 2011-2012, but stayed around 10 afterwards. The ABME program awarded the first two degrees in 2016-2017.

Figure 29. Number of Awarded Doctoral Degrees
Graduation Rates

Figure 30 shows the graduation rates for Master students after three years of enrolling in the program. The 3-year graduation rates for Master students seems to be relatively stable and it ranges from 81-86 percent. Figure 31 shows the graduation rates for PhD students after five years of enrollment for the most recent available period (2008-2012). The graduation rates range from a low of 22% in 2010 to a high of 77% in 2008. Given that some PhD students take over five years to complete their degrees, these numbers will be adjusted in the following years.

Figure 30. Graduation Rates for Master’s Students after 3 Years

![Graph showing graduation rates for Master’s students from 2010 to 2014.](image)

Figure 31. Graduation Rates for PhD Students after 5 Years

![Graph showing graduation rates for PhD students from 2008 to 2012.](image)
Average Time to Degree

Figure 32 shows that the average number of years spent on Masters degrees was two and a half years for MS and two for MAB students. For Doctoral students, the average was between five and six years throughout the period (Figure 33).

Figure 32. Average Time to Degree for Master’s Students

![Average Time to Degree for Master’s Students](image)

Figure 33. Average Time to Degree for Doctoral Students

![Average Time to Degree for Doctoral Students](image)
Average Institutional Financial Support Provided

Figure 34 shows the proportion of graduate students with financial support. All of the students in the PhD ABME program received funding. The number of graduate students with some type of financial support remained relatively stable over the entire period. Note that the numbers reported in the figure do not take into account funding sources or dollar amounts.

Figure 34. Proportion of Students with Financial Support by Degree

Figure 35 shows the average amount of funding for graduate students in the Agribusiness and Managerial Economics program, Agribusiness and Agricultural Economics program for both Masters and PhD students. The ABME average funding ranged from $14,873 in 2013-2014 to $27,801 in both 2014-2015 and 2015-2016. The range of funding for graduate students in the Agribusiness program ranged from $9,101 in 2013-2013 to $12,223 in 2016-2017. Graduate students in the Agricultural Economics program received average funding ranging from $18,919 in 2012-2013 to $22,911 in 2016-2017.

Figure 35. Average Financial Support for Graduate Students by Degree
Student Publications

<table>
<thead>
<tr>
<th>Type</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Articles</td>
<td>32</td>
<td>30</td>
<td>14</td>
<td>22</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Drafts of Journal Articles</td>
<td>8</td>
<td>27</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Published Abstracts</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Books</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Book Chapters</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Govt/Univ/Research Reports</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Invited Papers</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Published Proceedings</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unpublished Proceedings</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Selected Papers</td>
<td>29</td>
<td>32</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Posters</td>
<td>8</td>
<td>7</td>
<td>2</td>
<td>12</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

Employment Profile

Table 12. Placement of MAB Program Graduates, 2016 and 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Financial Services</th>
<th>Food Processing</th>
<th>Agri-Input</th>
<th>Retail</th>
<th>Other</th>
<th>Unknown</th>
<th>Total Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>2017-18</td>
<td>7</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>24</td>
</tr>
</tbody>
</table>

Master students from the Agricultural Economics department have recently placed in AgriLogic, Cargill, EDP Renewables, Huckabee, SoFi, JLL, Informa Economics, Texas A&M University, Save the Children International, US Department of Agriculture, Procter & Gamble, and Unigen to name a few.

PhD students from the department of Agricultural Economics have recently taken academic positions at the University of Florida, University of Missouri, Mississippi State University, Virginia Tech University, Texas A&M University, West Texas A&M University, Australia National University, Xiamen University, and Henan University. PhD students have also placed in the Federal Reserve Bank of Chicago, Informa Economics, Research Triangle Institute, Banco de Mexico, JPMorgan Chase, Center for Budget and Policy Studies in India, South Korean

**Analysis**

*Analysis of Undergraduate Program*

… *shall we not have schools to teach men the way to feed, clothe, and enlighten the great brotherhood of man?* (Morrill statement on House Floor, April 1858)

This analysis will focus on 1. the contribution of the undergraduate program to achieving the land grant mission of the university, and 2. the progress of the degree program focusing particularly on retention, time to degree, degrees awarded, and placement upon graduation.

*Undergraduate program contribution to achieving the Land Grant mission of the University*

Imperative 3 of the university’s *Vision 2020 Strategic Plan* defines the expectation of undergraduate programs to achieve the university’s land grant mission. The imperative directs programs to equip students with skills in addition to enriching the educational experience through high impact engagements. To achieve this broad objective the college has “selected five broad societal problems where we can make the biggest difference. These challenges help focus our research, teaching and service.” (https://aglifesciences.tamu.edu/about/impacts/). These priorities are: protecting our environment, enriching our youth, improving our health, feeding our world, and growing our economy.

The Department of Agricultural Economics’ vision and mission are consistent with the university and college’s strategic plan because we equip “people with skills in the use of economic analysis for making decisions involving agribusinesses, natural resources, and communities through the pursuit of learning, leadership, diversity, professional development, and excellence.” We provide students with the skills and enriched education to participate in the pursuit of the land grant mission of the university.

The department uses measures of Student Learning Outcomes (SLOs) to assess whether defined teaching and learning targets have been achieved. The SLOs assesses students’ training in economic reasoning, quantitative skills, communication (written, oral, visual), ethics, cultural diversity. The results from assessments covering the period 2014-2018 show that the department has consistently met the targets set to measure expectations from our teaching program. The results also show that the department has made considerable improvements in the methods and metrics used in measuring outcomes.

In addition to the applied skills training, the department has enriched the educational experiences of students through high impact engagements. Some of these engagements and outcomes are summarized below:

*Study Abroad:* The department has offered study abroad opportunities in 8 countries (China, Costa Rica, France, Ghana, Ireland, Mongolia, Scotland, Swaziland) for a total of 248 students from 2013 to 2018.
**Internships:** Data from 2013 to 2018 show that our students’ participation in international, federal, state, and industry internships. Internship participation increased by 78% between 2012 and 2018. The internship program is well organized with a library of videos and reports to serve as a resource for students planning internship participation. Several of our students participate in youth development programs, especially under the FFA.

**Honors:** The department also manages an Honors program to recognize students with unique talents. Honors participation has increased from 19 in 2014-2015 to 30 in 2018.

We conclude that the undergraduate program in the Department of Agricultural Economics has made a positive contribution to the achievement of the university’s land grant mission. This contribution has come by way of equipping students with the knowledge and skill to contribute to the analysis of policies to achieve the societal goals set by the university. The program has also contributed to achieving the land grant mission by enriching the educational experiences of students through high impact engagement to grow them into government and business leaders in fulfillment of the land grant mission.

While the undergraduate program has achieved significant successes in contributing to achieving the land grant mission, there are some issues/opportunities that need to be explored. One area of concern is faculty participation in undergraduate research to stimulate publications at the undergraduate level. Such a research experience will encourage students to continue on to graduate and professional schools. Given the declining number of faculty, it may be useful to explore graduate student participation under some type of incentive system.

Opportunities for joint programs with other programs must be explored to expand opportunities for students. There is also a need to incentive faculty to participate in study abroad programs. The study abroad program has been based on faculty interest and no more. While laudable, interest alone cannot guarantee sustainability of a program. Exposing students to different cultural experiences is increasingly becoming an important consideration in hiring given the globalization of the economy.

**Retention, time to degree, degrees awarded, placement upon graduation**

The department’s record on student retention is high and above the university average. Retention rate has hovered between 94% in 2012 and 98% in 2018. This is higher than the target set under the Provost’s new initiative, *The Student Success Initiative* that aims to “increase first-year retention of students from 92% of the fall 2019 entering freshmen class to 95%” ([Recommendations of the Student Success Taskforce Open Forum November 5, 2018](http://provost.tamu.edu/Provost/media/Assets/pdfs-initiatives/pdfs-initiatives-StudentSuccess/OpenForumFinal.pdf)). No guidelines for implementing the initiative have been provided to departments, but given the success we have achieved under our existing system, we do not anticipate a major change in our retention strategy. Our success with student retention is due in part to the early introduction of students to the field of agricultural economics, professional opportunities available to those who obtain degrees in the field, and a climate in the department that is friendly, conducive to learning with very low transaction cost of obtaining information about the program from mentors and advisors working in the department.
The total number of students in the undergraduate program is 946 broken down into 570 Agricultural Economics majors and 376 Agribusiness majors. The time to degree for students in both degree programs is less than the university average, having fallen to 3.97 years for AGEC majors and 3.86 for AGBU majors. One reason for the low time to graduation is the vigilance we maintain in students’ curriculum planning. A student who follows the plan developed with the advisors in the department is likely to graduate on time and in some cases graduate early.

Our students have placed very well in the job market. In 2016/2017, for example, a little less than two-thirds of our graduates had accepted employment, expected to be employed within 90 days, had joined the military or entered graduate or professional school. The number of placements has stayed steady for some time, and is certainly influenced by market conditions.

Some of the challenges include how the initiatives at the university level could impact retention efforts in the department. While most applaud early graduation, we need to examine closely how the 3+2 programs could be structured those with the hours to graduate early.

Analysis of Agricultural Economics Graduate Programs

Graduate program contribution to achieving the Land Grant mission of the University

The graduate program’s contribution to achieving the Land Grant mission of the University is pursued by developing students’ skills through classroom teaching, mentored research, and engagement in outreach and professional development programs. This section is organized according to the level of the program—masters and doctoral degree programs.

Ph.D. in Agricultural Economics or Agribusiness and Managerial Economics

To achieve the university, college and departmental mission, we have committed to attract exceptionally talented PhD students. Funds have been available to support 18 teaching assistants from core funds and 40 research assistantships from grants and contract funding. Between 4-6 PhD students are on instructional appointments. A combination of stipends of $1,600/month and a $3,000 fellowship for merit PhD students has been has been competitive with other peer academic institutions and sufficient to attract strong PhD candidates to our program. This level of support allowed the ABME to grow from its inception in 2012 to 10-12 enrolled in recent years to reach parity with the AGEC doctoral degree. There are three main research emphasis areas at the doctoral level: resource economics, agribusiness finance, and behavioral economics.

Retention issues for the PhD degree programs have stabilized with improvements made to the course sequencing in preparation for the qualifying exams.

The graduate program uses measures of Student Learning Outcomes (SLOs) to assess whether defined teaching and learning targets have been achieved. The results from assessments covering two cycles, 2015-2016 and 2016-2017, show significant improvements on our student’s abilities to effectively communicate with a diverse audience and share their subject matter in a
way that all levels can understand. The learning outcomes assessments for MS and PhD degrees complies with College-level processes and uses input from the students’ advisory committees.

Over the last 5 years, the faculty involved with doctoral instruction have made changes to enhance mathematical training. It is now important that PhD students have been exposed to real analysis and proofs, in addition to calculus and linear algebra. Many of our PhD candidates enter the program without sufficient training in mathematics and it makes their first year difficult and in some cases resulted in dismissal as they failed the qualifier examination. To help address this problem, we have developed an online math camp available to all graduate students. This can be taken without registration or tuition. It can also be taken the summer before starting the program in whatever State or Country the prospective students reside. Students are also encouraged to take a 2 week math and stat prep classes offered by the Economics Department in August. In addition, in person math camp is offered in the first two weeks of classes. This is to help fine-tune their math training as they start the doctoral classes.

While the graduate program has achieved significant successes in contributing to achieving the land grant mission, there are some issues/opportunities that need to be explored.

The department’s goal to place our PhD students in peer academic institutions has fallen short of our expectations. Part of the reason placement has been lower than expected is because most of our PhD students have not had an opportunity to be an instructor in a class. This is exacerbated by the fact the many of our PhD students are international and need teaching experience to be competitive for academic positions. This was pointed out in the last APR external review. In the last semester, six graduate students were hired as graduate instructors. It is expected that hiring graduate students as graduate instructors will continue with the possibility of expanding the number of courses that are taught by graduate students. To improve placement at academic institutions, in addition to providing opportunities for students to be instructors, it is important that students have publications in refereed journal articles before graduation. The driving force for this to happen is for faculty to encourage students to publish.

A critical ingredient in training PhD students is to have quality faculty help train them in the research efforts. Currently, 7 faculty members chair two or more PhD graduate advisory committees and 5 faculty members chair three or more. One faculty member is chairing the graduate advisory committee of seven PhD students. Seventeen faculty members have chaired a PhD graduate committee in the last two years. It is important to encourage more faculty to work with PhD students.

Retention, time to degree, degrees awarded, placement upon graduation

Retention of doctoral graduate students has been high. There has been some movement from the PhD program to the MS program as some students have failed the qualifier exam and stayed for an MS degree. Other students have started in the straight-through PhD program but decided to switch to the MS degree in their second year. The failure in the qualifier exam has been reduced by stricter admission standards and greater emphasis on math training before starting the PhD coursework.
Time to degree for doctoral students may be longer than expected. This happens because students get a slow start on their research, some international students delay graduation as they make adjustments in their immigration status. Several policies have been put in place to help reduce the time to degree. Students are required to present a draft dissertation proposal as part of their oral prelim, required within 6 months of passing the written preliminary examination. This encourages the students to identify their dissertation research quicker in their PhD program. Also, the department has started to put graduate students on probation if they are not making substantive progress towards completing their degree. Students on probation are required to submit a plan of action signed by the Chair of their graduate advisory committee and the Associate Head of Graduate Programs. Within this plan of action, the students must provide milestones of when they will complete tasks leading up to the completion of their degree. No action has been taken to encourage international students to graduate as soon as possible instead of delaying to look for a job in the U.S. A less-common cause for lengthy time to degree is that some doctoral students accept employment in private industry before completing academic requirements.

The number of ABME degrees awarded has increased from initial low levels to a satisfactory size program. The AGEC doctoral degree numbers have been consistent with admissions.

Placement upon graduation has been strong, especially in private industry. However, until the last two years, we have not placed as many of our PhD students in peer academic institutions as would be expected from a top 10 Agricultural Economics Department. Moreover, many international students are not finding work in the U.S. like they would like in academic institutions, post-docs, or in industry.

Analysis of Masters Graduate Programs (MS, MAB)

The Masters-level graduate programs, the MS and the MAB, complement each other in key curriculum elements yet have some differentiating features to meet students’ goals and employers’ demands. The quantitative methods courses (AGEC 621 and AGEC 622) are the complementary aspects of Masters’ curricula. These classes serve all Masters students, enrollment 45-50 students each year, which makes them an efficient size for a faculty and teaching assistant.

The MS and the MAB are differentiated in the economic theory and core course requirements. MS students take microeconomics and macroeconomics in the Economics Department while MAB students take microeconomics in an AGEC course on Managerial Economics (AGEC 619). Macroeconomics at the intermediate level is a pre-requisite for MABs and not required at the graduate level. MAB students are required to take 4 core business courses, one each in accounting, finance, management, and marketing from the Mays Business School; these business topics are not required for MS students. MAB students must take 3 AGEC specialty courses in agribusiness; these are reserved for MABs and are typically around 20 students in the class. MS students have several more elective course options and research hours are required for the thesis-option MS curriculum.
The MS (at 36 credit hours) and the MAB (at 39 credit hours) currently require more credit hours than other Masters degrees. There is a trend among some competitor programs to reduce Masters’ degree requirements to as low as 30 credit hours.

**Recruitment and retention**

By design, the MS and the MAB approach recruitment differently. The MS was the original research-oriented graduate degree in the department and MS students are frequently involved in research and extension activities. As a result, some MS students are recruited with competitive assistantship offers. In contrast, the MAB is a professional degree program and no recruits are offered research or teaching assistantships along with admission offers (with the exception of two University Diversity fellowships offered in 2016). MAB students are recruited with modest scholarships (typically total of $30,000 per year for the entering cohort, averaging $2,500 per recruit). MAB recruits are attracted by the broad-based business curriculum, and the reputation of the Mays Business School and the department. As a result of the design of recruitment, the entrance offers of MS students who receive offers are more generous than the MAB students’ offers.

In a few cases, an MS assistantship offer has attracted students to the MS (at Texas A&M or at other land-grant universities) and the student declined an offer to the MAB. On the other hand, there are cases in which career interests have led an applicant to decline assistantship offers and choose the MAB.

Retention: Over the last 5 years, 5 students were dismissed or withdrew from the MAB program (3 had academic problems, 1 had medical reasons, and 1 had family reasons to return home). The remaining 96 students completed the degree. The most common retention risk was due to students taking the full-time program while also working a significant number of hours.

Time to degree: In the last 5 years, 5 MAB students took longer than expected to complete the degree, by enrolling less than full-time load or repeating classes in which grades were deficient. It has become more common in the last two years for students to choose to take the 4-semester program rather than the 3-semester calendar, by enrolling in 9 hours per term rather than 12 hours. In spite of these factors, the time to completion of the MAB averaged less than 2 years, as intended in the curriculum design.

The Agribusiness industry comprises experts largely in the private sector who make decisions about profit-oriented organizations in light of their understanding of consumers, the science and technology of food, feed, and fiber production, and the economic forces in the market. The faculty and staff who deliver the Masters-level Agribusiness degree program MAB identify, recruit, mentor, retain, and develop people who are candidates for rewarding and impactful careers in the food, feed, and fiber industries. We have impact by developing knowledgeable leaders who can respond to market signals.

The comparative advantage of the Agribusiness programs originates in the university, faculty, and peers. The Master of Agribusiness is unique in the nation as a full-time, residential face-to-face experience. The key competitors (Purdue, Kansas State) use distance-education format in
the professional agribusiness masters degrees. The Masters of Science degrees offered by many land-grant universities, including at Texas A&M, are sufficiently related as to provide competition for the best recruits.

The residential education experience is enhanced by the many resources and opportunities of Texas A&M, including but not limited to the Borlaug Institute for International Agriculture, Start-Up Aggieland, and the leadership development offered by the Office of Graduate and Professional Studies. This advantage accrues to the enrolled students and to the partnerships with former students.

Faculty strength has accommodated the evolution of the student body. Agribusiness faculty are excellent instructors and they have accommodated the goals and needs of MAB students while maintaining contributions to other graduate programs and to research and extension programs.

After 20 years since initiating the MAB, it may be time to re-visit the positioning of the professional Agribusiness Masters’ degree and how it co-exists with Master of Science degree options. The undergraduates at Texas A&M now can choose graduate education as early as the sophomore year by opting into 3+2 or 4+1 programs in Commercial Banking and Policy. The Mays Business School offers a graduate business program for non-majors, in addition to the MBA, which may compete with the MAB.

In teaching, there is an opportunity for changing delivery in a way that offers a continuous reinforcement and re-visiting of the key learning outcomes, impacting students even more effectively.

Of particular note, the Master of Agribusiness students could benefit greatly from more mentorships involving a wider and more diverse pool of mentors and advisors. We have used graduate enhancement funding to train students in peer mentoring (in 2013) and to send students out to professional conferences and other experiences (annually). The MAB staff use WebEx conversations to connect current students with past graduates. A long-term mentoring commitment among recent graduates and more-experienced graduates could be explored, perhaps as an advisory committee for evaluation of the second-year students’ projects.

Furthermore, there also needs an examination of the program’s vision and how the professional degree aligns with academics. This alignment requires greater consideration that graduates are trained to be ready for a data-driven workplace where an analysis of data involving a blend of economics, quantitative methods, and business management in the curriculum could provide the desired learning outcomes.
Concluding Observations

We appreciate the time and effort that the external review team has committed to this process. While we have sought to offer an analysis of the department on the basis of the available data, there are nevertheless concerns or issues that are not readily quantifiable. We believe that such considerations are important when evaluating the department’s future. The APR committee has met numerous faculty committee groups and support staff to solicit issues / concerns that can have material bearing on the department’s ability to meet its strategic vision. These issues / concerns are listed as follows:

1. Department

- The review of the teaching, research, and extension program within the Department of Agricultural Economics shows that the department has performed creditably in meeting its Land Grant mission to improve livelihoods in Texas, the nation, and the global community. However, the department faces several constraints. One major constraint is the gap left in the teaching faculty due to faculty retirements and transfers. While the administration has extended invitations for proposals to hire faculty, we may be unlikely to completely replace faculty given the timeline for hiring new faculty. Declines in allocation to research and graduate student support are also of concern given the potential adverse consequences on teaching and research.

- The department must consider vertical and horizontal alliances by exploiting the full capacities of faculty members. For example, an energy/resources/policy nexus could be explored to take advantage of the capacities of recent faculty hires. The same could be done for a quantitative group programming, simulation, and econometrics. Horizontally, the department could intensify current/recent efforts to collaborate with researchers from other disciplines. Examples, of such horizontal engagements are the collaboration with the Texas A&M Energy Institute, the collaboration with the Water Institute, the ESSM, and the Borlaug Institute. Collaboration with the School of Public Health, Department of Food Science and Nutrition are also a possibility given our growing strength in experimental economics, risk, and consumer food and nutrition demand analysis.

- The department has intensified efforts to network with former students and the strategic stakeholders who contribute immensely in our effort to meet our Land Grant Mission. We need to continue to expand these efforts related to guest speaker, mentoring, conferences, internships and developments. Our legitimacy as a program is to an extent influenced by the acceptance of the information from our halls in the decision making processes by strategic individuals. Networking is becoming critical not only in terms of the immense knowledge that could be brought to the classroom but also in terms of attracting funding resources to the program to minimize the impacts of the decline in federal and state funding of programs.

- The department should develop a credible plan to diversify its programs, faculty and staff. Even though various climate surveys have been positive for our department, the distribution of faculty, staff, and students by gender, ethnicity, socio-economic
backgrounds are below averages for the college and the university. New initiatives at the university level must be fully exploited to enrich students’ experiences in a diversified educational environment.

■ The work environment and climate in the department has consistently ranked high on COALS surveys. Employees and students have always felt at home in the department and are satisfied with the social interaction. Despite the positive outcome, there are some concerns that the department may be losing social capital in terms of faculty participation in non-academic events such as the Undergraduate Kick-Off, Tailgate, SKYP lunch, and graduate students’ events, Faculty interaction with students outside the classroom is an effective way to promote retention and possible research engagement at the undergraduate level and identification of possible graduate student engagement.
2. Undergraduate Program

- The department has experienced considerable growth in student numbers, and the number of Minor programs even though we have raised the transfer entry requirements considerably. While the increased demand for our program is laudable, it still puts considerable strain on teaching and advising resources. We have experienced larger classes and have been forced to create more sections of courses. An inventory of allocation of teaching responsibilities should be undertaken to help in efficient distribution of teaching responsibilities.

- The assessment of the undergraduate program shows that the undergraduate program is responding to its Land Grant mission of educating citizens of Texas and building leadership skills. The analysis of the SLO assessments of *empirical and quantitative skills* of students shows that, the department has:
  1. An ongoing and integrated planning and evaluation in place
  2. An assessment process in place that promote continued improvement of its programs
  3. Identifiable measures of expected outcomes
  4. Evidence of improvement based on analysis of results

- The department suffered a 29% decline in High Impact (HIP) support funds. The effect of this reduction has been quite significant in terms of students’ participation in study abroad, quiz bowl and other national competition, research, and internships. With the reduced level of funding support, there is less incentive for faculty members to engage undergraduate students in research or experiential education. Lack of faculty interest in study abroad programs will threaten our internationalization efforts and ultimately render our graduates less competitive in the job market.

- There is a need to evolve alternative institutional arrangements to better tie the undergraduate program to the graduate program to facilitate transfer of students to graduate programs. Our students have not been competitive in applying to top-tier Masters and Doctoral programs because their training, especially in the quantitative areas is not strong to survive the rigors of top-tier Ph.D. Programs. The reduction of required credit hours for graduation from 132 to 120 hours is a major disincentive because there are benefits from graduating early under Texas education laws. Most students who plan to continue on to doctoral programs follow a B.S. major in agricultural economics and a minor in mathematics. Only a handful of students have travelled this road and there is a need to incentivize more students to follow this path if we want to maintain the presence of our graduates in academic institutions in the U.S. and around the world, and as leaders in business and government. The changes in the quantitative offering in the department along with adjustments in honors program participation need an overhaul to address the problem.
The undergraduate program needs to explore more horizontal alliances such as the 3+2 program with the Bush School of Government and Mays School of Business. Joint programs with other departments significantly expand the professional opportunities for students, and serve as an incentive for lifelong learning consistent with the mission of a Land Grant institution.

The undergraduate program scores high in terms of enrollments by gender but poorly in terms of ethnic, first-generation in college, and Regents’ scholars. Retention rates and time to graduation are also lower than the university averages. The undergraduate program has an opportunity to improve in this area given that the Provost’s office has announced a new initiative, “Provost’s Student Success Initiative” (Announced Monday, November 5, 2018) that seeks to achieve specific targets: Increase first-year retention of students from 92% of the fall 2019 entering freshmen class to 95%; Increase the four-year graduation rate from 54% to 65%; Increase the six-year graduation rate from 82% to 85%; and reduce disparities among ethnicities, first-generation status, gender and socioeconomic status. (Recommendations of the Student Success Taskforce Open Forum, November 5, 2018, [pdf](http://provost.tamu.edu/Provost/media/Assets/pdfs-initiatives/pdfs-initiatives-StudentSuccess/OpenForumFinal.pdf))

The current staff and advising resources in the undergraduate program are inadequate to effectively respond to the new initiatives. There are no implementation guidelines available to departments and programs. On our own, we are beginning to create a database to use in identifying potential freshmen to join our program. Our effort will be interfaced with university guidelines and funding levels given to departments.

Even though the Honors program has grown in terms of numbers, it has not lived up to some of the expectations. The program was intended in part to serve as a pathway to doctoral education. However, as mentioned above, only a very few of our students have continued on to doctoral programs. A main reason is the entry requirements where we required MATH 151 (Engineering math) in place of MATH 141 (Calculus). The math requirement proved too challenging for some students, resulting in the higher attrition rate observed in the program. Given our honors student population, it may be beneficial to offer an alternative for the honor student population so that those without the math competence may also be a part of the honors program so long as they are engaged in inquiry, discovery and the pursuit of excellence. Some of our most outstanding graduates have gone on to become business owners, lawyers, and consultants to major research organizations.

Our students have participated in the university scholars program and presented research papers at conferences. We need to do more by providing incentives to faculty and graduate students to engage undergraduate students in their research.

Students have expressed concerns about the number of courses offered to support options in the Agricultural Economics degree. Concerns have been voiced about the availability of courses within the Finance and Real Estate (FRE) option. The concern is recognized and will be addressed within the broader framework of the procedures for filling new faculty positions.
3. Graduate Program

- To attract and train exceptionally talented PhD students, the department must consider the stipends offered to applicants. We expect stipend demands to increase over time and the discussion must address how we will remain competitive in attracting top performers to the graduate program.

- The department should continue to expand opportunities for graduate student teaching to make them competitive in the job market. For students who are interested in an academic career there must be a demonstration of both research competence and a record of teaching.

- There is a need to double efforts to attract grant and contract money to engage more doctoral students in research. Currently, only a few faculty members have the funding to support graduate students. It is also important to find ways to match student’s research interests with faculty research interest.

- The department must continue the commitment to strengthen the mathematical skills of Ph.D. students to achieve the strategic goal to grow excellence. Many of our PhD candidates enter the program without sufficient training in mathematics and it makes their first year difficult and in some cases resulting in the dismissal from our PhD program as they fail the qualifier examination. Resources must be provided to intensify the ongoing math skills training program in the department.
Appendices

Appendix 1. Certified Financial Planner Board of Standards

November 6, 2017

Dr. Nathan Harness, CFP®
TD Ameritrade Director of Financial Planning
Texas A&M University- College Station
600 Kimbrough Blvd.
College Station, TX 77843

Dear Dr. Harness,

My comments regarding this review are below with CFP Board registration criteria embedded (See Criteria for Registration of a Financial Planning Curriculum with CFP Board, modified January, 2013).

This application is for the renewal registration of the undergraduate program at Texas A&M University- College Station titled, Financial Planning Minor (A2.1). Texas A&M University-College Station is accredited by the Southern Association of Colleges and Schools, Commission on Colleges and the Association to Advance Collegiate Schools of Business (AACSB) (A1). This classroom and web-delivered program consists of 6 courses with 18 credit hours (A3.1). This program contains the required 72 topics per CFP Board criteria (C1) and is taught at the upper division baccalaureate level (C4). The learning resources and faculty meet or exceed CFP Board criteria (F, D1).

Program enrollment is reported to be 125 at matriculation with 85 at mid-point. Overall enrollment breakdown is 45% female and 55% male with 12% Asian; 4% Black or African American; 22% Hispanic/Latino; 52% White and 10% two or more races.

The CFP® Certification Completion Initiative (CCI) report of September 30, 2017 indicates 95% of graduates with a CFP Board account and a target of 75% by the next renewal in 2019. I encourage you to challenge yourself with targets that are high than what you achieved in the current renewal period. I applaud that Texas A&M University- College Station is encouraging students to create a CFP Board online account. I encourage faculty to facilitate students’ creation of this account as early as possible in the program of study. This process is free and more information can be found at www.CFP.net. Please e-mail RegisteredPrograms@CFPBoard.org for assistance with this process.

The same report indicates 7.5% graduates sitting for the CFP® exam and a target of 15% by the next renewal in 2019. I challenge you to overperform on this percentage and am interested to hear if the mentor pairing in the capstone course might drive results in this area.
I am pleased to approve the renewal registration of the CFP Board Registered Program titled, *Financial Planning Minor* at Texas A&M University- College Station. This review will be used as a foundation for the next renewal process, when we will expect to review evidence of results from current initiatives as well as recommendations contained in this letter for continuous program improvement and development.

CFP Board is pleased to continue this important partnership. Please feel free to contact me if you have any questions.

Sincerely,

Mary Kay Svedberg, Ph.D.
Director of Education
Certified Financial Planner Board of Standards, Inc.

cc: Dr. Parr Rosson
Head, Department of Agricultural Economics
Appendix 2. Student Learning Outcomes Assessment

What improvements (including student learning and faculty development) has the department made since the previous program review?

A major focus of the departmental review is the assessment of improvements (including student learning and faculty development) that the department has made since the previous program review. We have used student-learning outcomes (SLOs) in our undergraduate and graduate programs to assess improvements in our teaching programs since the last assessment. Our analysis show that the department has:

1. An ongoing and integrated planning and evaluation process in place that promote continued improvement of its programs
2. Identifiable measures of expected outcomes
3. Evidence of improvement based on analysis of results that demonstrate that the department is meeting its land grant teaching mission.

The department uses SLO assessment guidelines from the Office of Institutional Effectiveness & Evaluation (OIEE) under the Office of the Provost. The SLO Mission states, “The mission of the Office of Institutional Effectiveness & Evaluation is to foster assessment practices university-wide by supporting the collection, analysis, management and use of data. We facilitate efforts of continuous improvement to enhance student learning and strengthen the university’s programs, services, operations, and processes.” The department also measures SLO of the core curriculum (CC) to meet graduation requirements. The core curriculum focuses on the development of six skills that have been shown to be effective in preparing students for the job market and their role in a diverse world and democratic society. Metrics for measuring these skills are defined by the department in consultation with the OIEE and the Dean’s office. The data and analysis of the department’s SLO are entered into the university assessment system, Weaveonline.

The department has been measuring the six skills since 2012-2013 to 2016-2017. There is considerable flexibility in how departments measure these outcomes. For example, the rubric used in measuring empirical and quantitative skills may include teamwork if students work in groups, or may include communication skills if students have to present their quantitative findings to an audience. Even though the department measures all six skills, empirical and quantitative

Critical Thinking Skills – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
Communication Skills – to include effective development, interpretation and expression of ideas through written, oral and visual communication.
Empirical and Quantitative Skills – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
Teamwork – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
Personal Responsibility – to include the ability to connect choices, actions and consequences to ethical decision making.
Social Responsibility – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.

http://catalog.tamu.edu/undergraduate/general-
skills, personal responsibility (ethics), and social responsibility (cultural awareness and diversity) have been consistently assessed since 2012-2013.

There are three main sections under the *Weaveonline* assessment system. The first section shows the goals, the SLO to be measured, quantitative outcomes expected, indication of whether the expectation was met or not, and resources used in measuring the outcomes. The next section describes “action plans” based on the results in analyzing the quantitative outcomes, and the third section describes approaches for continued improvement in the learning outcome. These three components apply to all defined SLOs, including ethics and cultural diversity. The analysis uses the department’s entries on “Empirical and Quantitative Skills” in *Weaveonline* as an example to demonstrate the mechanism in place to measure SLOs, the use of identifiable metrics to measure targets set by the department, how action plans are used to promote continued improvement, and evidence of the positive outcomes under the department’s assessment process. We have removed extraneous information and reproduced only entries from *Weaveonline* that are directly related to the statement of objectives, the specific SLO being measured, the quantitative target to be achieved, and how the SLO is being measured.

**2012-2013**

The measure of SLO for empirical and quantitative skills under the 2012-2013 cycle is presented on green pages. Under this cycle, the measurement of the SLO for empirical and quantitative skills was part of the learning outcome under students’ skills in economic reasoning. The 2012-2013 cycle marks the beginning of the effort to improve SLO in empirical and quantitative methods. We note that no numerical quantitative measure was introduced in measuring targets even though a survey of students showed that 83.3% correctly responded to quantitative measures of interest. The plan to improve Empirical and quantitative skills was assigned ‘high priority’ and was under the direct oversight of the Department Head.

**2013-2014**

The action plan from the 2012-2013 cycle influenced the SLO for empirical and quantitative skills in several ways (Yellow pages). An additional instructor was hired to teach sections of AGEC 217 and AGEC 317. Two Doctoral students were engaged to teach computer lab sessions to work with students on communication tools (charts, graphs, tables, etc). This was to bring class sizes to manageable levels to promote closer student/instructor interactions. The cycle also
introduced ‘communication skills’ as part of the empirical and quantitative skills SLO. This was a transition cycle and no measures by way of meeting targets were reported.

**2014-2015**
The 2014-2015 reporting cycle (Blue pages) introduced curriculum innovations that serve as “Evidence of improvement based on analysis of results.” First, measurable quantitative thresholds (75% achievement in most cases) were introduced to measure the SLO outcomes. Second, the cycle introduced the idea of student Portfolios that was intended to capture, students’ quantitative and empirical skills, critical thinking, written, oral, and visual communication. The idea is to train a student in problem identification and specification, data sources to address the problem (in the process introduce students to the government and private sources of data useful in agriculture), use a statistical tool to analyze the data and communicate results, orally, written, and visually (graphs, tables, etc.). The program is designated ‘High Priority’ under the leadership of the Department Head. The communication and econometric targets were met but the restructuring of AGEC 217 and AGEC was ongoing. Our attempt to deepen students’ empirical and quantitative skill by loading software and other study materials onto student laptops did not materialize. The different configurations of laptops and the sizes of some software, especially the SAS software proved to be a nightmare!!. The initiative has been tabled for closer examination and recommendations.

**2015-2016**
The 2015-2016 cycle (light maroon pages) intensified the initiatives from the 2014-2015 assessment cycle. Students were introduced to the use of firm level information by collaborating with local businesses, particularly the retail shops, HEB, KROGER, Restaurants, in using their information for statistical analysis by students. A closer attention was paid to students’ ability to communicate research information as presented in the portfolios. Student presentations were attended by the Department Head and other faculty members in the department who offered comments and suggestions for improving students’ performances.

**2016-2017**
The 2017-2018 cycle (Brown pages) introduced another major curriculum innovation to promote continued improvement of our programs, and evidence of improvement based on analysis of results. The immediate observation is the employment of a large number of sources used in measuring SLO outcomes. We are not only using exams, exit interviews, and surveys but also course syllabi, sample exams and homework, and all resources that go into teaching AGEC 217 and AGEC 317. The curriculum innovation and demonstration of continued improvement is captured in the following language from Section 3 of the 2015-2016 cycle, “We will change the structure of AGEC 217 so that the Writing Intensive requirement will be removed from this class and focused in a new AGEC course that will be placed in the curriculum for students to complete after AGEC 105 (1st class in major coursework).” (Assessment Cycle 2015-2016, Section 3, Analysis Questions and Analysis Answers).

This restructuring of the quantitative sequence to achieve the SLOs for empirical and quantitative analysis has been achieved.
PROPOSAL AGEC 117 / 217 / 317

The Department Head appointed a committee in summer 2018 (Dr. James Mjelde, Chair) to coordinate the reorganization of the quantitative course sequence in the department to better serve the needs of our students consistent with the SLO to improve students’ empirical and quantitative skills. The Committee solicited input from the undergraduate office personnel, faculty, students, and reviewed all teaching materials related to AGEC 217 and AGEC 317. Goals are 1) to increase students’ ability to use Excel, Word, and PowerPoint in economic context and 2) increase students’ ability/skill levels in math/stat, regression, and effective communication of research results. The goal is based on student, faculty, and industry comments on the need to be able to use these programs. The committee recommended two new courses AGEC 117 and AGEC 417 to beef up students’ background in quantitative and empirical analysis.

The Head of Department of Agricultural Economics submitted a proposal on September 28, 2018 to Curricular Services Review for onward transmission to the Agricultural Committee in the College of Agriculture. The Committee approved and transmitted the proposal to the Dean on October 10, 2018. The proposal was submitted to the University Curriculum Committee and approved on October 29, 2018. AGEC 117 is currently at the Faculty Senate Preparer then it will go to Faculty Senate, Provost, President, Curricular Services, and Banner. Students may register for the course once entered into Banner. AGEC will be offered in the department beginning Fall 2019.

Discussion on AGEC 417 is ongoing to better define the target population, course content, personnel and resources for effective implementation.

Summary

The analysis of the SLO assessments using the development empirical and quantitative skills of students as an illustration shows that, the department has:
1. An ongoing and integrated planning and evaluation in place
2. An assessment process in place that promote continued improvement of its programs
3. Identifiable measures of expected outcomes
4. Evidence of improvement based on analysis of results.

The framework used in reading the assessment reports may be applied to reading the assessments for ethical responsibility and cultural diversity. Links to these reports are provided.

We address two threshold issues for completeness.
1. Since the department has an AGEC and AGBU programs, how do these reflect in measuring SLOs?
2. Most SLO outcomes showed improvement; what happens when a target is not met?

The distinction between AGEC and AGBU expected outcome
The Department of Agricultural Economics offers two B.S. degrees - a B.S. in Agricultural Economics and a B.S. in Agribusiness. Other than a few specialized courses offered by the Mays Business school to the agribusiness students, all students take the same courses, for example, ALL students take AGEC 317. The mission of the agricultural economics and agribusiness degrees differ in important ways and they have been stated to reflect the difference. The basic difference between the outcomes under AGEC and AGBU is that AGEC focuses on the broader measure of policy impacts on farm firms and households. We turn our focus to firm behavior and outcomes under AGBU because at the UG level most AGBU students are entering the market as management trainees who need to know ways of measuring market competition, profitability, trends, etc. In reading this assessment report, one would encounter measures that apply to both degrees. However, in a few places, for example, under economic reasoning, different measures for AGEC and AGBU are used.

Figure xxx compares SLO under the Agribusiness and AGEC entries for the 2016-2017 cycle (Yellow page heavy border). As explained above the primary difference is the type of SLO being assessed. The AGBU focus is on firm level measures such as profit maximization. In their choice of topics to address in building their portfolios, AGBU students generally work on issues that are firm-specific. In contrast, the SLO under the AGEC assessment focuses on measuring the general economics tools such as computation of elasticities in policy analysis, introduction of risk concepts such as seasonality in model specification and estimation, econometric model analysis etc.

The distinction between SLO and AGBU is subtle but purposive. One finds considerable cross-referencing in assessing the AGBU and AGEC programs. This is to be expected, especially since the assessment process must support “ongoing and integrated planning and evaluation processes that assess its programs and services that result in continuing improvement and that demonstrate that each entity is effectively accomplishing its mission.” (charge to Review Committee).

2. Most SLO targets were met; what happens when a target is partially met or not met?

Such outcomes were observed especially during the 2013-2014 reporting cycle. This was a transition year with considerable experimentation on how to measure outcomes and the sources to use. For example, we found that the use of student exit interviews to measure ethics was inadequate for there was no defined measure of outcome. We switched from the exit interview measure to a pre- and post-test in the ethics course. We are now able to measure improvements in students’ understanding of ethics concepts in a consistent manner as we do with the statistical measures. There were some concerns in measuring the writing requirement as part of communication. This was addressed by increasing support for the two writing classes in the department – AGEC.
Section 1

Mission / Purpose
To encourage the application of economic reasoning to the analysis and communication of issues involving the allocation of resources to the food, feed, and fiber systems in Texas, the nation, and worldwide.

Targets, Findings, and Action Plans

SLO 1: Apply economics reasoning
Apply economics reasoning to issues involving the allocation of resources to agricultural industries, in Texas communities, the nation, and worldwide.

M 6: Basic quantitative knowledge
One or two questions from exam in AGEC 317, including skills in elasticity, hypothesis testing, derivative calculus. Source of Evidence: Academic direct measure of learning - other

Target:
At least 80% of the sampled student work will be rated acceptable by Program Assessment Committee.

Finding (2012-2013) - Target: Met

For this cycle the sampled students are from AGEC 317, Economic Analysis for Agribusiness Management, Section 201 and 501 from the Spring 2013 semester. A total of 30 students are included in this sample and answers to questions regarding demand analysis and risk analysis were reviewed. AGEC 317 is a major only course that is required by all students in our department. A 28 point question regarding demand analysis was included on an exam. The average point value for this question was 23.433 out 28 (83.69%). The median was 25 with the lowest score being 9 and the highest score being 28. A 32 point value question regarding risk analysis was included on an exam. The average was 29.8 out of 32 (93.13%). The median was 31.5 with the lowest score being 23 and the highest being 32.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

M 7: Advanced application of quantitative method
Class work from random sample of students enrolled in 400 level courses in spring semester, stratified to represent AGEC and AGBU
Source of Evidence: Capstone course assignments measuring mastery

**Target:**
The majority of student work will demonstrate depth in understanding of quantitative methods applied to economic problems. Evidence will be collected from 300-level and 400-level courses.

**Finding (2012-2013) - Target: Met**

For this cycle the sampled students are from AGEC 317, Economic Analysis for Agribusiness Management, Section 201 and 501 from the spring of 2013 semester. A total of 30 students are included in this sample and answers to questions regarding demand analysis and risk analysis were reviewed. AGEC 317 is a major only course that is required by all students in our department. A 28 point question regarding demand analysis was included on an exam. The average point value for this question was 23.433 out 28 (83.69%). The median was 25 with the lowest score being 9 and the highest score being 28. A 32 point value question regarding risk analysis was included on an exam. The average was 29.8 out of 32 (93.13%). The median was 31.5 with the lowest score being 23 and the highest being 32.

**Section 2**

**Details of Action Plans for This Cycle (by Established cycle, then alpha)**

**Enhancement of quantitative analysis course**

Based on the partially met target of 80% and in coordination with instructors of AGEC 317, the delivery of extended practice opportunities through eLearning and alternative study sessions will be piloted.

**Established in Cycle:** 2009-2010
**Implementation Status:** In-Progress
**Priority:** High
**Relationships (Measure | Outcome/Objective):**
Measure: Basic quantitative knowledge | Outcome/Objective: Apply economics reasoning

**Section 3**

**Analysis Questions and Analysis Answers**

Based on the analysis of your findings, what changes are you currently making to improve your program? Identify the specific findings you analyzed and how they led to your decision
The Department of Agricultural Economics strives to prepare our students to be ethical, selfless and visionary leaders of policy, business, and economic industries. In order to achieve this, one current objective of the Agricultural Economics program is that our students will apply economic reasoning when making decisions involving agriculture, agribusiness, natural resources and communities. Students are exposed to economic quantitative principles in many courses, but specifically in AGEC 217 and AGEC 317. Specific economic principles in which students are expected to have an understanding from AGEC 217 include: Profit maximization function computing elasticity Regression analysis Basic knowledge of linear programing. While students are tested on the above in AGEC 217, improvements in measuring and reporting our students' understanding of these fundamental quantitative concepts are needed to determine if areas need to be strengthened or if other changes might be needed.

Provide an update for completed or ongoing action plans from the previous year(s). Highlight your improvements.

No response since we reported “In progress” under program enhancement.

**Detailed Assessment Report**

**2013-2014 Agricultural Economics, BS**

*As of: 12/07/2018 01:56 PM CENTRAL*

**Section 1**

**Mission / Purpose**
To encourage the application of economic reasoning to the analysis and communication of issues involving the allocation of resources to the food, feed, and fiber systems in Texas, the nation, and worldwide.

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: Apply economics reasoning**
Apply economics reasoning to issues involving the allocation of resources to agricultural industries, in Texas communities, the nation, and worldwide.

**M 6: Basic quantitative knowledge**
One or two questions from exam in AGEC 317, including skills in elasticity, hypothesis testing, derivative calculus.
Source of Evidence: Academic direct measure of learning - other

**Target:**
At least 80% of the sampled student work will be rated acceptable by Program Assessment Committee.

**Finding (2013-2014) - Target: Not Reported This Cycle**
Not reported this cycle.

**Related Action Plans (by Established cycle, then alpha):**
For full information, see the *Details of Action Plans* section of this report.

**Enhancement of quantitative analysis course**
*Established in Cycle: 2009-2010*
From 2009-2010: Based on the partially met target of 80% and in coordination with instructors of AGEC 317, the delivery of extended practice opportunities through eLearning and alternative study sessions will be piloted. Update from 2013 - 2014 academic year: Based on feedback received from the graduation survey and AGEC 481 survey and review of our students' quantitative skills, additional instructor support has been hired to assist in AGEC 217 and AGEC 317. This support will allow for supplemental quantitative skills labs to be held for students. The focus of the labs is to teach spreadsheet application and quantitative analysis computer programs. Degree requirements will require all students to take AGEC 317 in either their junior or senior year to complete their Agricultural Economics degree.
Section 3

Analysis Questions and Analysis Answers

Based on the analysis of your findings, what changes are you currently making to improve your program? Identify the specific findings you analyzed and how they led to your decision.

The Department of Agricultural Economics strives to equip students with the analytical tools to address issues in the food and fiber sector of our nation and globally. Our students are prepared to be ethical, selfless and visionary leaders of policy, business, and economic industries. In order to achieve this objective we are working to provide students with opportunities to participate in unique programs and experiences to prepare them to be effective members of the workforce and communities in which they live. There are two important current objectives of the Agricultural Economics program. The first is that our students will apply economic reasoning and quantitative tools when making decisions involving agriculture, agribusiness, natural resources and communities. The second is that our students will be able to communicate effectively to stakeholders, institutions, and identifiable publics. The department pursues these two objectives using metrics from two main courses – AGEC 217 and AGEC 317. In AGEC 217 and AGEC 317 students are exposed to economic quantitative principles such as: profit maximization function, computing elasticity, regression analysis, and basic knowledge of linear programing and advanced spreadsheet applications. In the previous year's assessment cycle, inadequacies in measuring and reporting our students' understanding of fundamental quantitative and communication concepts were identified. Our findings were based on students' exit interviews and responses to questions about the usefulness of the two classes in their professional expectations, discussions with individuals from the business community who have employed our students, discussions with governmental entities who have a strong need for quantitative and communication skills, and in-house discussion among faculty regarding the adequacy of students' performance in AGEC 217 and AGEC 317. To strengthen our students' abilities regarding quantitative and communication concepts, structural changes have been undertaken with regard to AGEC 217 and AGEC 317 for the 2014-2015 academic year. Specifically, the department has hired an additional instructor for the two classes. This additional support has
allowed us to split the content of AGEC 217 into two separate emphases. One instructor will expand the writing section of the course by teaching writing skills as they apply to different stakeholders, for example, business writing, critical writing, memos, technical writing, etc. The other section will emphasize the mathematical analysis component of the class, including regression analysis, linear programming, basic modeling, etc. In addition to the classroom instruction we have hired two doctoral students to run quantitative skills labs for students. One lab is dedicated to training students in the use of spreadsheets to create visual presentation aides – graphs, charts, etc. in addition to training in locating data sources for quantitative analysis. The second lab is dedicated to training students in the use of cutting-edge statistical packages such as SA, GAMS, LP, etc. The assessment process has also identified several weaknesses in some of our current measures and targets. Efforts need to be directed toward possibly revising the methods used to evaluate our outcomes to ensure that we have measurable targets.

Provide an update for completed or ongoing action plans from the previous year(s). Highlight your improvements.

During the 2013-2014 academic year, we have continued to work to provide our students with opportunities to excel inside and outside of the classroom. A joint degree program between the Department of Agricultural Economics and the Bush School of Government and Public Service is being developed. Students enrolled in this program would receive their Bachelor of Science degree in Agricultural Economics and a Masters of Public Service Administration (MSPA) degree in five years. This degree program is in the process of receiving university approval with the desire to have the approved degree included in the 2015 – 2016 University Catalog. Plans to encourage participation in this program are currently being developed. During the 2013-2014 academic year, we have been working on strengthening our students' career and educational options once they have completed their B.S. degree. When entering the Department of Agricultural Economics, all students (freshmen admitted students, off-campus transfer students, and on-campus change of major students) must attend a departmental meeting. Efforts are made at these meeting to encourage students to engage in purposeful career planning and dedication to an effective job search process or continuing educational programs. Students are encouraged to participate in the many opportunities available to them as college students such as: clubs, leadership opportunities, community service, study abroad, certificate and minor programs, academic competitions, and internships. Analysis of data received from our graduation survey, indicates that students are taking steps to facilitate their move to the working world. Of the 94 AGEC students who completed their degree in the 2013-2014 academic year, 40% of the students participated in an internship program and 10% participated in a study abroad program. An opportunity was also made available to underclassmen honor students to participate in a study abroad program to Ghana, Africa. A total of 9 students participated in this trip with 4 of them being Agricultural Economics students. From the 2012-2013 assessment cycle, several improvements were planned to strengthen the purposeful career planning of students. Review of these planned improvements show mixed results. 1. Work was started in the 2013-2014 academic year to improve our tracking of former students, especially recent graduates, to follow-up with their employment status. Efforts need to continue in this area as adequate follow-up did not happen. A specific plan with contact dates of recent graduates should be concerned. 2. New mandatory freshmen meetings were initiated during the 2013-2014 academic year. These meetings were held midsemester in the fall and were used as an opportunity to enrich students'
experiences such as career planning, departmental opportunities and where a student can go for help if needed. The advising staff in the department received positive feedback from these meetings and the timing of the meetings proved to be helpful to the students. The meetings will be continued in the fall of 2014 and will be refined to make the information included to be helpful and interesting to the student. 3. Changes were made to the graduation survey to collect additional information from students regarding their participation in various programs and opportunities. Additional analysis of the survey results should be conducted to identify areas in which improvements can be made. 4. The Undergraduate website is currently being updated to provide information regarding club and activity meeting times. An investigation into developing a “Job Board” is also being conducted.

**Detailed Assessment Report**

**2014-2015 Agricultural Economics, BS**

*As of: 12/07/2018 01:55 PM CENTRAL*

**Section 1**

**Mission / Purpose**

Foster the development of skills in agriculture, applied economics and economic logic to the analysis and communication of issues involving finance and real estate, food sales and marketing systems, policy, and entrepreneurship in Texas, the nation, and worldwide.

The Department of Agricultural Economics offers two B.S. degrees - a B.S. in Agricultural Economics and a B.S. in Agribusiness. Other than a few specialized courses offered by the Mays Business school to the agribusiness students, all students take the same courses, for example, ALL students take AGEC 317. The mission of the agricultural economics and agribusiness degrees differ in important ways and they have been stated to reflect the difference. The basic difference between the outcomes under AGEC and AGBU is that AGEC focuses on the broader measure of policy impacts on farm firms and households. We turn our focus to firm behavior and outcomes under AGBU because at the UG level most AGBU students are entering the market as management trainees who need to know ways of measuring market competition, profitability, trends, etc. In reading this assessment report, one would encounter measures that apply to both degrees. However, in a few places, for example, under economic reasoning, different measures for AGEC and AGBU are used.

**Goals**

**G 1: Apply economics reasoning**

Apply economics reasoning to issues involving the allocation of resources to agricultural industries, in Texas communities, the nation, and worldwide.

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: Recognize seasonality in an estimated demand mode**
Students will recognize seasonality in an estimated demand model. The concept of seasonality is important in agriculture because of the nature of agriculture and food market. For example, the effect of cold periods on availability of fruits and vegetables is always a concern. It is also well-known that certain products such as turkey meat are in high demand during certain periods (Christmas and Thanksgiving) of the year. Students' ability to understand and quantify the impacts of seasonality on a market is one important metric in evaluating a student's understanding of basic economic principles and concepts.

**Related Measures**

**M 1: AGEC 317 Final Exam**

AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGEC program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide students with the knowledge, skills, and ability to understand and apply 3 core concepts – seasonality, price, and income elasticities that are relevant to understanding the behavior of farm firms and households. ‘Seasonality' provides knowledge about risk and is a fundamental characteristic of agriculture. The concept has been described as “the phenomenon that causes crop prices (including cash, futures, basis, option volatility, intramarket, intermarket, and inter-commodity spreads) to behave in a relatively predictable manner, year in and year out”. (See, Welch, Mark, et. Al. “Risk Management: Seasonality and its Effects on Crop Markets,” AgriLife Extension, Texas A&M University. Bulletin E-313, RM2-5.0 11-11 http://agecoext.tamu.edu/files/2013/10/rm2-5.pdf).

A student's knowledge, skills, and ability to measure and apply the concepts of price and income elasticities is also very important because it measures whether as an applied economist a student is able to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions. We measured these outcomes in several ways. 1. We used exams to determine whether a student understands what the concepts mean and using calculus can identify the concepts in a hypothetical in the form of an equation. This helped to measure students' knowledge of the concepts. 2. We asked students to develop a course portfolio that shows skills in statistical model-building, allows for the measurement of elasticities, and an ability to interpret results. Also, students must be able to use the results to forecast the impacts of policy (taxes, subsidies) decisions on markets for selected products. 3. A separate computer lab training provided students with knowledge about data processing and how to communicate using visual images.

Within the portfolio, students were able to demonstrate skills and ability to process raw data to develop graphs, trend lines, and outcome of forecasts as visual communication. In addition to
measuring students' knowledge of econometric models using exams, we measured students' skills and abilities to develop their own econometric model, set hypotheses, use statistical tools to estimate the coefficients in the econometric model, and interpreted the results. We also measured students' skills and abilities to introduce some specific government policies, such as a tax or subsidy into the econometric model and be able to explain what happens in markets when these policies are introduced (Pages 3-10 of attached Portfolio shows these skills and abilities).

Source of Evidence: Academic direct measure of learning - other

**Target:**

75% of students will recognize seasonality in an estimated demand model.

**Finding (2014-2015) - Target: Met**

Using the Evaluation of Learning Outcomes from AGEC 317, we found that 88% of our students were able to recognize seasonality in an estimated demand model.

**SLO 2: Calculate an elasticity from an estimated demand model**

Measure 2: Students will calculate elasticity from an estimated demand model. 'Elasticity' measures the responsiveness in an outcome as a result of a change in a variable. For example, suppose a food seller wanted to know what would happen to the quantity of bread sold (an outcome) if the price (a variable) of bread went up. The answer is a price elasticity measure. Likewise, if the food retailer wanted to know what would happen to the quantity of roman noodles sold (an outcome) if incomes of students (a variable) went up, the answer is an income elasticity measure. Another example, if the City Council wanted to raise revenues, their first step would be to determine what consumers would do if a tax was placed on certain items, for example, cigarettes. Smokers do not change easily (low elasticity) so it is best to tax cigarettes. It may also be that a policy maker wishes to know if consumers will switch from beef consumption to chicken consumption if the price of beef went up. This is a 'cross-elasticity measure. Elasticity is therefore a key concept in economics so students' understanding of the concept and ability to measure is important.

**Related Measures**

**M 1: AGEC 317 Final Exam**

AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGEC program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT
301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide students with the knowledge, skills, and ability to understand and apply 3 core concepts – seasonality, price, and income elasticities that are relevant to understanding the behavior of farm firms and households. ‘Seasonality’ provides knowledge about risk and is a fundamental characteristic of agriculture. The concept has been described as “the phenomenon that causes crop prices (including cash, futures, basis, option volatility, intramarket, intermarket, and inter-commodity spreads) to behave in a relatively predictable manner, year in and year out”. (See, Welch, Mark, et. Al. “Risk Management: Seasonality and its Effects on Crop Markets,” AgriLife Extension, Texas A&M University. Bulletin E-313, RM2-5.0 11-11 http://agecoext.tamu.edu/files/2013/10/rm2-5.pdf ). A student's knowledge, skills, and ability to measure and apply the concepts of price and income elasticities is also very important because it measures whether as an applied economist a student is able to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions. We measured these outcomes in several ways. 1. We used exams to determine whether a student understands what the concepts mean and using calculus can identify the concepts in a hypothetical in the form of an equation. This helped to measure students' knowledge of the concepts. 2. We asked students to develop a course portfolio that shows skills in statistical model-building, allows for the measurement of elasticities, and an ability to interpret results. Also, students must be able to use the results to forecast the impacts of policy (taxes, subsidies) decisions on markets for selected products. 3. A separate computer lab training provided students with knowledge about data processing and how to communicate using visual images.

Within the portfolio, students were able to demonstrate skills and ability to process raw data to develop graphs, trend lines, and outcome of forecasts as visual communication. In addition to measuring students' knowledge of econometric models using exams, we measured students' skills and abilities to develop their own econometric model, set hypotheses, use statistical tools to estimate the coefficients in the econometric model, and interpreted the results. We also measured students' skills and abilities to introduce some specific government policies, such as a tax or subsidy into the econometric model and be able to explain what happens in markets when these policies are introduced (Pages 3- 10 of attached Portfolio shows these skills and abilities). Source of Evidence: Academic direct measure of learning - other

**Target:**
75% of students will accurately calculate an elasticity from an estimated demand model.

**Finding (2014-2015) - Target: Met**

Using the Evaluation of Learning Outcomes from AGEC 317, we found that 86% of our students were able to calculate elasticity from an estimated demand model.

**SLO 3: Evaluate an estimated econometric model**

Students will evaluate an estimated econometric model. It is the ability to build a model, test hypothesis, and make predictions about markets and policy recommendations that make
agricultural economics an 'applied science.' Students' understanding of how to determine the usefulness of a model is a basic requirement in determining the effectiveness of students' learning and understanding of agricultural economics as an applied science.

Related Measures

M 1: AGEC 317 Final Exam

AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGEC program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide students with the knowledge, skills, and ability to understand and apply 3 core concepts – seasonality, price, and income elasticities that are relevant to understanding the behavior of farm firms and households. ‘Seasonality' provides knowledge about risk and is a fundamental characteristic of agriculture. The concept has been described as “the phenomenon that causes crop prices (including cash, futures, basis, option volatility, intramarket, intermarket, and inter-commodity spreads) to behave in a relatively predictable manner, year in and year out”. (See, Welch, Mark, et. Al. “Risk Management: Seasonality and its Effects on Crop Markets,” AgriLife Extension, Texas A&M University. Bulletin E-313, RM2-5.0 11-11 http://agecoext.tamu.edu/files/2013/10/rm2-5.pdf).

A student's knowledge, skills, and ability to measure and apply the concepts of price and income elasticities is also very important because it measures whether as an applied economist a student is able to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions. We measured these outcomes in several ways. 1. We used exams to determine whether a student understands what the concepts mean and using calculus can identify the concepts in a hypothetical in the form of an equation. This helped to measure students' knowledge of the concepts. 2. We asked students to develop a course portfolio that shows skills in statistical model-building, allows for the measurement of elasticities, and an ability to interpret results. Also, students must be able to use the results to forecast the impacts of policy (taxes, subsidies) decisions on markets for selected products. 3. A separate computer lab training provided students with knowledge about data processing and how to communicate using visual images. Within the portfolio, students were able to demonstrate skills and ability to process raw data to develop graphs, trend lines, and outcome of forecasts as visual communication. In addition to measuring students' knowledge of econometric models using exams, we measured students' skills and abilities to develop their own econometric model, set hypotheses, use statistical tools to estimate the coefficients in the econometric model, and interpreted the results. We also measured students' skills and abilities to introduce some specific government policies, such as a tax or subsidy into the econometric model and be able to explain
what happens in markets when these policies are introduced (Pages 3-10 of attached Portfolio shows these skills and abilities).
Source of Evidence: Academic direct measure of learning - other

**Target:**
75% of students will effectively evaluate an estimated econometric model.

**Finding (2014-2015) - Target: Met**
Using the Evaluation of Learning Outcomes from AGEC 317, We found that 78% of our students were able to evaluate an estimated econometric model.

**SLO 4: Oral Communication Skills**
Students will demonstrate effective oral communication skills by presenting their findings of economic analysis and reasoning to the AGEC administration, faculty, and peers.

**Relevant Associations:**
General Education/Core Curriculum Associations
3 Communicate effectively

**Related Measures**

**M 2: AGEC 317 Course Portfolio**
Students will present their findings of economic analysis and reasoning from their course portfolio to departmental administrators, faculty, and peers, and must be able to correctly answer questions from the audience. The students are asked to explain the sources of data used in the study, the statistical estimation technique used, what the estimated coefficients mean, and the policy and management use of their study. 
Source of Evidence: Portfolio, showing skill development or best work

**Target:**
75% of our students will demonstrate effective oral communication skills by presenting their findings to departmental administrators, faculty, and peers and be able to correctly answer questions from the audience

**Finding (2014-2015) - Target: Met**

*Even though this is the first time the portfolio approach is being used,* students displayed considerable interest and purpose in presenting their study. Students understood that in going through the portfolio preparation process, they have addressed one of the dreaded questions in all job interviews "What can you do for our organization?" for a position as an economist/policy analyst or industry/business analyst. The student recognizes that they need to demonstrate an ability to take raw information/data, organize that data into a statistically useful for estimating statistical parameters of interest, and be able to interpret their findings in a coherent manner. All students who presented were able to explain their study to the satisfaction of the faculty and
peers. We set a low threshold of 75% because this is the first time the portfolio approach is being tested. The evaluations show that all students (100%) were able to effectively communicate (oral).

**Related Action Plans (by Established cycle, then alpha):**
For full information, see the *Details of Action Plans* section of this report.

**Student Access to Software**

The use of a course portfolio to assess students' economics knowledge, quantitative skills and communication (written, oral, vis...)

**SLO 5: Visual Communication Skills**
Students will demonstrate effective visual communication skills by presenting their findings of economic analysis and reasoning in the form of graphs and charts.

**Relevant Associations:**
_General Education/Core Curriculum Associations_

3 Communicate effectively

**Related Measures**

**M 2: AGEC 317 Course Portfolio**

Students will present their findings of economic analysis and reasoning from their course portfolio to departmental administrators, faculty, and peers, and must be able to correctly answer questions from the audience. The students are asked to explain the sources of data used in the study, the statistical estimation technique used, what the estimated coefficients mean, and the policy and management use of their study.

Source of Evidence: Portfolio, showing skill development or best work

**Target:**
75% of students will demonstrate effective visual communication skills by presenting their some information in their Portfolios in visual form and explained in their oral presentations to departmental administrators, faculty, and peers.

**Finding (2014-2015) - Target: Met**

Students were required as part of the portfolio preparation to use the skills acquired from the excel training lab to demonstrate an ability to present their information/data in a visual format. Document 1 shows that students were able to. We set a low threshold of 75% because this is the first time the portfolio approach is being tested. The evaluations show that all students (100%) were able to effectively communicate (visual).
Section 2

Related Action

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Enhancement of quantitative analysis course
From 2009-2010: Based on the partially met target of 80% and in coordination with instructors of AGEC 317, the delivery of extended practice opportunities through eLearning and alternative study sessions will be piloted. Update from 2013 - 2014 academic year: Based on feedback received from the graduation survey and AGEC 481 survey and review of our students' quantitative skills, additional instructor support has been hired to assist in AGEC 217 and AGEC 317. This support will allow for supplemental quantitative skills labs to be held for students. The focus of the labs is to teach spreadsheet application and quantitative analysis computer programs. Degree requirements will require all students to take AGEC 317 in either their junior or senior year to complete their Agricultural Economics degree.

Established in Cycle: 2009-2010
Implementation Status: In-Progress
Priority: High
Responsible Person/Group: Parr Rosson, Professor and Head

Section 3

Analysis Questions and Analysis Answers
Based on the analysis of your findings, what changes are you currently making to improve your program? Identify the specific findings you analyzed and how they led to your decision.

AGEC plans to build on the successes achieved using the assessment protocols initiated after consultations with stakeholders, administration, and faculty. The participation of faculty in developing appropriate measures for students' learning outcomes has been especially useful. One important benefit is the establishment of a quantifiable and transparent baseline that will support comparability and permit tracking of outcomes in the future. Our overall goal for the coming years is to scale-up our efforts towards achieving a comprehensive outcome for all our students in the future. Despite meeting all of our targets for this year, we believe that the following actions will continue to strengthen student learning in the areas of economics reasoning, communication, ethical awareness and professionalism, and the recognition of diversity and differences. The specific initiatives to strengthen our program include: More aggressive activities to enhance cultural diversity in our program. There are two main targets in this effort. First, we plan to strengthen our collaboration with COALS' recruiting resources to reach minority and disadvantaged populations, especially in the urban centers and the less-represented regions in Texas. AGEC has started already and developed a comprehensive database on potential markets and available personnel to assist in the recruiting effort. A video of our program was circulated to all potential collaborators in this recruiting initiative. Second, we are working on opening more study abroad destinations to expose our students to cultures and peoples around the world.
We are alerting our students early in the Fall semester to prepare for a study abroad experience in the following summer. This early notice proved very valuable in engaging the interest of students in the early stages of their educational careers. AGEC plans to significantly expand students' involvement in internships, university, college, and departmental club activities. Improving leadership skills is an important objective of our program consistent with the teaching imperative of the university. Our plan is to work more closely with the industry/business professionals who visit the department during the year. There must be a better coordination between the objective to encourage professionalism in our students and the experiential education through internships.

The testing approach used in measuring students' ethical experience proved very useful. The plan is to expand the content of the tests to reflect current ethical issues that confront industry/business. The use of a course portfolio to assess students' economics knowledge, quantitative skills and communication (written, oral, visual) proved very useful. We plan to scale-up this approach by removing a major bottleneck that we believe could have led to even higher performance by students. The size of the computer labs and number of computers posed a major challenge. We plan to download computer software to students' laptops so that the number of desktops will no longer be a constraint. We believe that having the statistical packages on a laptop will also encourage usage as students are no longer constrained by access to computer labs. This year we had industry/business guests and speakers visit with our students in our AGEC 315, AGEC 340, AGEC 481, AGEC 314/414, and AGEC 422 courses. In the years following, we plan to continue bringing in industry professionals, but we intend ask for student feedback on these presentations by providing a post-test.

**Provide an update for completed or ongoing action plans from the previous year(s). Highlight your improvements.**

1) The Action Plan from the 2013-2014 academic year call for changes to AGEC 217. A greater focus was placed on written communication and skills based on type of audience and type of communication needed, which is reflected in this year's assessment results. 2) We modified the metric for professionalism, as highlighted in the 2012-2013 and 2013-2014 Action Plan. Historically, our measure focused on outcome, (output) that is, the professional positions held by students after graduation. We decided to use an input-output (I-O) framework in this report. We have provided information on the number of industry/business contacts (guest lecturers, prof-for-a-day, Round Table participant, mentors, etc.) with our students. This is the first time AGEC is measuring professionalism using this I-O framework and we believe it gives a better measure of the efficiency/effectiveness of our professionalism education.
Section 1

Mission / Purpose
Foster the development of skills in agriculture, applied economics and economic logic to the analysis and communication of issues involving finance and real estate, food sales and marketing systems, policy, and entrepreneurship in Texas, the nation, and worldwide. The Department of Agricultural Economics offers two B.S. degrees - a B.S. in Agricultural Economics and a B.S. in Agribusiness. Other than a few specialized courses offered by the Mays Business school to the agribusiness students, all students take the same courses, for example, ALL students take AGEC 317. The mission of the agricultural economics and agribusiness degrees differ in important ways and they have been stated to reflect the difference. The basic difference between the outcomes under AGEC and AGBU is that AGEC focuses on the broader measure of policy impacts on farm firms and households. We turn our focus to firm behavior and outcomes under AGBU because at the UG level most AGBU students are entering the market as management trainees who need to know ways of measuring market competition, profitability, trends, etc. In reading this assessment report, one would encounter measures that apply to both degrees. However, in a few places, for example, under economic reasoning, different measures for AGEC and AGBU are used.

Goals

G 1: Apply economics reasoning
Apply economics reasoning to issues involving the allocation of resources to agricultural industries, in Texas communities, the nation, and worldwide.

G 2: Effectively communicate
Effectively communicate their decisions to professional audiences in business and policy settings.

G 3: Demonstrate professionalism
Demonstrate awareness of professional choices that involve a broad range of stakeholder interests.

G 4: Recognize and respect diversity and differences
Recognize and respect the complexity of people's diversity and individual differences.

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans
SLO 1: Recognize seasonality in an estimated demand model
Students will recognize seasonality in an estimated demand model. The concept of seasonality is important in agriculture because of the nature of agriculture and food market. For example, the effect of cold periods on availability of fruits and vegetables is always a concern. It is also well-known that certain products such as turkey meat are in high demand during certain periods (Christmas and Thanksgiving) of the year. Students' ability to understand and quantify the impacts of seasonality on a market is one important metric in evaluating a student's understanding of basic economic principles and concepts.

Related Measures

M 1: AGEC 317 Final Exam
Specific questions on profit maximization by a firm, OLS, and elasticity are included in the final exam for the quantitative economics course (AGEC) 317. AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGBU program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of department head. AGEC 317 is designed to provide AGBU students with the knowledge, skills, and ability to understand how firms make managerial decisions to maximize profits and to use statistical and forecasting tools to project firms' revenue and profits, how firms measure market performance, competition, and forecasting of future profits, and ability to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions.

Source of Evidence: Academic direct measure of learning - other

Target:
75% of students will recognize seasonality in an estimated demand model.

Finding (2015-2016) - Target: Not Reported This Cycle
Not Evaluated in Fall 2015 or Spring 2016. The course has been focusing solely on cross-sectional data instead of cross-sectional and time series data.

SLO 2: Calculate an elasticity from an estimated demand model
Measure 2: Students will calculate elasticity from an estimated demand model. 'Elasticity' measures the responsiveness in an outcome as a result of a change in a variable. For example, suppose a food seller wanted to know what would happen to the quantity of bread sold (an outcome) if the price (a variable) of bread went up. The answer is a price elasticity measure. Likewise, if the food retailer wanted to know what would happen to the quantity of roman noodles sold (an outcome) if incomes of students (a variable) went up, the answer is an income elasticity measure. Another example, if the City Council wanted to raise revenues, their first step
would be to determine what consumers would do if a tax was placed on certain items, for example, cigarettes. Smokers do not change easily (low elasticity) so it is best to tax cigarettes. It may also be that a policy maker wishes to know if consumers will switch from beef consumption to chicken consumption if the price of beef went up. This is a 'cross-elasticity measure. Elasticity is therefore a key concept in economics so students' understanding of the concept and ability to measure is important.

**Related Measures**

**M 1: AGEC 317 Final Exam**

Specific questions on profit maximization by a firm, OLS, and elasticity are included in the final exam for the quantitative economics course (AGEC) 317. AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGBU program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide AGBU students with the knowledge, skills, and ability to understand how firms make managerial decisions to maximize profits and to use statistical and forecasting tools to project firms' revenue and profits, how firms measure market performance, competition, and forecasting of future profits, and ability to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions.

Source of Evidence: Academic direct measure of learning - other

**Target:**

75% of students will accurately calculate elasticity from an estimated demand model.

**Finding (2015-2016) - Target: Met**

Using the Evaluation of Learning Outcomes from AGEC 317 in Fall 2015, we found that our students were able to average 94 when asked to calculate the profit (or revenue) maximizing output for a firm. Using the Evaluation of Learning Outcomes from AGEC 317 in Spring 2016, students were able to average 89 when asked to calculate the profit (or revenue) maximizing output for a firm.

**SLO 3: Evaluate an estimated econometric model**

Students will evaluate an estimated econometric model. It is the ability to build a model, test hypothesis, and make predictions about markets and policy recommendations that make agricultural economics an 'applied science.' Students' understanding of how to determine the usefulness of a model is a basic requirement in determining the effectiveness of students' learning and understanding of agricultural economics as an applied science.
Related Measures

M 1: AGEC 317 Final Exam
Specific questions on profit maximization by a firm, OLS, and elasticity are included in the final exam for the quantitative economics course (AGEC) 317. AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGBU program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide AGBU students with the knowledge, skills, and ability to understand how firms make managerial decisions to maximize profits and to use statistical and forecasting tools to project firms' revenue and profits, how firms measure market performance, competition, and forecasting of future profits, and ability to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions.
Source of Evidence: Academic direct measure of learning - other

Target:
75% of students will effectively evaluate an estimated econometric model.

Finding (2015-2016) - Target: Met
Using the Evaluation of Learning Outcomes from AGEC 317, We found that 83% of our students were able to evaluate an estimated econometric model.

Related Measures

M 2: AGEC 317 Course Portfolio
Students develop a course portfolio that shows skills in statistical model-building, allows for the measurement of elasticities, and an ability to interpret results. Also, students must be able to use the results to forecast the impacts of policy (taxes, subsidies) decisions on markets for selected products.
Source of Evidence: Portfolio, showing skill development or best work

Target:
75% of our students will demonstrate effective oral communication skills by presenting their findings to departmental administrators, faculty, and peers and be able to correctly answer questions from the audience.
Finding (2015-2016) - Target: Met
98% of students will demonstrate effective oral communication skills by presenting their findings to departmental administrators, faculty, and peers and be able to correctly answer questions from the audience.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Student Access to Software
The use of a course portfolio to assess students' economics knowledge, quantitative skills and communication (written, oral, vis...}

SLO 5: Visual Communication Skills
Students will demonstrate effective visual communication

Section 2

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Enhancement of quantitative analysis course
From 2009-2010: Based on the partially met target of 80% and in coordination with instructors of AGEC 317, the delivery of extended practice opportunities through eLearning and alternative study sessions will be piloted. Update from 2013 - 2014 academic year: Based on feedback received from the graduation survey and AGEC 481 survey and review of our students' quantitative skills, additional instructor support has been hired to assist in AGEC 217 and AGEC 317. This support will allow for supplemental quantitative skills labs to be held for students. The focus of the labs is to teach spreadsheet application and quantitative analysis computer programs. Degree requirements will require all students to take AGEC 317 in either their junior or senior year to complete their Agricultural Economics degree.

Established in Cycle: 2009-2010
Implementation Status: In-Progress
Priority: High
Responsible Person/Group: Parr Rosson, Professor and Head

Section 3

Analysis Questions and Analysis Answers
Based on the analysis of your findings, what changes are you currently making to improve your program? Identify the specific findings you analyzed and how they led to your decision.
AGEC plans to build on the successes achieved using the assessment protocols initiated after consultations with stakeholders, administration, and faculty. The participation of faculty in
developing appropriate measures for students' learning outcomes has been especially useful. One important benefit is the establishment of a quantifiable and transparent baseline that will support comparability and permit tracking of outcomes in the future. Our overall goal for the coming years is to scale-up our efforts towards achieving a comprehensive outcome for all our students in the future. Despite meeting all of our targets for this year, we believe that the following actions will continue to strengthen student learning in the areas of economics reasoning, communication, ethical awareness and professionalism, and the recognition of diversity and differences. The specific initiatives to strengthen our program include: More aggressive activities to enhance cultural diversity in our program. We plan to strengthen our collaboration with COALS' recruiting resources to reach minority and disadvantaged populations, especially in the urban centers and the less-represented regions in Texas. We are continually working on opening more study abroad destinations to expose our students to cultures and peoples around the world. We are alerting our students early in the Fall semester to prepare for a study abroad experience in the following summer. This early notice proved very valuable in engaging the interest of students in the early stages of their educational careers. We are working on opening more study abroad destinations to expose our students to cultures and peoples around the world. We are alerting our students early in the Fall semester to prepare for a study abroad experience in the following summer. This early notice proved very valuable in engaging the interest of students in the early stages of their educational careers. AGEC plans to significantly expand students' involvement in internships, university, college, and departmental club activities. Improving leadership skills is an important objective of our program consistent with the teaching imperative of the university. Our plan is to work more closely with the industry/business professionals who visit the department during the year. There must be a better coordination between the objective to encourage professionalism in our students and the experiential education through internships. The testing approach used in measuring students' ethical experience proved very useful. The use of a course portfolio to assess students' economics knowledge, quantitative skills and communication (written, oral, visual) proved very useful. This year we had industry/business guests and speakers visit with our students in our AGEC 315, AGEC 340, AGEC 481, AGEC 314/414, and AGEC 422 courses. In the years following, we plan to continue bringing in industry professionals.

Provide an update for completed or ongoing action plans from the previous year(s).
Highlight your improvements.

The primary goal in introducing the course portfolios was to improve students' communication (oral, written, and visual) skills, outcomes highlighted in the 2013-2014 Action Plan to receive special attention. In terms of written communication skills, students were able to explain the sources of data used in their study (data primarily from local businesses- HEB, KROGER, Restaurants, etc), explain their statistical results, and to make policy and management recommendations based on findings from the statistical analysis. Students also demonstrated improvements in visual communication by including graphs, charts, trend lines, and other business visual concepts in presenting the information to readers and users. Students demonstrated oral communication skills by presenting the results of their research to their colleagues and selected faculty members including the Head of Department, the Assistant Head for Undergraduate Affairs, and other faculty members who are affiliated with the undergraduate research program.
Section 1

Mission / Purpose
Foster the development of skills in agriculture, applied economics and economic logic to the analysis and communication of issues involving finance and real estate, food sales and marketing systems, policy, and entrepreneurship in Texas, the nation, and worldwide. The Department of Agricultural Economics offers two B.S. degrees - a B.S. in Agricultural Economics and a B.S. in Agribusiness. Other than a few specialized courses offered by the Mays Business school to the agribusiness students, all students take the same courses, for example, ALL students take AGEC 317. The mission of the agricultural economics and agribusiness degrees differ in important ways and they have been stated to reflect the difference. The basic difference between the outcomes under AGEC and AGBU is that AGEC focuses on the broader measure of policy impacts on farm firms and households. We turn our focus to firm behavior and outcomes under AGBU because at the UG level most AGBU students are entering the market as management trainees who need to know ways of measuring market competition, profitability, trends, etc. In reading this assessment report, one would encounter measures that apply to both degrees. However, in a few places, for example, under economic reasoning, different measures for AGEC and AGBU are used.

Connected Documents
AGEC 217 course data
AGEC 217, Assignment 4 and 5, sample 3
AGEC 217, Assignment 4 and 5, sample 4
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
AGEC 317 Summer 2017 Course Portfolio 2
AGEC HIP data

Goals

G 1: Apply economics reasoning
Apply economics reasoning to issues involving the allocation of resources to agricultural industries, in Texas communities, the nation, and worldwide.

Connected Documents
AGEC 217 course data
AGEC 217 data for 2016-2017
AGEC 217 Rubric
AGEC 217 Rubric 4
AGEC 217, Assignment 4 and 5, sample
SLO 7: Calculate an elasticity from an estimated demand model
Measure 2: Students will calculate elasticity from an estimated demand model. 'Elasticity' measures the responsiveness in an outcome as a result of a change in a variable. For example, suppose a food seller wanted to know what would happen to the quantity of bread sold (an outcome) if the price (a variable) of bread went up. The answer is a price elasticity measure. Likewise, if the food retailer wanted to know what would happen to the quantity of roman noodles sold (an outcome) if incomes of students (a variable) went up, the answer is an income elasticity measure. Another example, if the City Council wanted to raise revenues, their first step would be to determine what consumers would do if a tax was placed on certain items, for example, cigarettes. Smokers do not change easily (low elasticity) so it is best to tax cigarettes. It may also be that a policy maker wishes to know if consumers will switch from beef consumption to chicken consumption if the price of beef went up. This is a 'cross-elasticity measure. Elasticity is therefore a key concept in economics so students' understanding of the concept and ability to measure is important.

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
AGEC 317 Summer 2017 Course Portfolio 2
Text for Test information for AGEC 317

Related Measures
M 7: AGEC 317 Final Exam
Specific questions on profit maximization by a firm, OLS, and elasticity are included in the final exam for the quantitative economics course (AGEC) 317. AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGBU program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects
and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide AGBU students with the knowledge, skills, and ability to understand how firms make managerial decisions to maximize profits and to use statistical and forecasting tools to project firms' revenue and profits, how firms measure market performance, competition, and forecasting of future profits, and ability to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions.

Source of Evidence: Academic direct measure of learning - other

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
Text for Test information for AGEC 317

Target:
75% of students will accurately calculate elasticity from an estimated demand model.

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
Text for Test information for AGEC 317

Finding (2017-2018) - Target: Met
Using the Evaluation of Learning Outcomes from AGEC 317, we found that our students averaged 84.8 when asked to calculate elasticity from a theoretical model of utility maximization.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

SLO 8: Evaluate an estimated econometric model
Students will evaluate an estimated econometric model. It is the ability to build a model, test hypothesis, and make predictions about markets and policy recommendations that make agricultural economics an 'applied science.' Students' understanding of how to determine the usefulness of a model is a basic requirement in determining the effectiveness of 'students' learning and understanding of agricultural economics as an applied science.

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample
M 7: AGEC 317 Final Exam
Specific questions on profit maximization by a firm, OLS, and elasticity are included in the final exam for the quantitative economics course (AGEC) 317. AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGBU program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide AGBU students with the knowledge, skills, and ability to understand how firms make managerial decisions to maximize profits and to use statistical and forecasting tools to project firms' revenue and profits, how firms measure market performance, competition, and forecasting of future profits, and ability to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions.

Source of Evidence: Academic direct measure of learning - other

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
Text for Test information for AGEC 317

Target:
75% of students will effectively evaluate an estimated econometric model.

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
Text for Test information for AGEC 317
Finding (2017-2018) - Target: Met
In Spring 2018 AGEC 317, Students were assigned a project that requires them to estimate an econometric model using data (on demand food products). After estimation, students must evaluate and interpret the estimated model. The average project grade was 85%. The average final exam grade was 83%. In Spring 2018, AGEC 317 students completed a final exam that tested their knowledge of econometric techniques and interpretation of econometric models.

SLO 9: Recognize seasonality in an estimated demand model
Students will recognize seasonality in an estimated demand model. The concept of seasonality is important in agriculture because of the nature of agriculture and food market. For example, the effect of cold periods on availability of fruits and vegetables is always a concern. It is also well-known that certain products such as turkey meat are in high demand during certain periods (Christmas and Thanksgiving) of the year. Students' ability to understand and quantify the impacts of seasonality on a market is one important metric in evaluating a student's understanding of basic economic principles and concepts.

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3
AGEC 317 sample 4
AGEC 317 Summer 2017 Course Portfolio
AGEC 317 Summer 2017 Course Portfolio 2
Text for Test information for AGEC 317

Related Measures

M 7: AGEC 317 Final Exam
Specific questions on profit maximization by a firm, OLS, and elasticity are included in the final exam for the quantitative economics course (AGEC) 317. AGEC 317 is the index course selected by faculty to determine how well students graduating from the AGBU program have acquired the key tools in economic theory and quantitative procedures to address economic policy and management issues. The AGEC catalogue has the following entry: Economic Analysis for Agribusiness Management. (3-0). Credit 3. Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms. Prerequisites: AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of Department Head. AGEC 317 is designed to provide AGBU students with the knowledge, skills, and ability to understand how firms make managerial decisions to maximize profits and to use statistical and forecasting tools to project firms' revenue and profits, how firms measure market performance, competition, and forecasting of future profits, and ability to identify, measure and interpret the responsiveness of farm firms and households to alternative policy and managerial decisions.
Source of Evidence: Academic direct measure of learning - other
Target:
75% of students will recognize seasonality in an estimated demand model.

Finding (2017-2018) - Target: Met
Using the Evaluation of Learning Outcomes from Spring 2018 AGEC 317, we found that 81.6% (40 of 49 total) of our students were able to correctly calculate an elasticity from a demand model of utility maximization.

Section 2

Details of Action Plans for This Cycle (by Established cycle, then alpha)
Enhancement of quantitative analysis course

From 2009-2010: Based on the partially met target of 80% and in coordination with instructors of AGEC 317, the delivery of extended practice opportunities through eLearning and alternative study sessions will be piloted. Update from 2013 - 2014 academic year: Based on feedback received from the graduation survey and AGEC 481 survey and review of our students' quantitative skills, additional instructor support has been hired to assist in AGEC 217 and AGEC 317. This support will allow for supplemental quantitative skills labs to be held for students. The focus of the labs is to teach spreadsheet application and quantitative analysis computer programs. Degree requirements will require all students to take AGEC 317 in either their junior or senior year to complete their Agricultural Economics degree.

Established in Cycle: 2009-2010
Implementation Status: In-Progress
Priority: High
Responsible Person/Group: Parr Rosson, Professor and Head

Connected Documents
AGEC 317 course data
AGEC 217 course data
AGEC 217 data for 2016-2017
Analysis Questions and Analysis Answers

Consider the Findings and the Action Plan(s) established this cycle. How did the program/unit identify these next steps for action? Why does the program/unit believe this Action Plan(s) should improve future assessment results?

After a review of previous Findings, posted Documents and Action Plans of previous years as well as the 2017-2018 cycle, a consensus of key individuals have determined that students who have a stronger communication skill set are more successful. This year's findings (SLO2: M2) show that the class average for the first assignment was 69.96, while the average on the second paper was 87.58, an improvement of only 25%. A new course will allow the department of Agricultural Economics to meet a targeted goal of 35% improvement. We will change the structure of AGEC 217 so that the Writing Intensive requirement will be removed from this class and focused in a new AGEC course that will be placed in the curriculum for students to complete after AGEC 105 (1st class in major coursework). The new course will focus solely on improving writing skills so that the current Writing Intensive course (AGEC 217) will have more time to dedicate to increasing software knowledge. The course will be designed over the 2018-2019 school year to be included in the 2019-2020 catalog.

Connected Documents
AGEC 217 course data
AGEC 217, Assignment 4 and 5, sample 3
AGEC 217, Assignment 4 and 5, sample 4

*CRITICAL* Provide an update for completed or ongoing action plans from the previous year(s). Discuss any successes, challenges, and/or obstacles the program/unit has experienced while implementing the Action Plan(s). Address whether or not the program/unit has seen any improvement in assessment results for the targeted Outcome(s) the Action Plan(s) were designed to address and why the action plan may/may not have resulted in improvements.

In the 2013-2014 Action Plan "Enhancement of Quantitative Analysis Courses", feedback determined that students needed supplemental quantitative skills labs. To that end, students were required to complete QUANT+ workshop. This workshop is offered in conjunction with AGEC
In Spring 2018, students in AGEC 317 - Economic Analysis for Agribusiness Management were required to complete an out of class workshop that provided instruction on the QUANT+ software. 95% of students completed the workshop and received a certificate. The QUANT+ workshop will again be required of all students enrolled in AGEC 317. The attendance goal for the workshop is 100%. The intent of the workshop is to provide strategic targeted quantitative skills. QUANT+ is described as: This package is a multicomponent quantitative analysis package based on principal component regression (PCR). The statistical approach used by Spectrum QUANT+ enables it to ignore errors caused by uncontrolled variations from sample to sample, and minimize errors caused by sampling methods. - http://www.perkinelmer.com/product/spectrum-quant-plus-l1108757

Connected Documents
AGEC 317 GAO grade information
AGEC 317 sample 3AGEC 317 sample
## Appendix 3. Faculty 2- Page Curriculum Vitae

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson, David</td>
<td>Prof &amp; Ext. Spec.</td>
<td>College Station</td>
</tr>
<tr>
<td>Bennett, Blake</td>
<td>Assoc. Prof &amp; Ext. Spec</td>
<td>Dallas</td>
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<tr>
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<td>Zhang, Yvette</td>
<td>Assoc. Prof</td>
<td>College Station</td>
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David P. Anderson  
Professor and Extension Economist  
email: danderson@tamu.edu

Current Appointment

Professor and Extension Economist – Livestock and Food Products Marketing, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. Extension/applied research interests include livestock markets and policy.

Education

1988  Ph.D. Texas A&M University, Agricultural Economics  
1980  M.S. University of Arizona, Agricultural Economics  
1987  B.S. University of Arizona, Agricultural Economics

Past Appointments

2008 – Present  Professor and Extension Economist-Livestock and Food Products Marketing, Department of Agricultural Economics, Texas A&M University  
2004 - 2008  Associate Professor and Extension Economist-Livestock and Food Products Marketing, Department of Agricultural Economics, Texas A&M University  
2002 - 2004  Associate Professor and Extension Economist – Crop Economics, Department of Agricultural Economics, Texas A&M University  
1999 - 2002  Assistant Professor and Extension Economist – Crop Economics, Department of Agricultural Economics, Texas A&M University

Awards / Professional Activities (total during career 19)

2019  Texas Agricultural Extension Service Superior Service Award. (Ranch Management University Program).  
2016  Texas Agricultural Extension Service Superior Service Unit Award. (Agricultural Economics Extension Farm Bill Education Team).  
2013  ASAS Southern Section National Pork Board Award for Research. (Co-recipient)  
2014  Southern Agricultural Economics Association, Outstanding Extension Program Team Award. (Extension Impact Publication Team).  
2012  Texas A&M AgriLife Extension Service Superior Service Team Award. (Extension Impact Publication Team)  
2010  Cattleman’s Council Award, Independent Cattleman’s Association.  
2008  Texas AgriLife Extension, Superior Service Award. (Effects of Ethanol on Texas Food and Feed).  
2004  University of Arizona College of Agriculture and Life Sciences Young Achiever Award.  
2003  American Agricultural Economics Association Distinguished Extension Program Award.  
Selected Other Professional Contributions

Dr. Anderson has authored or co-authored over 900 publications, made over 700 presentations, and has recorded almost 700 media interviews. He has taught Ag Econ 614-Ag Policy since 1999. Dr. Anderson has chaired 26 and been a member of an additional 67 graduate committees. Dr. Anderson served as AAEA Extension Section Chair. Dr. Anderson has participated in grants totaling over $10 million.

Selected publications (total during career, 41 refereed articles, 885 other)


Blake K. Bennett  
Associate Professor and Extension Economist/Management  
email: b-bennett@tamu.edu

Current Appointment

Associate Professor and Extension Economist/Management, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. Primary responsibilities are in direct support of the Texas AgriLife Extension District 4 clientele demographics as well as agricultural producers across the State of Texas and the U.S. focusing on coordination, development, and implementation of Extension programs that are relevant to not only to large commercial producers, but also agricultural producers operating on limited acreage. Extension/applied research interests include agricultural marketing and Integrated Pest Management (IPM).

Education

1999    Ph.D. Texas Tech University, Agricultural Economics  
1995    M.S. Texas Tech University, Agricultural Economics  
1993    B.S. Texas Tech University, Agricultural Economics

Past Appointments

1999 - 2005  Assistant Professor & Extension Economist/Management  
Department of Agricultural Economics, Texas A&M University  
1994 - 1998  Research and Teaching Assistant  
Department of Agricultural Economic, Texas Tech University

Selected Awards / Professional Activities (total during career 3)

2016    Texas A&M AgriLife Extension Service Superior Service Unit Award.  
(Agricultural Economics Extension Farm Bill Education Team)  
2015    Texas A&M AgriLife Extension Service Superior Service Team Award. (Texas School Integrated Pest Management Program)  
2005    Texas Cooperative Extension Superior Service Team Award. (Tomorrow’s Top Agricultural Producer Program)

Selected Other Professional Contributions

Co-developer/co-leader of Tommorow’s Top Agricultural Producer program, national school Integrated Pest Management budget generator, two North Texas weekly radio shows, urban agriculture ground based programs, and Extension web-based programs. Dr. Bennett has produced 191 publications and made over 1,050 presentations to a combined audience of over 30,000 participants. Dr. Bennett has participated in 43 grants for a total of $825,506.
List of Selected publications (total during career, 13 refereed articles, 211 other)


Frederick O. Boadu  
Professor, Asst. Department Head, Undergraduate Affairs  
f-boadu@tamu.edu

Current Appointment

Professor of Agricultural Economics & Assistant Department Head for Undergraduate Affairs. Dr. Boadu currently teaches Agricultural Law and conducts research on land, water, and energy issues in Texas and in developing countries. He has presented lectures on biosecurity, climate change, water resources law in Texas, and bioenergy development. The Assistant Department Head for Undergraduate Affairs is responsible for managing the overall curriculum implementation of the department, and also represents the undergraduate program in all matters pertaining to students’ class work and scheduling.

Education

1988  J.D. Georgia State University, Law  
1980  Ph.D. University of Kentucky, Agricultural Economics  
1974  B.A. Berea College, Economics

Past Appointments

2005 - 2018  Professor and Assistant Dept. Head for Undergraduate Affairs, Department of Agricultural Economics, Texas A&M University  
1995 - 2004  Associate Professor, Department of Agricultural Economics, Texas A&M University  
1989 - 1993  Assistant Professor, Department of Agricultural Economics, Texas A&M University

Selected Awards / Professional Activities (total during career 16)

2009  American Society of Agricultural and Biological Engineering (ASABE) educational Aids Blue Ribbon Award (with Saqib Mukhtar, Yanghon Jin, Won Bo-Shim, Tom Vestal, and Cody Wilson) for Managing Contaminated Animal and Plant Materials (Department of Homeland Security)  
2007  Association of Former Students Distinguished Achievement Award for Teaching at the College level  
2005  Risk Policy Fellow, American Association for the Advancement of Science  
1995  Diplomacy Fellow, American Association for the Advancement of Science

Selected Other Professional Contributions

Research Leader, Howard G. Buffett Foundation research on food security in Sub-Saharan Africa. Dr. Boadu led studies on households’ food security in three countries – Ghana, Liberia, and Senegal and the use of no-till agriculture practices to protect environmental resources. Dr. Boadu also led the research on youth employment policies in Ghana. Dr. Boadu was member of team that examined the institutional issues associated with groundwater use in Texas and the impacts of imposing pumping limits on the Edwards Aquifer. He has also collaborated on research focusing on the legal implications of federal renewable fuel standards and agriculture. Dr. Boadu has served
as supervisor and committee member of 2 doctoral and 10 masters thesis. With the support of the international development program at TAMU Dr. Boadu has worked with governments in Sub-Saharan Africa in developing programs and policies for land titling to promote food security, crop-livestock owner conflict resolution (fence laws), and Youth-in-Agriculture Programs. Dr. Boadu has participated in 5 major grants programs totaling $1,500,000.00

List of Selected publications (total during career _1 book 40)


Current Appointment

Research Professor, Department of Agricultural Economics, Texas A&M University. Primary duties are to develop and maintain economic models and databases for the Agricultural and Food Policy Center that support policy analysis requests from the U.S. congress and support agricultural producer decision making via online tools. Research interests include risk management, commodity marketing, and causal inference using observational data.

Education

2003 Ph.D. Texas A&M University, Agricultural Economics
1991 B.S. University of Nevada, Las Vegas, Business Administration

Past Appointments

2010 – 2017 Research Associate Professor, Department of Agricultural Economics, Texas A&M University
2004 – 2010 Research Assistant Professor, Department of Agricultural Economics, Texas A&M University
2003 – 2004 Post-doctoral Researcher, Department of Agricultural and Resource Economics, University of California, Berkeley

Selected Awards / Professional Activities (total during career 8)

2016 Texas A&M Vice Chancellors Award for Partnership Collaboration
2016 Agricultural and Applied Economics Association Extension Award
2016 Southern Agricultural Economics Association Extension Award
2008 Texas AgriLife Extension Superior Service Team Award

Selected Other Professional Contributions

Developed online decision tools that have been used tens of thousands of times supporting agricultural producer decision making for the 2014 Farm Bill, annual crop insurance enrollment decisions, and the 2018 seed cotton base acre reallocation. Primary developer of large-scale representative farm policy simulation modelling system overhaul, including addition of new detailed crop insurance components. Served on Ph.D. dissertation committees for 19 matriculated students (11 as chair/co-chair). Participation in projects representing $22 million in grants ($7 million to individual program).

Selected publications (total during career: 18 refereed articles, 4 book chapters, 30 others)


Oral Capps, Jr.
Executive Professor and Regents Professor
Co-Director, Agribusiness, Food, and Consumer Economics Research Center
email: ocapps@tamu.edu

Current Appointment

Dr. Capps is Executive Professor, Regents Professor and holder of the Southwest Dairy Marketing Endowed Chair in the Department of Agricultural Economics at Texas A&M University as well as Co-Director of the Agribusiness, Food, and Consumer Economics Research Center (AFCERC). Dr. Capps holds a 50% teaching appointment and a 50% research appointment. His current teaching responsibilities include introduction to agricultural economics at the undergraduate level and business forecasting methods at the graduate level. Primary research focus is demand and price analysis, with particular expertise in econometric modeling and forecasting methods. Applied research areas include analyses of health and nutrition issues, uses of scanner-derived information for managerial decision making in food retailing, and evaluations of commodity checkoff programs.

Education

1979  Ph.D. Virginia Tech, Agricultural Economics
1979  M.S. Virginia Tech, Statistics
1977  M.S. Virginia Tech, Agricultural Economics
1975  B.S. Virginia Tech, Mathematics

Past Appointments

1989 - 2009  Professor, Department of Agricultural Economics, Texas A&M University
1994 - 2000  Graduate Recruitment Coordinator, Department of Agricultural Economics, Texas A&M University
1986 - 1989  Associate Professor, Department of Agricultural Economics, Texas A&M University
1984 - 1986  Associate Professor, Department of Agricultural Economics and Department of Statistics, Virginia Tech
1985  Visiting Professor, Department of Agricultural and Applied Economics, University of Minnesota
1979 - 1984  Assistant Professor, Department of Agricultural Economics and Department of Statistics, Virginia Tech

Awards / Professional Activities (total during career 47)

2018  Presidential Award for Excellence in Research and Communication: “The Use of Time-Series Analysis in Examining Food Safety Issues: The Case of the Peanut Butter Recall,” Food Distribution Research Society
2015  Distinguished Achievement Award for Teaching, Association of Former Students Faculty, Texas A&M University
2015  Certified Business Economist, National Association for Business Economics
2014  Fellow, Agricultural and Resource Economics Review
Selected Other Professional Contributions

Throughout his career, Dr. Capps has made over 480 presentations to the academic community and to private sector clientele. He has participated in 131 grants with over $5 million in funded dollars. Dr. Capps has served as major professor to nearly 50 graduate students.

Selected publications (total during career--145 refereed articles, 88 published abstracts, 15 book chapters, 7 books, and 198 research reports). The list below includes only publications for calendar year 2018.


Williams, G. W. and O. Capps, Jr. (forthcoming.) “Generic Promotion of Sorghum for Food and Industrial Uses.” *Journal of International Food and Agribusiness Marketing*.

Current Appointment

Assistant Professor and Extension Specialist, Community Economics and Business Development, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. This role since June 2016. Overall responsibilities include efforts to plan, develop, implement and evaluate curricula, extension education programs, and applied research related to Community Economics and Business Development affecting clientele. Educational program delivery includes developing grant and contract proposals, extension and peer-reviewed publications, workshops, conferences, electronic and mass media releases. Cooperation with campus and district based extension and research faculty, district extension administrators, county extension agents, regional program leaders, and other specialists, as necessary in developing and delivering nationally recognized programs.

Education

2016 Ph.D. Michigan State University, Agricultural, Food, and Resource Economics
2011 B.A. Kalamazoo College, Double major, Economics and Business, Political Science. Program included year at the London School of Economics.

Past Appointments

2011 - 2016 Graduate Research Assistant - Department of Agricultural, Food, and Resource Economics, Michigan State University
2014 - 2015 Visiting Instructor - Department of Economics and Management, Albion College
2011 - 2016 Teaching Assistant - Department of Economics and Business, Kalamazoo College

Awards / Professional Activities (total during career 2)

2016 Dissertation Completion Fellowship, Department of Agricultural, Food, and Resource Economics, Michigan State University.
2015 Glenn and Sandy Johnson Dissertation Enhancement Fellowship, Department of Agricultural, Food, and Resource Economics, Michigan State University.

Selected Other Professional Contributions

Developed or developing Business Retention and Extension Program, Community-Opportunity Mapping Program, and Vetrepreneur Programs; 39 Extension presentations; over 2000 contacts.


Selected publications (total during career, 4 refereed articles, 3 research agency, 14 other)


Current Appointment

Extension Risk Management Specialist, Texas A&M AgriLife Extension Service, Texas A&M University, 2012 to present. Oversee the annual updating of the web based Extension Crop and Livestock Budgets. Created a spreadsheet budget system to expedite the annual Extension Crop and Livestock Budgets updating process. Annually collect agricultural equipment prices for updating of budget machinery cost estimates. Also, conduct analysis of farm and ranch operation for clientele of the FARM Assistance Program as necessary. This analysis projects the agricultural plan and financial situation of the operation over the next ten years under risk and uncertainty.

Education

1981 Ph.D. Texas A&M University, Agricultural Economics
1976 M.S. Texas A&M University, Agricultural Economics
1973 B.S. Oklahoma State University, Agricultural Economics

Past Appointments

2004 - 2011 Research Scientist, Department of Agricultural Economics, Texas A&M University
2002 - 2003 Vice President of Finance, Crystion, Inc.
1997 - 1997 Chief Financial Officer, CIC Corporation
1983 - 1997 District Economist, Districts 5, 10 and 8, Department of Agricultural Economics, Texas A&M University
1982 - 1983 Agricultural Marketing Specialist, College of Tropical Agriculture, University of Hawaii
1982 - 1982 Postdoctoral Research Economist, Department of Agricultural Economics, Texas A&M University
1978 - 1981 Research Associate, Department of Agricultural Economics, Texas A&M University
1977 - 1978 Management System Coordinator, Valmac Industries
1975 - 1977 Research Associate, Department of Agricultural Economics, Texas A&M University
1974 - 1975 Farm Manager, Northwest Oklahoma

Selected Awards / Professional Activities

1997 Distinguished Professional Contribution Award, Southern Agricultural Economics Association
1988 Group Superior Service Award, Texas Agricultural Extension Service

Selected Other Professional Contributions
Crop and Livestock Budgets. Completely revised internal annual Crop and Livestock budget development system drastically reducing processing time and effort. Built features in the system to facilitate the production of additional extension budget products such as spreadsheet budgets and budget books.

Computer Training Short Courses. Recognized the need for farmers, ranchers, and agribusinessmen to adopt the use of computerized recordkeeping for management and financial decision making. In conjunction with other Extension professionals, conducted numerous computer short courses across Texas using Quicken, QuickBooks, TAMWFARM, Lotus, Dbase, and various cattle recordkeeping programs.

Ratites and Ungulates Economics. Recognized demand for economic information for ratites (ostriches, emus, and rheas) and ungulates (exotic deer and sheep). Along with another Extension professional with similar interest, researched and developed enterprise budgets, collected available market and industry information, and prepared handout and presentation information. Information was disseminated through local meetings with interested groups, trainings for other Extension professional, CPA continuing education sessions, and responses to requests for information.


List of Selected publications (total during career _115_)


Thompson, William and Gerald Cornforth, Spreadsheet Budget Help Video, Texas A&M AgriLife Extension Service, College Station, Texas, 2016.

**Cornforth, Gerald**, FARM Assistance Strategic Analysis prepared for Irma Castro, Cedar Creek, TX, May 2015

**Cornforth, Gerald**, Bruce McCarl, James Richardson, and John Nichols. “Impact of FLIPSIM on Agriculture,” an internal economic impact report for administration, Texas AgriLife Experiment Station, College Station, Texas, 2011.


**Cornforth, Jerry**. Quarterly article in the Southwestern Peanut Growers News, 1994 through 1996.

Senarath Dharmasena  
Instructional Assistant Professor  
email: sdharmasena@tamu.edu

Current Appointment  
Instructional Assistant Professor, Department Agricultural Economics, Texas A&M University. Areas of specialization: Consumer Economics and Applied Demand Analysis, Agribusiness, Food Market and Price Analysis, Behavioral Economics, Health and Nutrition Economics, Economics of Food Security, Economics of Food Environments and Obesity, Artificial Intelligence and Data Science, Machine Learning and Causality Modeling, Probability Forecasting and Forecast Evaluation, Simulation and Risk Modeling, Market Integration and Price Discovery, Spatial Economics, Economics of Complex Systems. Classes taught: Food and Agricultural Price Analysis (AGEC 447), Marketing Agricultural and Food Products (AGEC 314-on line), Agribusiness and Food Market Analysis (AGEC 414), Food and Agribusiness Strategic Marketing Planning (AGEC 415), Consumer Demand Analysis (AGEC 635), Mathematics for Applied Economists (PhD Math Camp)

Education  
2010  Ph.D. Texas A&M University, Agricultural Economics  
2003  M.S. Texas A&M University, Agricultural Economics  
2000  B.S. University of Peradeniya, Sri Lanka, Agriculture

Past Appointments  
2012 - 2015  Visiting Assistant Professor, Department of Agricultural Economics, Texas A&M University  
2010 - 2012  Postdoctoral Research Associate, Agribusiness, Food and Consumer Economics Research Center, Texas A&M University  
2006 - 2010  Graduate Research Assistant, Department of Agricultural Economics, Texas A&M University  
2004 - 2006  Graduate Teaching Assistant, Department of Agricultural Economics, Texas A&M University  
2001-2004  Lecturer, Department of Agricultural Economics, University of Peradeniya, Sri Lanka  
2000-2001  Assistant Lecturer, Department of Agricultural Economics, University of Peradeniya, Sri Lanka  
1999-2000  Research Assistant, Department of Animal Production and Agricultural Economics, Obihiro University of Ag & Vet Medicine, Japan

Selected Awards / Professional Activities (total during career 16)  
2017  Fellow, Critical Thinking Academy, Texas A&M University  
2017  Southeastern Conference (SEC) Faculty Travel Grant Award  
2016  First Place, Food Distribution Research Society (FDRS) student marketing case competition; team advisor and coach  
2014  J. of Agricultural and Resource Econ. most outstanding published paper award  
2014  First Place, Western Agricultural Economics Association selected paper  
2010  William Applebaum Scholarship Honorable Mention Award for PhD Dissertation  
2009  Gamma Sigma Delta, The Honor Society of Agriculture, Texas A&M Chapter

Selected Other Professional Contributions  
Dr. Dharmasena has been Principal Investigator/Co-PI/Collaborator of 8 research projects
with total grant value of $1,112,016 from various public and industry institutions. He has received $4,700 worth of pedagogy/travel funds from Texas A&M University. He has made 81 scientific presentations at regional/national conferences along with 95 scientific communications. He has taught 2,811 students and supervised/co-supervised 34 student dissertations/thesis/research papers and advise/coach two student teams/associations. He is member of several professional associations and has contributed in capacity of peer reviewer, committee member, and symposia organizer. Also, he has participated/trained in several pedagogy related workshops/symposia including academies put together by Texas A&M University Center for Teaching Excellence and Harvard Business School. He has collaborated with colleagues from several international universities and institutions in Thailand, France, Australia, China and Chile.

Selected publications (13 refereed papers, 12 abstracts/proceedings, 9 book chapters and industry publications, 61 other)

Youngho Kim and Senarath Dharmasena, “Price Discovery and Integration in the U.S. Pecan Markets” Journal of Food Distribution Research, 49(1), 2018


Christopher S. Rowland, James W. Mjelde, and Senarath Dharmasena “U.S. Aggregate Energy Demand System with Pre-Commitments” Energy Policy, 102: 406-413, 2017


Rebekka M. Dudensing  
Associate Professor and Extension Economist  
email: rmdudensing@tamu.edu

Current Appointment

Associate Professor and Extension Economist - Community Economic Development, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University System, since 2016. Extension/applied research interests include rural infrastructure and business development, economic linkages along the rural-urban continuum, economic impact analysis, and working with communities to evaluate economic development opportunities and facilitate regional planning efforts.

Education

2008    Ph.D., Clemson University, Applied Economics  
2005    M.S., Texas Tech University, Agricultural & Applied Economics  
2002    B.S., Kansas State University, Agriculture

Past Appointments

2008 - 2016  Assistant Professor and Extension Specialist, Community Economic Development, Department of Agricultural Economics, Texas AgriLife Extension Service and Texas AgriLife Research, Texas A&M University System  
2006 - 2008  Research Assistant, EDA University Center for Economic Development, Department of Applied Economics and Statistics, Clemson University

Selected Awards / Professional Activities (total during career 6)

2017  Southern Rural Development Center. Bonnie Teater, Early Career Achievement Award  
2016  Agricultural and Applied Economics Association, Distinguished Extension/Outreach Program Awards - Individual: Less than Ten Years’ Experience  
2016  Midcontinent Region Science Association, Leadership Award  
2016  Southern Agricultural Economics Association, Emerging Scholar

Selected Other Professional Contributions

Dr. Dudensing is active in the AAEA Community and Regional Economics Network and the National Association of Community Development Extension Professionals. She has chaired six graduate committees and served on 15 additional committees. She has participated in 37 grants and contracts for more than $2 million.

List of Selected publications (total during career 18 refereed journal articles, 269 other)


Nathaniel J. Harness  
Instructional Associate Professor and TD Ameritrade Director of Financial Planning  
email: nharness@tamu.edu

Current Appointment

Instructional Associate Professor, Financial Planning Program Director, Texas A&M University. Financial Planning Director since 2014. Primary duty is to provide a program that satisfies the educational requirement to sit for the Certified Financial Planner™ (CFP®) exam and to ultimately create the next generation of financial planners.

Education

2007  Ph.D. Texas Tech University, Personal Financial Planning  
2004  M.S. Texas Tech University, Finance  
2001  B.S. University of Central Arkansas, Finance

Past Appointments

2014 - Present  TD Ameritrade Director of Financial Planning, Department of Agriculture Economics, Texas A&M University  
2012 - 2014  Executive Director of Global Programs, Texas A&M – Commerce  
2008 – 2014  Associate Professor, Texas A&M – Commerce  
2007 – 2008  Assistant Professor, University of Georgia

Selected Awards / Professional Activities

2017  Chairman’s Award (DFW Financial Planning Association)  
2016  40 Under 40 Award (Investment News)  
2016  Young Guns Award in Financial Planning

Selected Other Professional Contributions

TD Ameritrade Director of Financial Planning—as director I have increased enrollments by 221% for academic learners and 181% for distance extended learners. This has been accomplished by training and recruiting new instructors to teach financial planning courses as program continues to grow, implementing pedagogical effectiveness and quality control program to maintain highest quality teaching methods, and co-create minor coursework and facilitated paperwork necessary for academic approval of minor.

List of Selected publications (total during career 16 publications)


Robert J. Hogan  
Associate Professor and Extension Economist  
email: RHogan@ag.tamu.edu

Current Appointment

Associate Professor and Extension Economist – Management, District 10, Uvalde, Texas since 2013. Primary duties involve district leadership and coordination for Texas AgriLife Extension Agricultural Economics educational programs and applied research in management, marketing, and policy. Technical expertise and educational program development are provided for stakeholders such as farmers, ranchers, merchandisers, processors, and lenders.

Education

2003 Ph.D. Oklahoma State University, Agricultural Economics  
1972 B.S. Oklahoma State University, Agricultural Economics

Past Appointments

2012 - 2013 Associate Professor and Extension Economist – Management, District 6, Fort Stockton, TX.  
2007 - 2012 Assistant Professor and Extension Economist – Management, District 6, Fort Stockton, TX.  
2003 - 2007 Assistant Professor and Extension Economist, Harold Ohlendorf Professor (75% extension and 25% research), University of Arkansas, Arkansas Cooperative Extension Service, and Arkansas Agricultural Experiment Station, Keiser, AR.

Awards / Professional Activities (total during career 7)

2015 Co-recipient of 2015 Texas AgriLife Extension Superior Service Unit Award for 2014 Farm Bill education.  
2006 Co-recipient of 2006 American Society of Agricultural and Biological Engineering "Superior" Paper Award for "Multiple Inlet Approach To Reduce Water Requirements For Rice Production.” Eight papers received this award nationally.

Selected Other Professional Contributions

Dr. Hogan has produced over 215 publications and made over 380 presentations. Dr. Hogan has participated in 33 grants for a total of $5,591,910.
Selected publications (total during career, 13 refereed articles, 1 book chapters, 240 other)


Ariun Ishdorj  
Associate Professor  
email: aishdorj@tamu.edu

Current Appointment

Associate Professor, Department of Agricultural Economics, Texas A&M University. Classes taught include AGEC 105 in-class and online, AGEC 489 (study abroad), AGEC 621, AGEC676, and AGEC 635. Research interests include health economics and applied econometrics with emphasis on food security, program evaluation, food and nutrition assistance, and consumer demand.

Education

2008 Ph.D. Iowa State University, Economics  
2000 M.S. University of Idaho, Mathematics  
1996 B.S. National University of Mongolia, Mathematics

Past Appointments

2009 - 2016 Assistant Professor, Agricultural Economics, Texas A&M University  
2008 - 2009 Postdoctoral Research Associate, Economics, Iowa State University  
2006 Instructor, Economics, Iowa State University

Selected Awards / Professional Activities (total during career 4)

2018 Dean’s Outstanding Achievement Award for Educational Enrichment, and Innovation, College of Agriculture and Life Sciences, Texas A&M University  
2017 -2018 Review Panel Member, FFAR  
2016 Review Panel Member, USDA NIFA  
2013-2014 Topic Leader, AAEA Annual meetings

Selected Other Professional Contributions

Chaired/co-chaired 8 PhD and 5 MS students, served on 20 graduate committees and supervised 4 undergraduate honors research projects since 2009.

List of Selected publications (total during career 16)


Current Appointment

Associate Professor and Extension Economist, Extension, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. Primary duty is to provide leadership for all areas of agricultural economics programming and educational program support to Agricultural and Family & Consumer Health County Extension Agents. Extension/applied research interests include agricultural risk management, family financial planning, and natural resource management and stewardship.

Education

1996 Ph.D. Texas Tech University, Agricultural Economics minor in Consumer Economics
1993 M.S. Louisiana State University, Agricultural Economics minor in Economics
1991 B.S. Texas Tech University, Agricultural Education emphasis Agribusiness

Past Appointments

2006 - Present Associate Professor and Extension Economist - Department of Agricultural Economics, Texas A&M University, Stephenville Center
2007 - 2010 Associate Director, Southern Region Risk Management Education Center, Texas A&M University
2003 - 2006 Associate Professor and Extension Economist - Department of Agricultural Economics, Texas A&M University, San Angelo Center
1999 - 2003 Assistant Professor and Extension Economist - Department of Agricultural Economics, Texas A&M University, San Angelo Center
1997 - 1998 Assistant Professor and Extension Economist - Department of Agricultural Economics, Texas A&M University, Weslaco Center
1994 - 1996 Teaching and Research Assistant - Department of Agricultural Economics, Texas Tech University
1992 - 1993 Research Associate - Department of Agricultural Economics and Agribusiness, Louisiana State University.

Awards (total during career 4)

2016 Texas County Agricultural Agents Association, District 8 Distinguished Specialist Award.
2016 Texas Agricultural Extension Service Superior Service Unit Award. (Agricultural Economics Extension Farm Bill Education Team)
2005 Superior Service, Team Award (Agricultural Economics Extension Tomorrow’s Top Agricultural Producer Program).
2002 Epsilon Sigma Phi Early Career Award, Texas A&M University’s Alpha Zeta Chapter.
Selected Other Professional Contributions

Dr. Johnson has led curriculum development and educational delivery efforts for several extension programs including Annie’s Project - Education for Farm Women, Tomorrow’s Top Agricultural Producers Program, Total Resource Management Training for Land Use Advisors, Financial Fitness Family Financial Planning Workshops, Managing for Today and Tomorrow (estate, transition, succession and retirement planning for agricultural producers), and Investing for Farm Families. Much of Dr. Johnson’s applied research activities have focused on natural resource stewardship through strategic planning of water management (regional water planning analysis, cost/benefit analysis of weather modification, brush control for increased water harvesting, and best land management practices for improved water quality). Dr. Johnson has authored/co-authored over 200 publications and delivered over 1,100 professional presentations (294 at the National and State level). Dr. Johnson has participated in 33 grants for a total of $1,620,000.

Dr. Johnson passed the Series 65 Investment Advisor Representative Exam and is a Registered Investment Advisor with the Texas State Securities Board (CRD #141350). He serves on the Annie’s Project - Education for Farm Women 501(c)(3) (www.anniesproject.org) Board of Directors and is a Master Facilitator Trainer providing nationwide trainings of extension educators to deliver Annie’s Project programs in their respective states.

Selected publications (total during career 16 refereed journal articles, 212 other)


DeDe Jones
Extension Program Specialist III – Risk Management
email: dljones@ag.tamu.edu

Current Appointment

Extension Program Specialist III – Risk Management. Provide leadership and coordination regarding extension risk management programs in both the Texas Panhandle and statewide by offering relevant workshops and presentations, technical expertise and computerized data analysis to develop and interpret strategic risk management alternatives.

Education

1999     M.B.A. Texas Tech University, Masters of Business Administration
1998     B.S. Texas Tech University, Major in Agricultural and Applied Economics

Past Appointments

2005 - 2010  Extension Program Specialist II – Risk Management, Department of Agricultural Economics, Texas A&M University
2000 - 2005  Extension Program Specialist I – Risk Management, Department of Agricultural Economics, Texas A&M University
1999 - 2000  Executive Assistant, Texas Grain Sorghum Producers, Lubbock, TX
1997 - 1999  Research Assistant - Department of Agricultural Economics, Texas Tech Univ

Awards / Professional Activities

2016  District 1 Award for Excellence – Non-Professorial
2015  District 1 Team Award – Farm Bill Education
2013  Texas A&M AgriLife Extension Service Award for a Program Team
2011  Epsilon Sigma Phi Team Award for QuickBooks Financial Education
2010  AAEA Distinguished Extension Program Group Award
2010  Southern Agricultural Economics Association Distinguished Extension Team Award
2008  Western Agricultural Economics Association Outstanding Extension Team Award
2008  Epsilon Sigma Phi Early Career Award
2008  Texas AgriLife Extension Superior Service Award for a Program Unit
2005  Texas AgriLife Extension Superior Service Award for a Program Specialist

Selected Other Professional Contributions

Developed materials and conducted 43 QuickBooks Financial Software workshops with 530 people attending. Course material was designed to focus on the financial needs of farmers and ranchers. Evaluations indicated a 54% increase in knowledge gained and an average annual economic benefit of $2,500 per producer. Completed 559 FARM Assistance Analyses representing over 1.2 million acres with a combined ending real net worth of $595 million. Authored, co-authored, or served as a team member to produce 48 extension publications, 19 economic decisions aids and 17 grant reports. Presented at 297 meetings with 11,896 people attending.
Selected Publications


Greg H. Kaase  
Extension Program Specialist III  
email: g-kaase@tamu.edu

Current Appointment

Extension Program Specialist III, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, Texas A&M University.

Education

2006  Ph.D. Agricultural Education, Texas A&M University  
1995  M.E. Agricultural Education, Texas A&M University  
1991  B.S. Animal Science, Texas A&M University

Past Appointments

2000 – 2018  Extension Program Specialist – Risk Management, Department of Agricultural Economics, Texas A&M University  
1999 – 2000  Extension Associate – Risk Management, Department of Agricultural Economics, Texas A&M University  
1997 – 1999  County Extension Agent/Agriculture, Haskell County, Texas, Texas A&M AgriLife Extension Service  
1994 - 1997  County Extension Agent/4-H, Brazos County, Texas, Texas A&M AgriLife Extension Service

Selected Awards / Professional Activities (total during career 5)

2010  Southern Agricultural Economic Association, Distinguished Professional Contribution Award  
2008  Texas Agricultural and Applied Economics Association, Distinguished Extension/Outreach Program Group  
2008  Southern Agricultural Economic Association, Outstanding Extension Program Award  
2008  Southern Agricultural Economics Association, Distinguished Professional Contribution Award  
2007  Texas Agricultural Extension Service Superior Service Team Award (FARM Assistance)

Selected Other Professional Contributions

Dr. Kaase’s primary responsibilities are in direct support of the Texas Risk Management Education Program (TRMEP). Specifically, his efforts focus on the implementation of the FARM Assistance program, which is an integral component of the TRMEP. FARM Assistance is a farm level simulation model used as a decision support system to aid individual producers in evaluating potential impacts of alternative strategic plans. In addition, the model is used as an educational tool to explain the effects, advantages, and disadvantages of different risk management strategies. Dr. Kaase has also worked closely with the Rancher’s Leasing Workshop developing educational material and presenting at the
different workshops throughout the State.

**List of Selected publications (total during career, 115 FARM Assistance Analysis, 18 other)**


William S. Keeling  
Extension Program Specialist I  
email: will.keeling@ag.tamu.edu

Current Appointment

Extension Program Specialist I-Risk Management. Primary duties focus on analyzing the financial performance and risk of agricultural decisions through the agency’s FARM Assistance program. Include position title, classes taught, and areas of specialization.

Education

2012 M.S. Texas Tech University, Agricultural and Applied Economics  
2010 B.S. Texas Tech University, Agricultural and Applied Economics

Past Appointments

2013 - 2015 Credit Analyst, Rabo AgriFinance  
2010 - 2012 Graduate Research Assistant, Texas A&M AgriLife Research.

Selected Other Professional Contributions

Mr. Keeling has conducted 35 FARM Assistance strategic analysis across the state, given 34 presentations, including 16 Farm Bill meeting, to a combined audience of 1,170 participants. Mr. Keeling has regularly collaborated with DeDe Jones to deliver a two-day short course on QuickBooks Financial Software and has worked with Jackie Smith to conduct a series of profitability workshops which provide annual crop budgets, market outlooks, and other relevant topics.

List of Selected publications (1 journal article and 4 other)


Emmy Williams Kiphen  
Extension Program Specialist I  
emmykiphen@tamu.edu

Current Appointment

Extension Program Specialist I, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, Texas A&M University. Primary duty is to coordinate program planning, grant applications, and evaluation delivery needed to conduct applied research to estimate the economic impacts of extension programs. Program subject matter is concentrated in crop marketing, cooperative management, and community economic development working with commodity producers, cooperative members, and the rural communities of Texas.

Education

2004  M.S. Texas A&M University, Agricultural Education  
      Texas Secondary Teacher Certification in Agricultural Production  
2003  B.S. Texas A&M University, Agribusiness, International Business Certificate

Past Appointments

2004 - 2006  Research Assistant-International Trade, Center for North American Studies, Department of Agricultural Economics, Texas A&M University

Selected Awards / Professional Activities

2006 - 2018  Texas Extension Specialists Association  
            *2013-2018, Chapter Director  
            *2014-2016, Historian  
            *2012-2016, Awards Committee  
2006 - 2018  Texas Agricultural Cooperative Council  
            *2017-2018, Professional Board  
            *2013-2018, Summer Internship Interview Committee

Selected Other Professional Contributions

2018 - 2019  Master Marketer Program.  $5,000 grant funded by Texas Wheat Producers Board.  Co-Project Investigator with Mark Welch, Project Investigator.  
2019  Master Marketer Program.  $10,000 grant funded by Cotton Incorporated – Texas State Support Committee.  Co-Project Investigator with Mark Welch, Project Investigator.

2017 - 2018  *Master Marketer Program.* $5,000 grant funded by Texas Wheat Producers Board. Co-Project Investigator with Mark Welch, Project Investigator.

2018  *Master Marketer Program.* $10,000 grant funded by Cotton Incorporated – Texas State Support Committee. Co-Project Investigator with Mark Welch, Project Investigator.

2018  *Master Marketer Program.* $10,000 grant funded by Texas Corn Producers Board. Co-Project Investigator with Mark Welch, Project Investigator.

2018  *Master Marketer Educational System.* $10,000 grant funded by Texas Farm Bureau. Co-Project Investigator with Mark Welch, Project Investigator.

**List of Selected publications**

Rosson, Parr, Dan Hanselka, **Emmy Kiphen**, and Dean McCorkle.  *Economic Impacts of Extension Education: Master Marketer Educational System.* Texas A&M AgriLife Extension, The Texas A&M University System. 2018


Steven L. Klose
Professor and Extension Economist
email: sklose@tamu.edu

Current Appointment

Professor and Extension Economist, FARM Assistance Extension Program Coordinator, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, The Texas A&M University System. Extension and applied research areas include farm management, strategic financial planning, insurance, and farm policy.

Education

2001 Ph.D. Texas A&M University, Agricultural Economics
1995 M.S. Texas A&M University, Agricultural Economics
1992 B.S. Texas A&M University, Agricultural Economics

Past Appointments

2007-2013 Associate Professor and Extension Economist, Department of Agricultural Economics, Texas A&M University System
2001-2007 Assistant Professor and Extension Economist, Department of Agricultural Economics, Texas A&M University System
1997-2001 Extension Program Specialist – Farm Management, Department of Agricultural Economics, Texas A&M University System
1995-1997 Research Associate, Agricultural and Food Policy Center, Department of Agricultural Economics, Texas A&M University System

Selected Awards / Professional Activities (total during career: 20)

2016 Texas A&M AgriLife Extension Service, Superior Service Team Award
2014 Southern Agricultural Economics Association, Outstanding Extension Program
2012 Texas AgriLife Extension Service, Superior Service Team Award
2012-13 Chairman of Southern Region Extension Economics Committee
2009-12 Vice Chair and Chairman of Public Policy Education Working Group (SERA 39)
2006-11 Southern Extension Public Affairs Committee (Served as Texas representative, Secretary, and Chairman)
2010 Agricultural & Applied Economics Assoc., Distinguished Extension Program
2010 Southern Agricultural Economics Association, Outstanding Extension Program
2008 Western Agricultural Economics Association, Outstanding Extension Program
2007 Texas AgriLife Extension Service, Superior Service Unit Award
2006 Epsilon Sigma Phi, State Early Career Award
2003 American Agricultural Economics Association, Distinguished Extension Program
2003 Southern Agricultural Economics Association, Distinguished Extension Program

Selected Other Professional Contributions
Dr. Klose is Program Coordinator of the FARM Assistance program, responsible for directing program staff and program delivery. The FARM Assistance program is a concentrated, highly intensified extension effort aimed at assisting individual agricultural producers with strategic planning and risk management as well as creating broader educational materials resulting from a diverse database of participants.

FARM Assistance has been used to analyze all types and sizes of crop and livestock operations across the state of Texas. Currently, over 2500 reports have been completed for producers statewide representing roughly 4.5 million acres of land and over $1.75 billion in managed assets. Over 92% of clientele indicate they are better able to evaluate financial risks and impacts of decisions and are more confident of their business strategies. Clients have estimated an average $24,000 annual impact to their operation as a result of participating in the FARM Assistance program.

Dr. Klose has contributed to the management and oversight of internal extension funding, external grant funding, and program fees in excess of $33 million, with direct responsibility for over 45% of those funds.

List of Selected publications (total during career: 16 journal articles, 320 other)

Klose, Steven L., Kurt M. Guidry, and Bryon J. Parman. *Working with your Ag Lender in Good Times and Bad.* An article in the collection “Surviving the Farm Economy Downturn,” a joint publication produced by the Southern Region Extension Economics Committee with support from the Southern Region Risk Management Education Center. August 2017.


Klose, Steven L. “The Environment of the Next Farm Bill Debate.” *Choices* 2nd Quarter 2011, 26(2)


Klose, Steven L., George M. Knaepk, and J. Marc Raulston. *The Intersection of Farm Credit and Farm Policy.* Texas AgriLife Extension Service, Texas A&M University System, Department of Agricultural Economics, Agriculture and the 2008 Credit Crisis Series, E-548, March 2009


Ronald D. Lacewell
Assistant Vice Chancellor/ Professor
r-lacewell@tamu.edu

Current Appointment
Assistant Vice Chancellor for Texas A&M AgriLife Federal Relations and Professor of Resource Economics with specialization in water resources

Education

1970 Ph.D. Oklahoma State University, Agricultural Economics
1967 M.S. Texas Tech University, Agricultural Economics
1963 B.S. Texas Tech University, Agricultural Economics

Past Appointments

2005 - 2018 Professor/ Asst Vice Chancellor, Federal Relations, Texas A&M AgriLife and Department of Agricultural Economics, Texas A&M University
1996 - 2005 Professor, Asst Vice Chancellor, Assoc. Director of Texas Agricultural Experiment Station, Department of Agricultural Economics, Texas A&M University
1978 – 2018 Professor of Natural Resources, Department of Agricultural Economics, Texas A&M University
1973 – 1978 Associate Professor of Natural Resources, Department of Agricultural Economics, Texas A&M University
1970 – 1973 Assistant Professor of Natural Resources, Department of Agricultural Economics, Texas A&M University
1966 Instructor, Department of Agricultural Economics, Texas Tech University
1963 - 1964 Statistician, Bureau of the Census, U.S. Department of Interior

Selected Awards / Professional Activities (total during career 19)

2017 Texas Plant Protection Association, Ray Smith Leadership Award
2011 Texas Plant Protection Association, Norman Borlaug Lifetime Achievement Award
2011 U.S. Department of Agriculture and Association of Public and Land-grant Universities, 2011 National Excellence in Multistate Research Award as Administrator of S-1034, Improving the Sustainability of Livestock and Poultry Production in the United States
2006  University Council of Water Resources, President
2005  Western Agricultural Economics Association, Scholarship Award
2004  Southern Agricultural Economics Association, Lifetime Achievement Award
2003  Texas Tech University, Distinguished Alumni
2003  Texas Plant Protection Association, Academic/Agency Award
2000  University Council of Water Resources, Board Member (two terms)
1998  The Vice Chancellor for Agriculture, Texas A&M University System, Award for Distinguished Performance in Team Research
1993  Natural Research Council, Water Science and Technology Board, Certificate of Appreciation for Outstanding Service
1993  Texas Plant Protection Association, Member of the Board (1993 – current)
1989  The Deputy Chancellor for Agriculture, Texas A&M University System, Award for Distinguished Performance in Team Research
1981  The Deputy Chancellor for Agriculture, Texas A&M University System, Award for Distinguished Performance in Individual Research
1980’s  American Journal of Agricultural Economics, Editorial Council
1976  Southern Journal of Agricultural Economics, Editorial Council
1975  Western Agricultural Economic Association, Vice President
1974  Department of Agricultural Economics, Texas A&M University, Research Award
1970’s  Western Agricultural Economics Association, Quality of Communication Award

Selected Other Professional Contributions

Principal and co-principal investigator for contracts totaling several million dollars. Served as economist of several multi-disciplinary, multi-state contracts which have exceeded $25 million. Research areas have included water, energy, integrated pest management, fisheries, recreation, weather modification and new crops. Served as a consultant to EPA, U.S.D.A., U.S. Dept. of Interior, Office of Technology Assessment of the U.S. Congress, Army Corps of Engineers, World Resources Institute, State Agencies, Conoco, Diamond Shamrock, several engineering firms, Texas Attorney General, Fulbright and Jawarski Law Firm, Department of Justice and others. Also developed Cooperative Agreements with USDA- Natural Resources Conservation Service, DOD-Corps of Engineers, University of California, San Antonio Water System, as well as Memorandum of Agreements with the Canacintra (Mexico), the Texas Natural Resource Conservation Commission and Pristina University, Kosova

Selected publications (total during career, 85 Journal articles, 12 book chapters, > 500 other)

Current Appointment

Professor, and Associate Head for Graduate Programs. Teaching responsibilities currently include: AGEC 330: Financial Management in Agriculture; AGEC 432: Rural Real Estate and Financial Analysis; AGEC 605: Rural Real Estate Appraisal and Organization; and AGEC 695: Frontiers in Agribusiness and Managerial Economics. Research interests include: improving financial decision making for agricultural businesses including farms and ranches and the ability of financial intermediaries to provide credit to agricultural businesses. As Graduate Program Advisor, I am in charge of the graduate program including advising graduate students, scheduling graduate classes, hiring and assigning graduate assistants and administering qualifying and preliminary examinations.

Education

1983 PhD. Purdue University, Agricultural Economics
1978 M.S. Brigham Young University, Agricultural Economics
1977 B.S. Brigham Young University, Agricultural Economics

Past Appointments

2012-2013 Interim Chair of the Intercollegiate Faculty of Agribusiness and Interim Director of the Master of Agribusiness- Department of Agricultural Economics, Texas A&M University
1989-1996 Associate Professor - Department of Agricultural Economics, Texas A&M University
1983-1989 Assistant Professor - Department of Agricultural Economics, Texas A&M University
1979-1983 Research Assistant - Purdue University
1978-1979 Research Associate - Department of Agricultural Economics, Brigham Young University

Selected Awards / Professional Activities (total during career, 5)

2016 Outstanding article in the Journal of Agricultural and Applied Economics.
2013 Guest Professor of Huazhong Agricultural University, Peoples Republic of China
1988 Texas Agricultural Experiment Station Award of Excellence for Team Research, Texas A&M University
Selected Other Professional Contributions

Dr. Leatham has produced 57 refereed journal articles, over 70 technical bulletins and reports, and made over 100 presentations. He has chaired the graduate committee of 27 PhD students, and 30 MS students.

List of Selected publications (total during career, 57 referred articles, 73 technical bulletins and reports, and 100 papers presented)


Kerry Litzenberg  
Senior Professor  
email: Litz@tamu.edu

Current Appointment  
Classes Taught  
- AGEC 216 “Fundamentals of Agri-Food Sales”  
- AGEC 315 “Food and Agriculture Sales”  
- AGEC 316 “Customer Relationships”  
- AGEC 416 “Advanced Sales and Sales Management”  
- AGEC 484 “Professional Internship Supervision)”

Areas of Specialization  
Senior Professor/Director of Weston Agri-Food Sales Program  
Presidential Professor of Teaching Excellence  
Regents Professor

Teaching programs in marketing and management and agricultural economics; research on student learning and motivation, development of curriculum; and review of academic programs. Teaching and applied research on agribusiness education, management and strategic decision making, agribusiness sales and sales management; recruitment, retention and placement of students; Special interest in applications of computers, quantitative techniques, and managerial evaluation of computerized decision support systems in agribusiness.

Education  
1979  Ph.D. Purdue University, Agricultural Economics  
1972  M.S. Purdue University, Educational Counseling  
1971  B.S. Purdue University, Agricultural Education

Past Appointments  
2018-19  Senior Professor, Agricultural Economics, Texas A&M University  
1990-18  Professor, Agricultural Economics, Texas A&M University  
1986-90  Associate Professor, Agricultural Economics, Texas A&M University  
1979-86  Assistant Professor, Agricultural Economics, Texas A&M University

Selected Awards / Professional Activities (total during career __16____)  
2014 Fellow, Western Agricultural Economics Association  
2011 National U S D A Food and Agriculture Sciences Excellence in Teaching Award  
2010 National Undergraduate Teaching Award, more than 10 years’ experience, Agriculture and Applied Economics Association, national professional association.  
2010 Lifetime Achievement Award, Southern Agricultural Economics Association.  
2010 Presidential Professor for Teaching Excellence, Texas A&M University  
2009 Regents Professor, Texas A&M University System  
2002 TAMU Minnie Stevens Piper Professorship, TAMU Eppright Professorship of Undergraduate Teaching Excellence (5 years)  
1997 Texas A&M Association of Former Students Distinguished Achievement Award for Teaching at the college-level.
1985 Texas A&M University Association of Former Students Distinguished Faculty Teaching Award awarded at Texas A&M University (three awarded annually).
1983 Texas A&M University Former Students Distinguished Teaching Award in the College of Agriculture (three awarded annually).

**Selected Other Professional Contributions**
2015 Western Ag Econ Association – Board of Directors
2015 Western Ag Econ Association Teaching Awards Committee
2014 Western Ag Econ Association – Board of Directors
2014 Selection Committee – Lifetime Achievement Award – Southern Agricultural Economics Association
2014 Selection Committee – Outstanding Alumni Award - College of Agriculture and Life Sciences
2013-14 Curriculum Review Committee, Department of Agricultural Economics
2002 – Pres Director of Internship Programs, Department of Agricultural Economics

**Grant Funding (Lifetime)** 2019 is $5,299,009
2018 Litzenberg Chair in Agri-Food Sales (contribution to date $1,010,000)
2018 Weston Agri-Food Sales Program, Professor of Practice Fund $500,000
2015-2020 Weston AgriFood Sales Program contribution (to date $1,390,000)
2010 Academic Program Review and Assessment of the Armenian State Agrarian University Agribusiness Teaching Center Program, USDA/CADI/FAS, $71,885.

**List of Selected publications (total during career:28)**

Higgins, Lindsey M. and Kerry K. Litzenberg, “Transferring Experience Through Team Teaching: The Chance of a Lifetime”, *College Teaching, 63:3, 105-111, DOI: 10.1080/87567555.2015.1017795 2015*. To link to this article: [http://dx.doi.org/10.1080/87567555.2015.1017795](http://dx.doi.org/10.1080/87567555.2015.1017795)


Bruce A. McCarl  
University Distinguished Professor  
email: mccarl@tamu.edu

Current Appointment
2017  Presidential Impact Fellow, Texas A&M University
2012  Texas AgriLife Research Senior Faculty Fellow
2010  Leader of Research, Dept of Ag Econ
2008  University Distinguished Professor, Texas A&M University
2002  Regents Professor, Texas A&M University
1985  Professor, Agricultural Economics, Texas A&M University

Duties: Research and teaching on climate change economics, water, food-energy-water Nexus, Environmental Economics, Optimization theory and Quantitative policy analysis

Education
1973  Ph.D., Pennsylvania State University, Management Science
1970  B.S., University of Colorado, Business Statistics

Past Appointments
1982-1985  Professor, Agric. And Resource Econ., Oregon State University
1973-1982  Asst/Assoc Professor, Agricultural Economics, Purdue University

Selected Awards / Professional Activities (total during career 28)
2012  Southern Agricultural Economics Association Lifetime Achievement Award
2009  Bruce Gardner Memorial Prize for Applied Policy Analysis, AAEA
2009  Distinguished Scholar Award, Western Agricultural Economics Society
2008  Publication of Enduring Quality, AAEA
2007  Nobel Peace Prize participant, through award to Intergovernmental Panel on Climate Change as designated by IPCC.
2005  Distinguished Fellow, American Agricultural Economics Association

Selected Other Professional Contributions
Advisor for 93 PhD's and Post Docs and 20 MS students
Participation in more than $70 million in funded research
Coordinating Editor Choices, 2004-2007
Advisor of three students who are Fellows of professional organizations
List of Selected publications (drawn from 284 journal articles during career, 68 book chapters, 9 books and 362 invited presentations)


Dean A. McCorkle  
Extension Program Specialist III – Economic Accountability  
email: d-mccorkle@tamu.edu

Current Appointment

Extension Program Specialist III – Economic Accountability since 2004. Primary duty is to provide leadership for assessing the economic impacts of extension programs for Texas A&M AgriLife Extension Service. Other duties include providing applied research and extension outreach related to various agricultural commodity issues and needs.

Education

2005 Ph.D. Texas A&M University, Agricultural Education  
1991 M.A. Texas A&M University, Agricultural Economics  
1988 B.S. Texas A&M University, Agricultural Economics

Past Appointments

1997 - 2004 Extension Program Specialist - Risk Management  
Department of Agricultural Economics, Texas A&M University

1995 - 1997 Assistant Research Scientist  
Department of Agricultural Economics, Texas A&M University

1991 - 1995 Extension Agricultural Economist  
Department of Agricultural Economics, Kansas State University

Awards / Professional Activities (total during career 11)

2017 Texas A&M AgriLife Extension Service, Superior Service Team Award (U.S. EPA Pesticide Safety Regulations)

2017 World Academy of Science, Engineering and Technology (WASET), Best Presentation Award

2016 Texas A&M AgriLife Extension Service Superior Service Unit Award. (Agricultural Economics Extension Farm Bill Education Team)

2015 USDA-National Institute of Food & Agriculture (NIFA) and the Association of Public & Land Grant Universities, National Extension Diversity Team Award, 2015.

2014 Southern Agricultural Economics Association, Outstanding Extension Program Team Award. (Extension Impact Team).

2013 Texas A&M AgriLife Extension Service, Superior Service Team Award (Childhood Obesity)

2012 Texas A&M AgriLife Extension Service, Superior Service Team Award (Economic Impact Team)

2008 Western Agricultural Economics Association (WAEA), Outstanding Extension Project Award

2007 Texas AgriLife Extension Service, Superior Service Team Award (Cotton Project)

2006 Texas AgriLife Extension Service, Superior Service Award (Extension Specialist)

2000 United States Department of Agriculture, Group Honor Award for Excellence.

Selected Other Professional Contributions

Dr. McCorkle has authored or co-authored more than 600 publications, including 12 refereed journal articles and 339 extension publications. He has played a variety of roles in securing 30 grants and contracts totaling more than $7 million. He has also made more than 80 presentations to and audience of more than 2,700 people, including presentations to
conference and governmental audiences in three different countries.

Selected publications (total during career, 12 refereed articles, 2 book chapters, 627 other)


Max D. Menzies III  
Lecturer  
email: d-menzies@tamu.edu

Current Appointment

Lecturer, Department of Agricultural Economics, Texas A&M University. Primary duty is to teach undergraduate courses and lead students in high-impact activities. Teach AGEC 217 – Fundamentals of Agricultural Economics Analysis and AGEC 460 – Cross-cutting Issues in Agricultural Economics. Lead two study abroad programs each summer to Scotland and Ireland. Coach departmental Academic Quiz Bowl team and take students to two competitions each year. Advisor for three student organizations within department.

Education

2017  Ph.D. Texas A&M University, Higher Education  
2004  M.S. Texas A&M University, Agricultural Economics  
1997  B.S. Texas A&M University, Double Major, Agricultural Economics and Animal Science

Past Appointments

2006 - 2015  Assistant Lecturer, Department of Agricultural Economics, Texas A&M University

Awards / Professional Activities (total during career 3)

2015  Critical Thinking Fellow, College of Agriculture and Life Sciences, Texas A&M University  
2012  Distinguished Achievement Award for College Level Teaching, Association of Former Students, Texas A&M University  
2008  Student Led Award for Teaching Excellence, Texas A&M University

Selected Other Professional Contributions

Developed and led seven study abroad field trips involving 120 students to Ireland and Scotland. Advisor for Agriculture and Applied Economics Association (AAEA) and Southern Agricultural Economics Association (SAEA) student sections. Advisor for three undergraduate student organizations with total membership over 200 students. Dr. Menzies has helped his student organizations receive 31 grants totaling $74,000. Coached Academic Quiz Bowl team for 6 years.

List of Selected publications (total during career 1 set of class notes, 7 other)

Menzies, M.D. (2017). Tuition Elasticity at the College Level and its Effect on Differential Tuition Rates. Unpublished dissertation, Texas A&M University, College Station, TX.


James W. Mjelde  
Professor  
email: j-mjelde@tamu.edu

Current Appointment

Professor, Department of Agricultural Economics, Member, Texas A&M Energy Institute since 2014, Member Intercollegiate Faculty of Agribusiness since 2012, Professor, Texas A&M Water Resources Program since 2005. Classes taught are AGEC 105 – Introduction to Agricultural Economics, 603 – Land Economics, and 604 - Natural Resource Economics. Research has primarily focused on the design of information forecasting systems. Secondary emphasis has been incorporating dynamics into decision making models. Research interests include a multitude of natural resource issues including energy economics and willingness-to-pay.

Education

1985 Ph.D. University of Illinois, Agricultural Economics,  
1982 M.S. Montana State University, Applied  
1980 B.S. Montana State University, Fish and Wildlife Management

Past Appointments

1995 - 2005 Professor, Department of Agricultural Economics, Texas A&M University  
1996 -2001 Faculty Associate, Bush School of Government and Public Service, Texas A&M University  
1994 - 1997 Department Graduate Advisor, Department of Agricultural Economics, Texas A&M University  
1990 - 1995 Associate Professor, Department of Agricultural Economics, Texas A&M University  
1985 - 1990 Assistant Professor, Department of Agricultural Economics, Texas A&M University  
1982 - 1985 Research Assistant - Department of Agricultural Economics, Univ. Of Illinois

Selected Awards / Professional Activities (total during career 7)

2011 Association of Former Students of Texas A&M University, Distinguished Achievement Award – Teaching  
1998 - 2001 Member United States Global Ocean Observing System Steering Committee  
1995 Faculty Recognition Award given by Graduate Students Association  
1989,1990 Outstanding Professor in the Department of Agricultural Economics given by the Agricultural Economics Undergraduate Club

Selected Other Professional Contributions
Focusing on multidisciplinary research, Dr. Mjelde has referred publications with faculty from 14 disciplines. Dr. Mjelde has chaired 48 M.S. and Ph.D. students. He has advised undergraduate and graduate students who have won 15 regional or national awards. Awards won by graduate students include Outstanding Ph.D. dissertation by SAEA and Universities Council on Water Resources and M.S. thesis won the University Association of Former Students Distinguished Graduate Student Award for Excellence in Research. Undergraduate student awards include AAEA Academic bowl competition (won 5 competitions and 3 other times place in top 3) and AAEA Undergraduate Paper Competition.

List of Selected Publications (total referred publications during career 106)


Christopher M. Moore  
Lecturer  
email: cmoore3105@tamu.edu

Current Appointment


Education

In process Ph.D. Kansas State University, Personal Financial Planning  
2013 M.B.A. Texas A&M University - Commerce, Accounting  
2008 B.S. Texas A&M University, Agricultural Economics

Past Appointments

2015 – Pres Director of Financial Planning - R I Planners  
2013 - 2015 Vice President, Private Client Advisor – JP Morgan Chase  
2011 - 2013 Vice President, Financial Advisor – Merrill Lynch  
2007 - 2010 Account Executive – Peak Investments

Awards / Professional Activities

2018 Investment News’ 40 Under 40 Award  
2018 AFCPE Symposium Student Paper Award  
2015 CERTIFIED FINANCIAL PLANNER™  
2014 JP Morgan Asset Management Award of Excellence  
2011 Chartered Retirement Planning Counselor

Selected Other Professional Contributions

Developer of the Command Your Finances™ Program, which teaches basic concepts of personal finance to future military officers. The semester long course teaches students how to learn, act, and lead others in a sound financial decision-making process. Faculty Advisor for the Financial Planning Student Association.

Selected publications


Moore, Christopher, Andrew Scott, Juan Gallardo, and Sonya Britt-Lutter. “Applying Human Capital Framework to College Student’s Financial Well-Being” Selected Presentation at the Annual
Desmond W. Ng  
Assoc. Prof. of Agribusiness Management  
email: dng@tamu.edu

Current Appointment

Assoc. Prof, Department of Agricultural Economics, Texas A&M University. Primary duty is to provide teaching and research in the areas of Agribusiness and Strategic Management. Classes taught includes: AGEC 314: Agri-food Marketing (spring), AGEC 440: Agribusiness Management (fall / spring), AGEC 619: Managerial Economics (fall), AGEC 625: Environment of Agribusiness (spring), and AGEC 671: Fundamentals of Strategy. Area of specializations includes: product innovation, patent analysis, strategic alliances, behavioral and ethical decision making.

Education

2001    Ph.D. University of Illinois, Agricultural Economics / Strategic Management  
1997    M.S. McGill University, Montreal, Canada, Agricultural Economics  
1994    B.S. University of British Columbia, Vancouver, Canada, Agricultural Economics

Past Appointments

2010 -2018    Associate Professor of Agribusiness Management, Department of Agricultural Economics, Texas A&M.  
2004 - 2010    Assistant Professor of Agribusiness Management, Department of Agricultural Economics, Texas A&M.  
2000 - 2004    Assistant Professor of Agribusiness Management, Department of Rural Economy, University of Alberta.

Selected Awards / Professional Activities (total during career 10)

2012    Academy of Management Best Paper award proceedings.  
2012    Guest co-editor for the International Food and Agribusiness Management Review.  
2009    Program chair for the Agribusiness Research Forum.  
2009    Chair of the WERA-72 (Western Education and Research Activities Committee on Agribusiness).  
2008    Best Paper nomination for 2008 8th International Chain Conference.  
2006    Best paper award for the 2006 7th International Chain Conference.  
2005    Outstanding Research Paper Award for the 2005 International Academy of Business Economics.  
2004    Best paper selection for William H. Newman Award for Academy of Management Annual Meetings.
Selected Other Professional Contributions

Dr. Ng has produced 25 peer-reviewed publications and has presented in 46 presentations. Dr. Ng has participated in grants totaling $320,404.

List of Selected publications (total during career 25, 1 guest editorialship, 2 book chapters)


Ng, D. 2015. Entrepreneurial Overconfidence and Ambiguity aversion: Dealing with the Devil you know, than the devil you don’t know, Technology Analysis and Strategic Management Journal. 27 (8): 946-959.


Current Appointment

Research Professor of Agricultural Economics and concurrently Regional Director for Latin America and the Caribbean at the Borlaug Institute for International Agriculture. Teaches a graduate course in International Agricultural Development Policy. Develops and manages multiple international agricultural development projects at the Borlaug Institute.

Education

1971 Ph.D. Johns Hopkins University, Economics.
1963 B.A. Reed College, Mathematics and Economics.

Past Appointments

2009-2012 Director for Latin America, International Programs Office, Texas A&M University
1986-2009 Chief of Party, USAID Agricultural Policy Project in Honduras; Chief of Party, USAID Environmental Management Project in El Salvador; Project Director National Agricultural and Natural Resource Strategies in Estonia, Mozambique, and Eritrea; Project Director for National Development Strategy in Guyana; author of Rwanda’s National Agricultural Development Strategy in two versions 4 years apart; Coordinator of national private sector agriculture and forestry strategy in Nicaragua; Coordinator of the agricultural component of the Inter-American Development Bank’s competitiveness project in Panama ($100 million); author of policy analysis for water management in Yemen for World Bank; other advisory and research assignments in all regions of the world. Worked in 50 countries.
1979-1986 Full Professor of Economics, University of New Mexico and Adjunct Professor, Oklahoma State University; Visiting Professor, University of Naples, Italy.
1969-1979 Development Research Department, World Bank: staff member and Division Director; seconded to the Mexican Ministry of the Presidency 1972-74.

Selected Professional Contributions

Successful proposal developer and Principal Investigator for Borlaug Institute development projects in the Rwanda (IFAD, $100,000); Dominican Republic (USDA, $1.6 million), Higher Education Challenge Grant (Co-PI, USAID, $245,000), Central America (Co-PI, USAID, $4.0 million), and Worldwide (USDA, $3.1 million).

Developed a new variant of mathematical models for evaluation of agricultural policies in developing countries, applied in Mexico, Central America, Turkey, Niger, Nigeria, Italy and elsewhere. Co-authored the textbook on that class of models, cited in the literature more than 1,000 times.

Served as advisor to the Minister of Agriculture in Honduras for development of most
comprehensive agricultural policy reform legislation in Latin America and its negotiation with farmer groups, passed by that country’s Congress; served as advisor to the Minister of Finance in Guyana on a participatory National Development Strategy, coordinating 23 task forces with 200 Guyanese, that was approved by that country’s Parliament; served as advisor to the Minister of Agriculture in Estonia for a National Strategy for Agriculture and National Resources and worked with the Estonian Parliament in drafting legislation to implement the strategy; served as international advisor on Mozambique’s National Vision 2020 Strategy that was approved by Parliament and both formerly warring factions.

Head of International Evaluation Panel for all FAO policy projects worldwide and field evaluator for those projects in Cambodia, Laos and Bangladesh.

List of Selected publications (total during career: 47 articles & book chapters, 39 conference papers, 77 other formal reports; publications issued in 7 languages)


Competitiveness of Agricultural and Forestry Products in Colombia (in Spanish with R. Argüello), USAID/Colombia and the Government of Colombia, two volumes, Bogotá, 2008.


Joe L. Outlaw  
Regents Fellow, Professor and Extension Economist  
email: joutlaw@tamu.edu

Current Appointment

Professor and Extension Economist, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. Dr. Outlaw’s responsibilities are to provide leadership in the development and delivery of extension educational programs in agricultural policy. In September 2003, Dr. Outlaw was named Co-Director of the Agricultural and Food Policy Center (AFPC). In this role, he works with U.S. Congressional Agricultural Committee Staff to analyze their requests, prepare reports, and present research findings. He also plays a key role in securing the annual appropriations for AFPC from Congress. He also teaches AGEC 429 Agricultural and Food Policy at the undergraduate level.

Education

1992 Ph.D. Texas A&M University, Agricultural Economics  
1988 M.S. Texas A&M University, Agricultural Economics  
1987 B.S. Texas A&M University, Agricultural Economics

Past Appointments

2000 – 2005 Associate Professor and Extension Economist – Farm Management and Policy, Department of Agricultural Economics, Texas A&M University  
1995 – 2000 Assistant Professor and Extension Economist – Farm Management and Policy, Department of Agricultural Economics, Texas A&M University  
1996 – 1999 Extension Economist District 9 (Southeast Texas) Department of Agricultural Economics, Texas A&M University  
1992 - 1995 Assistant Research Scientist, Agricultural and Food Policy Center, Department of Agricultural Economics, Texas A&M University

Selected Awards / Professional Activities (total during career 33)

2018 Western Agricultural Economics Association, Fellow  
2016 Texas A&M University Board of Regents, Regents Service Fellow  
2016 American Agricultural Economics Association, Distinguished Extension/Outreach Program Award  
2016 Southern Agricultural Economics Association, Lifetime Achievement Award

Selected Other Professional Contributions

From 1997 to 2002, Dr. Outlaw provided leadership as Coordinator of the Financial and Risk Management (FARM) Assistance Program funded by the Texas Legislature. He started the program, developed curriculum and supervised the day-to-day operations of risk management specialists who are extending the model’s analytical capacity to producers. As Co-Director of the Agricultural and Food Policy Center, Dr. Outlaw has provided direct
input into the content and direction of the last four farm bills. He has spoken at 38 international, 252 national and regional, 396 statewide and district and 179 county programs. He has also secured over $26,000,000 in contracts and grants over his career.

**List of Selected publications (31 journal articles, 547 extension and other publications)**


Marco A. Palma  
Professor  
email: mapalma@tamu.edu

Current Appointment

Professor, Director of the Human Behavior Laboratory. Areas of specialization include consumer economics, food choices, experimental and behavioral economics and neuroeconomics. Classes taught: AGEC 676, AGEC 607.

Education

2002 M.S. University of Florida, Food and Resource Economics.  

Past Appointments

2017 - 2018 Associate Professor, Department of Agricultural Economics, Texas A&M University  
2012 – 2017 Associate Professor and Extension Economist, Department of Agricultural Economics, Texas A&M University  
2006 – 2012 Assistant Professor and Extension Economist, Department of Agricultural Economics, Texas A&M University

Selected Awards / Professional Activities (total during career 16)

2014 Agricultural and Applied Economics Association Latin American Section. Outstanding Selected Research Paper Award  
2010 Vice Chancellor’s Award in Excellence for a Research Team

Selected Other Professional Contributions

Total grants as PI or CO-PI exceeding $24 million. Founder and Director of the Human Behavior Laboratory (http://hbl.tamu.edu), one of the largest biometric labs in the world. Over 320 presentations around the world. Served in the Graduate Committee of 59 graduate students, including 29 PhD committees.

List of Selected publications – Last 3 Years (total during career 60 refereed, 124 other)


John L. Park  
Professor and Extension Specialist, Roy B. Davis Professor of Agricultural Cooperation  
email: john.park@tamu.edu

Current Appointment

Professor and Extension Specialist, and Roy B. Davis Professor of Agricultural Cooperation, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, Texas A&M University. Primary duty is to provide extension leadership and education to the state cooperative business community. Dr. Park also holds a teaching appointment, and currently teaches AGEC 413 (Agricultural Cooperation) and AGEC 629 (Strategic Agribusiness Management). Areas of expertise include agricultural marketing, agribusiness management, and cooperation.

Education

1996 Ph.D. Texas A&M University, Agricultural Economics  
1992 M.S. Utah State University, Agricultural Economics  
1991 B.S. Brigham Young University, Agricultural Economics

Past Appointments

2003 - 2008  **Associate Professor and Extension Specialist** – Cooperative Marketing and Agribusiness Management, Department of Agricultural Economics, Texas A&M University  
2000 - 2003  **Visiting Assistant Professor** – Agricultural Marketing and Agribusiness, Department of Agricultural Economics, Texas A&M University  
1992 - 1996  **Research Assistant**, Department of Agricultural Economics, Texas A&M University  

Selected Awards / Professional Activities (total during career 12)

2017  **Distinguished Service Award**, Texas Agricultural Cooperative Council  
2013  **Frank Panyko Award for Distinguished Service**, Food Distribution Research Society  
2012  **Outstanding Teaching of a Course**, Southern Agricultural Economics Association  
2010  **Distinguished Achievement Award, College Level**, Association of Former Students, Texas A&M University  
2010  **Outstanding Undergraduate Teaching Award, with less than 10 years experience**, Western Agricultural Economics Association  
2001  **President’s Award for Emerging Leadership**, Food Distribution Research Society
Selected Other Professional Contributions

Dr. Park is a director, chair of the Allied Services Division, and member of the executive board for the Texas Agricultural Cooperative Council. Dr. Park’s involvement with the Council has been instrumental in the development of an internship program and the Academy of Cooperative Excellence, a program intended to further the development of leadership talent for the cooperative community. Dr. Park is recognized as a highly successful teacher and chairs the department Undergraduate Advisory Committee.

Selected publications (total career 23 refereed articles, 1 book chapter, and 98 other)


Current Appointment

Risk Management Specialist since 2005. Primary duty is with the Farm Assistance program and am assigned to the Texas Alliance for Water Conservation program as the Producer Relations Manager for the 26 cooperating producers in the South Plains region.

Education

2003      M.Ed. Texas Tech University, Agricultural Education  
1979      B.S. Texas Tech University, Agricultural Education  

Past Appointments

2002 - 2005  City Bank, Agriculture Lending, City Bank-Texas  
             Security Bank, Agriculture Lending, Idalou, Texas  
             Farmer, Cotton, Grain Sorghum, Peanuts, Idalou, Texas

Selected Awards / Professional Activities

2016      National Energy and Conservation Award (Irrigation Association- team award)  
2015      Texas Environmental and Conservation Award (T.C.E.Q.-team award)  
2012      Blue Legacy Award (Water Conservation Advisory Council-team award)
John B. Penson, Jr.
Senior Professor
email: jpenson@tamu.edu

Current Appointment

Senior Professor
AGEC 105 Introduction to Agricultural Economics
AGEC 430 Macroeconomics of Agriculture
AGEC 434/634 Rural Financial Markets and Financial Analysis
Macroeconomics, credit markets,

Education

1973 Ph.D. University of Illinois, Agricultural Economics
1967 M.S. Southern Illinois University, Agribusiness
1964 B.S. Southern Illinois University, Agribusiness

Past Appointments

2017 - 2019 Senior Professor, Agricultural Economics, TAMU
2001 - 2017 Regents Professor and Stiles Professor, Agricultural Economics, TAMU
1988 - 2001 Stiles Professor, Agricultural Economics, TAMU
1983 - 1988 Professor, Agricultural Economics, TAMU
1978 - 1983 Associate Professor, Agricultural Economics, TAMU
1975 - 1978 Assistant Professor, Agricultural Economics, TAMU

Selected Awards / Professional Activities (total during career _27_)

2011 Distinguished Achievement Award in Teaching, Former Students Assoc., University level
2009 Distinguished Achievement Award in Teaching, Former Students Assoc., College level
2007 Visiting Foreign Distinguished Professor, Korea University
2007 Presidential Award, American Agricultural Economics Association
2007 Lifetime Achievement Award, Southern Agricultural Economics Association
2000 Regents Professor Service Award, Texas A&M University Board of Regents
1993 Honor Professor Award, College of Agriculture and Life Sciences, TAMU
1992 Distinguished Achievement Award in Teaching, Former Students Assoc., University level
1988 Appointed Stiles Endowed Professor of Agriculture
1986 Outstanding Alumnus Award, College of Agriculture, Southern Illinois University
1986 Outstanding Undergraduate Teaching Award, American Association of Agricultural Economics
1986 Distinguished Policy Contribution Award, American Association of Agricultural Economics
1985 Outstanding Undergraduate Teaching Award, Western Association of Agricultural Economics
1984 Distinguished Achievement Award in Research, Former Students Assoc., University level
1981 Visiting Scholar, Federal Reserve System
1974 Outstanding Doctoral Dissertation Award, American Agricultural Economics Association
Selected Other Professional Contributions

I have served on a number of professional committees, including chairing the doctoral dissertation award committee of the American Agricultural Economics Association. Other AAEA committees include the Outstanding Policy Contribution Committee and Quality of Communications Award Committee. I have given numerous invited presentations before financial, insurance and management audiences including the Board of the Farm Credit Administration and the President’s Council of the Farm Credit System. I served on the Board of Directors for the Southern Agricultural Economics Association and as Editor of the Journal of Agricultural and Applied Economics. I also served as co-Editor of Choices and the Agricultural Finance Review.

At the university level I have served on the Selection Committee for the Distinguished Alumni Award three years appointed by President Bowen and served two terms in the Faculty Senate. I also chaired the Tenure and Promotion Advisory Committee at the college level.

At the department level I have chaired the Faculty Evaluation Committee and Tenure and Promotion Committee and the Faculty Advisory Committee several times. I co-chaired the committee appointed by the Dean of COALS and Dean of Mays Business Schooled which developed the degree plan curriculum and policy statement for the undergraduate program in Agribusiness. I also co-chaired the committee appointed to develop the PhD program in Agribusiness.

In addition teaching courses in the department, I have taught graduate level courses at Korea University in South Korea, Universidad Del Valle De Guatemala in Guatemala, Kyushu University in Japan, International University in Ecuador. I have also taught a course in Managerial Macroeconomics in the Mays Full Time MBA Program.

Finally I served as the expert advisor to a Foreign Agricultural Service, USDA project on the sustainability of a rural lending cooperative in the country of Armenia. This five year project which involved 19 trips to Yerevan Armenia was funded by the U.S. State Department, led to the development and ultimate sustainability of Farm Credit Armenia. Other international activity include serving as chief of party for a US Agency for International Development (USAID) project in Egypt assessing the delivery of financing services to rural areas.

List of Selected publications (total during career _151_)


Sandra R. Pierce  
Program Specialist II Kids & Kows & More  
email: s-pierce@tamu.edu

Current Appointment

Program Specialist for the Kids & Kows & More Agriculture Literacy Program in Texas, New Mexico and Oklahoma. Initiate and maintain contact with County Extension Agents, school system personnel and various volunteer groups and sponsors. Use knowledge of extension policies and subject matter, along with own judgment to respond independently to external clientele. Develop brochures, news releases and display materials to publicize programs. The programs teach youth and adults the importance of agriculture in their lives and where their food and clothing actually come from. Scripts are written for the commodities that will be exhibited at each program and visuals are made or found in order for the students to actually see what they are being taught about. Facilities are found and scheduled and meetings with potential sponsors and host counties are arranged. Although each program has a little twist of its own each of the programs is organized and setup so the students will learn in a structured, fun learning environment. I serve as a liaison between Texas A&M AgriLife Extension and outside entities pertaining to fiscal office responsibilities and reporting. Handle all program documentation including monthly, quarterly and annual reports. Summarize program evaluations.

Education

2009   M.S. Grand Canyon University, Education  
2005   B.S. Park University, Human Resource Management

Past Appointments

2011 - 2016   Program Specialist I Kids & Kows & More, Department of Agricultural Economics, Texas A&M University  
2000 - 2011   Administrative Assistant for Kids & Kows & More, Department of Agricultural Economics, Texas A&M University  
1993 - 2000   Administrative Assistant for Agriculture and 4H, Texas Cooperative Extension – El Paso County

Awards / Professional Activities

S-A-L-E Leadership Extension – Graduated Fall 2017  
Texas Association of Student Nutrition – Excellent Speaker  
Outstanding Sponsor Special Olympics  
Friends of the Rio Grande Valley  
Working Well With Citrus – Rio Grande Valley  
Partners in Education Clint Independent School District  
Partners in Education Socorro Independent School District  
Partners in Education El Paso Independent School District  
Partners in Education Ysleta Independent School District  
Oklahoma Friends of Extension
Professional Contributions

Kids & Kows & More is an agricultural literacy program designed in El Paso and is now held across the three states of Texas, New Mexico and Oklahoma. The program is one of the best visual, classroom enrichment field trips and close up learning experience for students in 3rd and 4th grades. They learn about their local food and fiber commodities and the importance of agriculture. The goal is to help students and adults learn, understand and appreciate where their food and fiber comes from, not just that they are purchased at the store.

I want the thousands of students who attend the program each year to walk away from the event realizing that agriculture is not just a farmer in the field! It is the clothes that they wear, the food that they eat the water that they drink and bathe in and the shelter they have a well. It is important for them to realize and respect the importance of agriculture in their daily lives and the people that make it possible for them to have their necessities and luxuries.

Program Importance

With society becoming so intent on instant gratification, even ordering and picking their groceries up outside of the store; youth are rarely even exposed to produce or meat counters. As the generations become more dependent on others it is vitally important for the youth to realize that Agriculture is not a thing of the past and is very alive and important today. It is also important for them to know about the agriculture field and jobs that are available.

Since advancing to Program Specialist I at midyear of 2011 the Kids & Kows & More program under my direction and leadership has held 857 youth and adult programs seeing over 460,500 contacts. Every year we reach more people of all ages teaching them the basic life necessities that everyone has learned to take for granted. Youth and adults have been educated through the program learning that agriculture is essentially life.
Edwin C. Price  
Professor  
email: ec-price@tamu.edu

Current Appointment

Howard G. Buffett Endowed Chair on Conflict and Development and Director, Center on Conflict and Development, Department of Agricultural Economics, Texas A&M University. Teach AGEC 408, 608, 420 & 620. Academic, research and extension activities are focused on the economics of armed conflict, international development and foreign assistance. Lead and administer international research and development activities funded by the US Agency for international Development, the World Bank, and the Howard G. Buffett Foundation.

Education

1973 Ph.D. University of Kentucky, Agricultural Economics  
1968 M.A. Yale University, SE Asia Studies. Major: Economics and Indonesian Language and Culture  
1979 B.S. University of Florida, Agricultural Science. Major: Agricultural Economics

Past Appointments

2006 - 2012 Founding Director of the Norman Borlaug Institute, College of Agriculture and Life Sciences, Texas A&M University  
1994 - 2012 Assistant/Associate Vice Chancellor for International Agriculture, College of Agriculture and Life Sciences, Texas A&M University  
1985 – 1994 Assistant Vice President for International Research and Development/Associate Dean of Agriculture and Professor, Department of Agricultural Economics, Oregon State University.  
1975 - 1985 Senior Scientist, International Rice Research Institute, Los Baños, Philippines  

Awards / Professional Activities (25 plus in career)

2017 Member, US Department of State Advisory Council on Stabilization.  
2014 Member, Board of Directors, World Coffee Research (Finance and Science Committees)  
2013 Member, Board of Directors, AgriCorps, Inc. (Treasurer)  
2012 Chair, Board of Directors, Conflict and Development Foundation  
2006 George H. W. Bush Presidential Award for Outstanding International Service  
2000 Assoc. for International Agriculture and Rural Development Outstanding Service award  
1987 Chair, Joint Committee on Agricultural and Rural Development, Board for International Food and Agriculture Development (USAID/University oversight body on international agriculture)  
1985 Chair, International Committee on Organization and Policy, National Association of State Universities and Land Grant Colleges (now Association of Public and Landgrant Universities)

Selected Other Professional Contributions

Established in 2010 a path-breaking program of research, teaching and international development for regions in armed conflict, now with cumulative investment of $110 M.;
named Howard G. Buffett Endowed Chair and founding Director of Center on Conflict and Development. Center was selected in 2012 from 307 university applicants to become a USAID Higher Educations Solutions Network Laboratory. Founded in 2006 the Borlaug Institute for International Agriculture, building by 2012 a $73.9 M portfolio. Authored and achieved passage of PL 106-373, Famine Prevention and Freedom from Hunger Improvement Act of 2000, modernizing the partnership of the US government with land grant universities for international agricultural development. Organized and led the 1998 Inaugural Symposium for the George Bush Presidential Library Center, Agriculture and Sustainable Development: China and its Trading Partners. Was founding economist member of the International Rice-based Cropping Systems Network (1975), publishing the seminal guide for cropping systems research. Served as the advisor to the Federal Reserve Board on consumer food prices and agricultural production; corrected critical food production indices over inaccurate USDA estimation methods. As Peace Corp Volunteer in 1962, formed first 4-H Clubs and national 4-H program standards in Malaysia.

Selected publications (total during career, 25 articles, 1 book, 1 book chapter, 400 other)


Luis A. Ribera  
Professor & Extension Economist  
Director, Center for North American Studies  
email: lribera@tamu.edu

**Current Appointment**

Dr. Ribera is a Professor and Extension Economist for Texas A&M AgriLife Extension and Texas A&M Transportation Institute. Dr. Ribera also serves as the Director of the Center for North American Studies. His primary responsibilities are statewide international trade and transportation issues as well as feasibility studies, economics impacts and risk analysis. Dr. Ribera has worked in feasibility studies for all major row crops in Texas and specialty crops such as fruits and vegetables.

**Education**

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<th>Degree</th>
<th>Institution</th>
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<td>Agricultural Economics</td>
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**Past Appointments**

- **2011 - 2017**  
  *Associate Professor and Extension Economist-Farm Management and Trade*, Department of Agricultural Economics, Texas A&M University
- **2005 - 2011**  
  *Assistant Professor and Extension Economist-Farm Management*, Department of Agricultural Economics, Texas A&M University

**CONTRACTS AND GRANTS:** 2005-2018 - $30,608,911

**Awards / Professional Activities**

- **2016**  
  Texas Agricultural Extension Service Superior Service Unit Award. (Agricultural Economics Extension Farm Bill Education Team)
- **2014**  
  Outstanding Selected Research Paper, Latin American Section, AAEA.
- **2012**  
  Distinguished Professional Contribution, SAEA.

**Selected publications (last 4 years)(total during career, 24 refereed articles, 6 book chapters, 92 other)**

*Refereed Journals*


doi:10.1093/ajae/aav004


**Book Chapters**


**Other Publications**


James W. Richardson  
Senior Faculty Fellow, Texas A&M AgriLife Research Senior Faculty Fellow  
Co-Director Agricultural and Food Policy Center  
Email: jwrichardson@tamu.edu

Current Appointment:

Senior Faculty Fellow, Texas A&M AgriLife Research Senior Faculty Fellow  
Co-Director Agricultural and Food Policy Center, Department of Agricultural Economics, Texas A&M University. Co-Director of AFPC since 2003 where my primary duty is to direct research on farm policy and crop insurance issues and prepare reports summarizing the research results and make presentations to commodity groups, Congress and other interested parties. I teach two graduate courses dealing with decision making under risk and the development and use of Monte Carlo simulation models. Research interests are analysis of the economic viability of U.S. farms under alternative farm programs, crop insurance options, and regulations. Development of simulation tools and risk ranking techniques is a secondary research interest.

Education:

1978  Ph.D. Oklahoma State University, Agricultural Economics  
1973  M.S. Oklahoma State University, Agricultural Economics  
1971  B.S. New Mexico State University, Agricultural Economics  

Past Appointments:

2002-2003  Regents Professor and AFPC Co-Director, Department of Agricultural Economics, Texas A&M University  
1986-2002  Professor, Department of Agricultural Economics, Texas A&M  
1982-1986  Associate Professor, Department of Agricultural Economics, Texas A&M  
1978-1982  Assistant Professor, Department of Agricultural Economics, Texas A&M

Selected Awards:

1983 -- American Agricultural Economics Association Distinguished Extension Program  
1987 -- American Agricultural Economics Association Award for Quality of Communication  
1997 -- American Agricultural Economics Association Distinguished Policy Contribution  
2002 -- Regents Professor Award, Texas A&M Board of Regents  
2003 -- Southern Agricultural Economics Association Distinguished Extension Program  
2003 -- USDA - Farm Service Agency Administrator’s Award for Service to Agriculture  
2003 -- American Agricultural Economics Association Distinguished Extension Program  
2005 -- American Agricultural Economics Association Distinguished Graduate Teaching Award  
2006 -- Western Agricultural Economics Association Outstanding Undergraduate Teaching  
2008 -- Southern Agricultural Economics Association Lifetime Achievement Fellow  
2008 -- Western Agricultural Economics Association Distinguished Fellow.  
2016 – Southern Agricultural Economics Association Outstanding Extension Team  
2016 – American Applied Economics Association Outstanding Extension Team
Selected Other Professional Contributions:

Contracts and Grants $37,648,863 (186 contracts); Google Scholar Citation Count 10/31/2018 was 4,112; Refereed Journal Articles 148 (Economics Journals 80 and Other Journals 68); Experiment Station Publications 374; Books Edited 1; Chapters in Books 10; Extension Publications and Popular Articles 59; Selected Papers 249; Congressional Testimony 5; Presentations to Congress 50; Dissertations and Theses Directed 65 (M.S. 35, Ph.D. 30, Current Students 2); Simulation Short Courses 55; and Graduate Courses Taught since 1991 54. Developed Simetar, an Excel add-in for simulation, econometrics, and risk ranking.

Selected publications (total for career: 148 refereed, 10 book chapters, 434 other):


Current Appointment

Include position title, classes taught, and areas of specialization
Professor, M. Edward Rister ’74 Chair in Rural Entrepreneurship, and Associate Head.
Professor rank earned in 1991; Associate Head appointment in 2002; and Chair title awarded in 2014. Director of Agribusiness Entrepreneurship (AE) program, including teaching of AGEC 223 and AGEC 423 (both AE seminar introductory networking courses), AGEC 324 (AE Budgeting), AGEC 424 (AE Economic Analysis), AGEC 425 (AE Financial Analysis), and AGEC 491 (AE Research). Research focus is on “Investigation of Entrepreneurship Supply Chain Alternatives for Niche Crop Markets.”

Education

1981 Ph.D. Michigan State University, Agricultural Economics
1976 M.S. Texas A&M University, Agricultural Economics
1974 B.S. Texas A&M University, Agricultural Economics

Past Appointments

2002 -2006 Associate Head for Undergraduate Programs and Professor, Department of Agricultural Economics, Texas A&M University.
1986 – 1991 Associate Professor, Department of Agricultural Economics, Texas A&M University.
1981 – 1986 Assistant Professor, Department of Agricultural Economics, Texas A&M University.
1979 – 1981 Senior Graduate Research Assistant, Department of Agricultural Economics, Michigan State University.
1977 - 1979 Graduate Research Assistant, Department of Agricultural Economics, Michigan State University.
1976 - 1977 Research Associate, Department of Agricultural Economics, Texas A&M University.
1976 - 1976 Lecturer in Farm and Ranch Management, Department of Agricultural Economics, Texas A&M University

Selected Awards / Professional Activities (total during career 25)

2017 Rister T-Camp. Transition Camp Namesake, Texas A&M University.
2017 Texas A&M Foundation Partner in Philanthropy Faculty Award.
2014 M. Edward Rister ’74 Chair in Rural Entrepreneurship.
2013 Vice Chancellor's Award in Excellence for Teaching.
2011 WAEA Outstanding Undergraduate Teaching Award, 10+ years.
2011 Distinguished Individual Student Relations Award, Texas A&M University.
2008 Texas Commission on Environmental Quality (TCEQ). Texas Environmental Excellence Award.
Selected Other Professional Contributions

*Generated and participated in grant research totaling $6,630,208. Generated 391 total publications and more than 450 research presentations.
*Member of the “Efficient Irrigation for Water Conservation in the Rio Grande Basin” project team, which was awarded the USDA–CSREES National Water Program 2007 Award as the Outstanding Integrated Activities for Water Resources, and the 2006 Vice Chancellor's Award in Excellence for Team Research.

List of Selected publications (total during career – 51 refereed journal articles, 2 book chapters, and 81 Government and Experiment Station Bulletins)


John R. C. Robinson  
Professor and Extension Economist-Cotton Marketing  
email: jrcr@tamu.edu

Current Appointment

Professor and Extension Economist-Cotton Marketing (100% extension), September 1, 2009 to present. Dr. Robinson’s current position continues his long term professional emphasis in cotton economics, risk management, and policy issues. His current position calls for statewide leadership in developing and delivering extension education materials and programs focused on cotton risk management, including market outlook, marketing strategies, public policy education, and applied research issues. The target audiences include cotton growers, landowners, merchants, futures brokers, commodity organizations, commodity fund managers, gins, warehouses, other agribusiness, extension agents, extension specialists, researchers, news media, policy makers, and the general public. Program implementation is being accomplished through intensive and extensive workshop presentations as well as publications, e-mail, websites, social media, news media channels, professional/scholarly venues, and direct individual contacts with clientele. While this program implementation is focused on Texas clientele, Dr. Robinson’s programming is delivered regionally, nationally, and internationally via the internet, recirculation by industry, presentations in national and international venues, and other industry collaborations.

Education

1993 Ph.D. Texas A&M University, Agricultural Economics  
1986 M.S. Texas A&M University, Entomology  
1983 B.S. Texas A&M University, Entomology

Past Appointments

2005 - 2009 Associate Professor and Extension Economist-Cotton Marketing, Department of Agricultural Economics, Texas A&M University  
1999 - 2004 Associate Professor and Extension Economist-Management, Texas A&M Research and Extension Center at Weslaco  
1996 - 1999 Assistant Professor and Extension Economist, Department of Agricultural Economics, Mississippi State University.  
1993 - 1996 Assistant Research Scientist - Texas A&M Research and Extension Center at Weslaco

Awards / Professional Activities

2018 Outstanding Extension Program Award, Southern Agricultural Economics Association  
2018 Superior Service Award-Extension Specialist, Texas A&M AgriLife Extension Service.  
2014 Outstanding Extension Program Award Team (“Texas A&M University Economic Impact Team”), Southern Agricultural Economics Association.
Selected Other Professional Contributions

Co-developer/co-leader of Master Marketer program, Advanced Topic Series Workshops, TRAMM Workshop and co-leader of Texas Risk Management Education Program. Dr. Waller has produced over 600 publications, and made over 1000 presentations to a combined audience of 41,000 participants. Dr. Waller has participated in 94 grants for a total of $6,506,940.

Selected publications (total during career, 20 refereed articles, 6 book chapters, 314 other)


Andrew J. Ropicki  
Assistant Professor and Extension Economist – Marine Economics  
Email: andrew.ropicki@ag.tamu.edu

Current Appointment

Assistant Professor, Extension Economist – Marine Economics, Department of Agricultural Economics, Texas AgriLife Extension Service & Texas Sea Grant, Texas A&M University. In current position since August 2018. Primary duties include statewide leadership and coordination of extension educational programs and applied research in marine resource economics with emphasis on marketing and production of seafood, aquaculture production economics, and resource economics and provision of technical expertise and educational program development.

Education

2014  Ph.D. University of Florida, Food and Resource Economics  
2009  M.S. University of Florida, Food and Resource Economics  
2004  M.S. University of Florida, Finance  
2002  B.S. University of Florida, Finance

Past Appointments

2013 – 2014  Instructor, Food and Resource Economics Department, University of Florida  
2007 – 2014  Research/Teaching Assistant, Food and Resource Economics Department, University of Florida  
2006 – 2007  Performance Analyst, Emory Investment Management, Atlanta, GA  

Selected Awards / Professional Activities (total during career 9)

2018  Invited Member of Louisiana State University Center for Natural Resource Economics & Policy  
2018  Appointed Member of the Socioeconomic Panel of the Gulf of Mexico Fishery Management Council’s Scientific and Statistical Committee  
2017  Invited Participant, Gulf of Mexico Shellfish Initiative  
2016  Texas Sea Grant Representative, National Marine Fisheries Service/Sea Grant Gulf of Mexico Red Snapper Stock Assessment Workshop  
2015  Member, National Sea Grant Law Center Policy Advisory Board (2015-Present)  
2015  Outstanding Article in Marine Resource Economics  
2011  National Marine Fisheries Service/Sea Grant Fellowship in Marine Resource Economics  
2009  University of Florida Food and Resource Economics Grinter Fellowship
**Selected Other Professional Contributions**

Since joining Texas A&M in 2014 Dr. Ropicki has published 23 extension documents on marine resource issues relevant to Texas and the broader Gulf of Mexico region with an emphasis on estimating the economic impacts of Texas fisheries including shrimp, oysters, and recreational fishing. Dr. Ropicki has produced 33 total publications, and presented 45 times to a mixture of extension, academic, and fisheries management audiences. While at Texas A&M Dr. Ropicki has participated in 10 grant/contract funded projects with a total value of $853,195. Dr. Ropicki has been recognized as a leading contributor to socioeconomic analysis of Gulf of Mexico fishery issues with appointments to regulatory, academic, and extension/outreach advisory boards and marine resource working groups.

**List of Selected publications (33 total, 6 referred, 27 other)**


Parr Rosson  
Interim Director, Texas A&M AgriLife Extension Service  
email: prosson@tamu.edu

Current Appointment

Interim Director, Texas A&M AgriLife Extension Service, April 2018-present. Responsible for the administration of the agency that employs 1,862 people working in all 254 counties of Texas. With 600 county extension agents, 300 specialists and nearly 1,000 staff, AgriLife Extension programs impact 23 million people, including 100,000 volunteers and 680,000 4-H participants.

Education

1982 Ph.D. Texas A&M University, Agricultural Economics  
1978 M.S. Texas A&M University, Agricultural Economics  
1971 B.S. Texas A&M University, Agronomy

Past Appointments

2012 - 2018 Professor and Department Head, Department of Agricultural Economics, Texas A&M University  
1993 - 2018 Professor and Extension Economist-International Trade, Department of Agricultural Economics, Texas A&M University  
1997 - 2013 Director, Center for North American Studies  
1989 - 1993 Associate Professor and Extension Economist, Department of Agricultural Economics, Texas A&M University  
1987 - 1989 Associate Professor and Extension Agricultural Economist, Department of Agricultural Economics and Rural Sociology, Clemson University  
1988 - 1989 Acting Director of International Programs, Division of Agricultural and Natural Resources, Clemson University  
1982 - 1987 Assistant Professor and Extension Agricultural Economist, Department of Agricultural Economics and Rural Sociology, Clemson University

Selected Awards / Professional Activities (total during career (15 )

2001 – 2016 U.S. Department of Agriculture and U.S. Trade Representative Advisory Committee on Grains, Feeds and Oilseeds  
2012 President, Southern Agricultural Economics Association  
2010 Lifetime Achievement Award, Southern Agricultural Economics Association  
2008 Vice Chancellor’s Award in Excellence, Team Research, Texas A&M AgriLife  
1997 Distinguished Achievement Award – Extension, The Association of Former Students, Texas A&M University  
1996 Vice Chancellor’s Award in Excellence, Extension Education, The Agriculture Program  
1993 Award for Superior Service, Texas Agricultural Extension Service, Texas A&M University System
Selected Other Professional Contributions
Extension programs have focused on international trade, trade policy, international marketing and transportation. Rosson has conducted more than 350 extension and other related presentations and activities during his career. He directed the Center for North American Studies from 1997 - 2013. Priority CNAS programs included: (1) response to national and state priorities with economic impact analysis; (2) identification and analysis of crucial emerging international trade trends and issues; and (3) development and implementation of extension programs to educate key business and policy leaders.

List of Selected publications (total during career _37 refereed, 1 book, 7 editions, 15 book chapters/monographs, 131 other selected publications)


Victoria S. Salin  
Professor and Chair, Intercollegiate Faculty of Agribusiness  
Director of the Master of Agribusiness Program  
Co-Director, Agribusiness, Food, and Consumer Economics Research Center  
email: v-salin@tamu.edu

Current Appointment

Dr. Victoria S. Salin is a Professor in the Department of Agricultural Economics at Texas A&M University specializing in agribusiness management and finance. She is also the Chair of the Intercollegiate Faculty of Agribusiness and Director of the Master of Agribusiness Program. Dr. Salin teaches managerial economics (AGEC 619), financial management (AGEC 431 and AGEC 630) and regulatory economics (AGEC 638 and AGEC 639). Dr. Salin is Co-Director of the Agribusiness, Food, and Consumer Economics Research Center. She leads the research and outreach projects of the Center relating to food safety, traceability, financial markets, and strategic management.

Education

1996  Ph.D. Purdue University, Agricultural Economics  
1984  M.S. University of Virginia, Foreign Affairs  
1982  B.S. Miami University, Political Science

Past Appointments

2003 - 2013  Associate Professor, Department of Agricultural Economics, Texas A&M University  
1996 - 2003  Assistant Professor, Department of Agricultural Economics, Texas A&M University

Awards / Professional Activities (total during career 13)

2017  Fellow, International Food and Agribusiness Management Association  
2016  Distinguished Achievement Award for Teaching, College Level, Association of Former Students, Texas A&M University  
2011  Senior Scientist, Norman E. Borlaug Institute for International Agriculture, Texas A&M University  
2008  Economist Member, Scientific Advisory Council, World Food Logistics Organization, affiliate of the Global Cold Chain Alliance (2008 to present)  
2002  Director, Texas Agricultural Finance Authority, Texas Department of Agriculture (2002 to 2012)
Selected Other Professional Contributions

Throughout her career, Dr. Salin has participated in over 40 federal, private, and internal grants with an estimated $3 million in funded dollars. Current Dr. Salin serves as Co-PI on 2 separate federally funded million-dollar projects with the USDA Agricultural Marketing Service and the USDA Foreign Agricultural Service, respectively.

Selected publications (total during career, 19 refereed articles, 2 book chapters, 54 other)


W. Douglass Shaw  
Professor  
email: wdshaw@tamu.edu  

Current Appointment  
Professor, classes taught include Frontiers in Environmental and Resource Economics (677), Water Resource Economics (606), Environmental and Resource Economics (350). Research specialties include environmental and natural resource economics, experimental economics, water resource economics, and transportation economics.  

Education  
1985 Ph.D. University of Colorado, Economics.  
1983 M.S. University of Colorado, Economics  
1977 B.S. University of Colorado, Geography and Economics  

Past Appointments  
2005 - 2018 Professor, Agricultural Economics, Texas A&M University  
1995 – 2004 Associate Professor, Resource Economics, University of Nevada, Reno  
1991 - 1995 Economic analyst, RCG/Hagler Bailly Inc (consulting firm)  
1987 - 1991 Assistant Professor, Economics, Vassar College  
1986-1987 Visiting Assistant Professor, Economics, Williams College  

Selected Awards / Professional Activities  
2012 Invited Expert Reviewer, Harvard Center for Risk Analysis  
2005-08 Associate Editor, Water Resources Research  
2009 Association of Environmental and Resource Economics, Enduring research award Committee chair  
2006-07 Recipient, PI on NSF rapid response grant  
2003-06 Recipient, PI on U.S. EPA Star Grant  
1998 President, Regional (USDA) Research Working Group (W-133)  

Selected Other Professional Contributions  

Tenure and Promotion Reviewer, Smith College, Colorado State University, University of New Mexico  

List of Selected publications (Over 85 peer-reviewed publications in total)


Anastasia Shcherbakova  
Assistant Professor  
email: ashcherb@tamu.edu

Current Appointment

Assistant professor, Department of Agricultural Economics, Texas A&M University. Areas of expertise are energy and natural resource economics, regulation, policy, and non-market strategy. Classes taught or scheduled to teach include a two-course PhD-level sequence for natural resources and environmental economics, a course on regulation and non-market strategy for graduate and advanced undergraduate students, and introductory agricultural economics at the undergraduate level.

Education

2010       Ph.D. Public Policy, University of Chicago  
2005       B.A. Economics, Knox College

Past Appointments

2013 - 2017  Clinical Assistant Professor, Naveen Jindal School of Management, UT Dallas  
2010 - 2013  Assistant Professor, Leone Family Department of Energy and Mineral Engineering, Pennsylvania State University

Selected Other Professional Contributions

Dr. Shcherbakova has worked on a variety of international research projects in the field of energy economics, often in close collaboration with engineers, and has received grants from government agencies in the U.S. and South Korea to support her work. Dr. Shcherbakova has taught classes, presented seminars, and led short courses in several countries before a diverse audience and her research has been published in a number of peer reviewed economic, energy, and environmental journals. Prior to joining the faculty of Texas A&M, she founded and directed a new M.S. program in Energy Management at UT Dallas’s Naveen Jindal School of Management.

List of Selected publications (total during career 8 peer-reviewed articles, 1 book chapter, 1 other)


Jackie G. Smith  
Professor and Extension Economist  
email: J-smith34@tamu.edu

Current Appointment

Professor and Extension Economist with primary responsibility in Extension South Plains Area Headquartered at Lubbock Center. Agricultural Economics Department. Texas A&M University.

Education

1978  Ph.D, Oklahoma State University, Agricultural Economics  
1973  M.S. University of Florida, Food and Resource Economics  
1971  B.S. Texas Tech University, Agricultural Economics

Past Appointments

1984 – 1998  Extension Economist, Agricultural Economics Department with primary responsibility Including South Plains Extension District. Texas A&M University  
1978 - 1984  Assistant Professor, College of Agriculture, Tarleton State University, Texas A&M University System.

Selected Awards (total during career 25)

2014  Distinguished Alumni Award of the College of Agriculture, Texas Tech  
2001  Superior Service Individual Award, Texas Agricultural Extension Service  
2000  Specialist of the Year, Texas County Ag Agents Association  
1998  Award for Excellence in Extension, AAEA

Selected Other Professional Contributions

I served the Specialist Association as fund-raiser for 18 years and brought in approximately $200,000 to support the annual meeting and other projects. Also served as President of the Association 2004-5. Served as a member of the team that developed the Master Marketer program. Served 2 years as a member of statewide special extension committee that addressed a large set of issues resulting in many changes for the County Agent position all over the state.

Selected publications

McCorkle, etc. Waller, Amosson, J.G. Smith, S.J. Bevers. The Effect of the Master Marketer Program on Participant’s knowledge Master Marketer Program. Texas Journal of Agriculture and Natural Resources. 28:50-69


Jackie Smith, “Pricing Ghost Grain Sorghum” Southwest Farm Press. July, 1992

Connie Smotek  
Extension Program Specialist II  
Email: csmotek@tamu.edu

Current Appointment

Extension Program Specialist II, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. Primary duty is to provide leadership for the Tax Practitioner Workshops.

Education

2016 M.S. Texas A&M University, Accounting  
1986 B.S. Texas A&M University, Animal Science, Production Option

Past Appointments

2017 - 2018 Extension Program Specialist II, Department of Agricultural Economics, Texas A&M AgriLife Extension.  
2001 - 2017 Administrative Assistant - Department of Agricultural Economics, Texas AgriLife Extension, Texas A&M University  
1995 - 2001 Administrative Assistant – Department of Agricultural Economics, Texas A&M University

Awards / Professional Activities (total during career 2)

2000 Vice Chancellor’s Award in Excellence, Clerical Support Role On-Campus for 2000.  
1998 Vice Chancellor’s Award in Excellence, Member of the Texas Agricultural Market Research Center Team for 1998 (Group Award).

Selected Other Professional Contributions

Provided administrative leadership and support for continuing educations programs in 2018 for 3089 tax preparers for a total of 47,388 contact hours.

Selected publications (total during career, 2 articles)


H. Clark Springfield, III  
Professor of Practice  
email: cspringfield@tamu.edu

Current Appointment

Professor of Practice  
Areas of Specialization includes agribusiness management, and farm and ranch management  
Courses taught include: Agribusiness Management, Principles of Farm and Ranch Management, Land Economics, Ethics in Agricultural Economics and Agribusiness, and Cases in Agribusiness Finance

Education

2008  Ph.D. Texas A&M University, Agricultural Education  
1988  M.S. Texas A&M University, Agricultural Economics  
1084  B.S. Texas A&M University, Agricultural Economics

Past Appointments

2011 - 2014  Division Manager - Western Milling, Goshen, CA  
2010 - 2011  Vice President, Sales and Marketing - Ran-Pro Farms, Inc., Tyler, TX  
2008 – 2010  Marketing Manager & Livestock Equipment Business Unit Leader - Osborne Industries, Osborne, KS  
1995 - 2005  Various Management Positions, Sweetlix, LLC, Salt Lake City, UT  
1987 – 1991  Agricultural Economist, Texas Department of Corrections, Agriculture Division, Huntsville, TX  
1985 – 1987  Credit Analyst, Texas Ag Credit Corp, Bryan, TX  
1984 – 1985  Sales Representative, Tufts and Sons, Amarillo, TX

Selected Awards / Professional Activities

2003, 2016-2018  National Agri Marketing Association, Southwest Chapter President  
2013  Honorary Kentucky Colonel, Commonwealth of Kentucky

Selected Other Professional Contributions

Accomplished professional with a track record of demonstrated success and goal achievement with increasing levels of responsibility for operations, business development, sales and marketing management of agribusinesses.

Twenty-two years’ experience providing leadership and management of personnel, leading and influencing teams, and coaching individuals to accomplish defined goals and objectives; fourteen years in the animal nutrition industry; twelve years of direct responsibility for the
P&L of an operating unit; six years’ experience conducting market research and analysis; and, seven years managing the marketing functions of agribusinesses.

Extensive experience developing and managing relationships to grow the business in multiple channels of distribution including: distributor channels, retail dealer networks, mass merchandisers, and direct to livestock producers.

Energetic, positive leader known for achieving results and improving bottom line profitability under adverse market conditions.

List of Selected publications

**Springfield, H.** (2008), Feed and farm supply store managers’ perceptions of employee training as a contributor to competitive advantage. Texas A&M University, College Station, TX.


Reid B. Stevens  
Assistant Professor  
stevens@tamu.edu

Current Appointment

Assistant Professor. Research focus on Food-Energy-Water Nexus. Teaching responsibilities include developing and teaching courses in energy economics at the undergraduate and graduate level (AGEC 350, 489, 621, 676, 677, 689).

Education

2015  Ph.D. University of California, Berkeley, Agricultural and Resource Economics  
2008  M.S. University of California, Berkeley, Agricultural and Resource Economics  
2006  B.A. Brigham Young University, Economics,

Past Appointments

2015 - 2018  Assistant Professor, Council of Economic Advisers, Texas A&M University  
2010 - 2012  Economist, Agricultural Economics, Executive Office of the President  
2007 - 2010  Research Assistant, Agricultural and Resource Economics, University of California, Berkeley

Selected Awards / Professional Activities (total during career 2)


Selected Other Professional Contributions

Dr. Stevens has developed a visible research profile by publishing in peer-reviewed journals and by presenting my research at many regional, national, and international conferences, as well as departmental seminars at top-ranked research universities. Dr. Stevens and his co-authors, have been contacted by a number of Federal Agencies to discuss policy and present our research, including the Commodity Futures Trading Commission, the Federal Reserve System, the Department of Energy, and the White House Council of Economic Advisers. These research accomplishments have led to securing significant external grant funding. Dr. Stevens has been PI or co-PI for research projects in Afghanistan and Mexico with a total external funding of $4,847,266. He is a committee member for 19 graduate students (14 Ph.D., 5 Masters); 6 of those students have graduated, the remainder are in progress.

List of Selected publications (total during career 7 Refereed Articles, 1 Book, 1 Book chapter, 1 Report)


William J. Thompson
Assistant Professor and Extension Economist
w-thompson@tamu.edu

Current Appointment

Primary responsibilities are to provide leadership in the development and delivery of extension educational programs in farm, ranch and natural resource management in 23 counties of west central Texas. This entails providing economic analysis, training and teaching materials to agricultural producers, landowners, commodity groups, county extension agents, extension specialists and other clientele. Often these efforts are multi-disciplinary, thus involving specialists, faculty and industry professionals from other areas of specialization. Delivery of agricultural economics extension programming includes: a) one-on-one review, b) analysis and evaluation of individual farm/ranch operations, c) educational meetings, d) fee-based workshops and programs, f) extension publications, g) web-based delivery systems and h) direct mail. Other areas of focus include applied research and result-demonstration programs. Specific commodity expertise covers wheat, grain sorghum, cotton, cow-calf and stocker cattle, sheep and goats.

Education

1990 M.S. Texas A&M University, Agricultural Economics
1987 B.S. Arizona State University, Agribusiness Management/Finance

Past Appointments

2001 - 2007 Assistant Professor and Extension Economist-Management, Department of Agricultural Economics, Texas A&M University
1990 - 2001 Extension Economist-Management, Kansas Farm Management Association, Department of Agricultural Economics, Kansas State University

Selected Awards / Professional Activities (total during career 2)

2016 Texas Agricultural Extension Service Superior Service Unit Award. (Agricultural Economics Extension Farm Bill Education Team)
2005 Texas Agricultural Extension Service Superior Service Team Award (Tomorrow’s Top Agricultural Producer Program).

Selected Other Professional Contributions

Mr. Thompson has produced 104 publications and made over 700 presentations to a combined audience of 23,000 participants. Mr. Thompson has participated in 24 grants for a total of $1,336,603.

Selected publications (total during career – 2 refereed article and 102 other)
**Thompson, William**, “Impact of Cotton Being Reintroduced to the Farm Program as a Title I Commodity”, Texas Rural Land Value Trends 2017, American Society of Farm Managers and Rural Appraisers-Texas Chapter, Junction, TX, May 2018.


Gregory L. Torell  
Assistant Professor, AgriLife Research at El Paso  
email: gregory.torell@ag.tamu.edu

Current Appointment

Assistant Professor, AgriLife Research at El Paso. Primary duties include research on issues related to water and natural resource economics, with a focus on Texas and the El Paso region in particular.

Education

2016 Ph.D. University of Wyoming, Economics  
2010 M.S. New Mexico State University, Agricultural Economics  
2008 B.A. New Mexico State University, Economics  
B.A. New Mexico State University, Foreign Language – German

Past Appointments

2010 - 2016 Research Assistant, Department of Economics and Finance – University of Wyoming  
2008 - 2010 Research Assistant, Department of Agricultural Economics – New Mexico State University

Selected Awards / Professional Activities (total during career __4__)  
2014 University of Wyoming - Attilio and Hedy Bedont Outstanding College of Business Graduate Student Award  
2014 University of Wyoming - Department of Economics and Finance Best Graduate Student Teaching Award  
2014 University of Wyoming - Promoting Intellectual Engagement in the First Year Award  
2010 New Mexico State University - Outstanding Graduate Student in Agricultural Economics Award

Selected Other Professional Contributions

Co-PI for 3 external grants and 1 internal grants, all of which are competitive, for a total of $101,281 attributable to my program. Currently supervising 1 post-doctoral researcher and 1 graduate research associate. Have supervised 1 graduate researcher and 1 undergraduate researcher in the past.

List of Selected publications (total during career __8__)  


Dmitry Vedenov
Associate Professor
email: vedenov@tamu.edu

Current Appointment

Associate Professor. AGEC 448 (Agricultural Commodity Futures), AGEC 601 (Commodity Futures and Options), AGEC 630 (Cases in Agribusiness Finance). Research interests include commodity futures markets, risk management in agriculture, crop insurance

Education

2001 Ph.D. Agricultural, Environmental, and Development Economics, The Ohio State University
1998 M.A. Economics, The Ohio State University
1991 B.S. Applied Mathematics and Physics, Moscow Institute for Physics and Technology

Past Appointments

2007-2009 Assistant Professor, Department of Agricultural Economics, Texas A&M University
2001-2007 Assistant Professor, Department of Agricultural and Applied Economics, University of Georgia

Selected Awards / Professional Activities (total during career 7)

2012 Outstanding Faculty Award, Dept. of Agricultural Economics, Texas A&M University
2007 JARE Outstanding Article Journal Article for 2006

Selected Other Professional Contributions

Dr. Vedenov has taught 10 different undergraduate and graduate courses in agribusiness and agricultural finance and has been a faculty leader of France Agribusiness Study Abroad program since 2009. Dr. Vedenov coached marketing competition teams that won 1st (2011) and 2nd (2012) places in FDRS Marketing Competition. He published 35 peer-reviewed articles, made 64 presentations to academic and professional audiences (including 14 invited), and presented six workshops on Computational Methods in Economics at professional conferences. Dr. Vedenov participated in 11 grants for a total of $1,038,956.

List of Selected publications (total during career 35 peer-reviewed articles, 1 book chapter, and 4 other)


Mark L. Waller  
Professor, Acting Dept. Head, and Associate Dept. Head-Extension  
e-mail: mwaller@tamu.edu

Current Appointment

Professor, Acting Dept. Head, Associate Dept. Head-Extension, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University. The Acting Dept. Head role since May 2018, and the Associate Dept. Head-Extension since 2005. Primary duty is to provide administrative leadership for the Agricultural Economics Department and the Extension Program Unit. Extension/applied research interests include agricultural marketing and price risk management.

Education

1988  Ph.D. University of Illinois, Agricultural Economics  
1980  M.S. Southern Illinois University, Agricultural Economics  
1979  B.S. Southern Illinois University, Double major, Agricultural Education and Plant and Soil Sciences

Past Appointments

1999 - 2005  Professor and Extension Economist-Grain Marketing and Policy, Department of Agricultural Economics, Texas A&M University  
1993 - 1999  Associate Professor and Extension Economist-Grain Marketing and Policy, Department of Agricultural Economics, Texas A&M University  
1988 - 1993  Assistant Professor and Extension Economist-Grain Marketing and Policy, Department of Agricultural Economics, Texas A&M University  
1984 - 1988  Research Assistant - Department of Agricultural Economics, Univ. Of Illinois  

Awards / Professional Activities (total during career 16)

2016  Texas Agricultural Extension Service Superior Service Unit Award. (Agricultural Economics Extension Farm Bill Education Team)  
2014  Southern Agricultural Economics Association, Outstanding Extension Program Team Award. (Extension Impact Publication Team).  
2012  Texas A&M AgriLife Extension Service Superior Service Team Award. (Extension Impact Publication Team)  
2008  Texas Agricultural Extension Service Superior Service Team Award (FARM Assistance).  
2000  United States Department of Agriculture, Group Honor Award for Excellence.  
1998  American Agricultural Economics Association (AAEA) Award for Distinguished Extension Program (Group Award).
Selected Other Professional Contributions

Co-developer/co-leader of Master Marketer program, Advanced Topic Series Workshops, TRAMM Workshop and co-leader of Texas Risk Management Education Program. Dr. Waller has produced over 600 publications, and made over 1000 presentations to a combined audience of 41,000 participants. Dr. Waller has participated in 94 grants for a total of $6,506,940.

Selected publications (total during career, 8 refereed articles, 2 book chapters, 595 other)


**Waller, Mark L.**, Wayne A. Hayenga, Luiz Cesar Vieira de Souza, and Rodrigo Sinaiid Zandonadi. “Exploring Brazilian and Argentine Agriculture.” *Faculty Paper Series* 2005-01, Department of Agricultural Economics, Texas A&M University, College Station, Texas March 2005.
J. Mark Welch  
Professor and Grain Marketing Extension Specialist  
email:jmwelch@tamu.edu

Current Appointment

Dr. Mark Welch serves as a professor in the Department of Agricultural Economics at Texas A&M University and Grain Marketing Economist with the Texas A&M AgriLife Extension Service with responsibilities to provide information and educational materials related to grain crop marketing and price risk management. This includes market outlook presentations, distribution of market information, development of risk management strategies, research on pertinent topics related to the grain industry, and collaboration with colleagues at Texas A&M University and other educational institutions and industry groups. Dr. Welch is the director of the nationally recognized Master Marketer Program and The Executive Program for Agricultural Producers (TEPAP). Dr. Welch has developed a teaching marketing simulation exercise and computer programs to analyze hedging strategies and estimate crop insurance benefits.

Education

2006  Ph.D. Texas Tech University, Agricultural Economics  
1999  M.S. West Texas A&M University, Agriculture: Business and Economics  
1979  B.A. Graceland College, Economics

Past Appointments

2018-present  Professor and Extension Economist, Texas A&M AgriLife Extension Service  
2013-2018  Associate Professor and Extension Economist, Texas A&M AgriLife Extension Service  
2007-2013  Assistant Professor and Extension Economist, Texas A&M AgriLife Extension Service  
2005-2007  Research Associate, Texas Tech University  
2003-2005  Research Assistant, Texas Tech University  
1979-2003  Farmer/Rancher, Castro County, Texas

Selected Awards / Professional Activities (total during career: 11)

2018  State Specialist of the Year in Texas Agriculture, Texas County Agricultural Agents Association  
2016  Texas Agricultural Extension Service Superior Service Unit Award, Agricultural Economics Extension Farm Bill Education Team  

Selected Other Professional Contributions

Dr. Welch provides information and educational materials related to grain crop marketing and price risk management. This includes outreach in the form of market analysis, primarily outlook presentations, and risk management education. His weekly newsletters for Feed
Grains and Wheat are emailed to 461 contacts. He has participated in 312 programs in Texas with total attendance of 19,521, 48 national programs, and 11 international programs.

**List of Selected publications (total during career: 16 refereed journal articles, 30 extension publications, 4 book chapters)**


Gary W. Williams  
Professor of Agricultural Economics  
Co-Director, Agribusiness, Food, and Consumer Economics Research Center (AFCERC)  
Senior Scientist, Borlaug Institute for International Agriculture  
email: gwwilliams@tamu.edu

Current Appointment

Dr. Williams is Professor and Co-Director of AFCERC in the Department of Agricultural Economics at Texas A&M University. He is the AFCERC chief operations officer and leads AFCERC research and outreach projects on commodity and agribusiness markets and policy and international trade. His areas of teaching and research emphases include commodity promotion programs, international agricultural trade, agricultural policy, marketing, and price analysis.

Education

1981 Ph.D. Purdue University, Agricultural Economics  
1977 M.S. Purdue University, Agricultural Economics  
1974 B.S. Brigham Young University, Economics

Past Appointments

2008 - 2018 Associated Professor, Department of International Affairs, Bush School of Government and Public Service, Texas A&M University  
1988 - 2009 Professor and Director, Texas Market Research and Development Center, Department of Agricultural Economics, Texas A&M University  
1986 - 1988 Associate Professor, Department of Economics, Iowa State University  
1984 - 1988 Assistant Coordinator, Meat Export Research Center, Iowa State University  
1983 - 1986 Assistant Professor, Department of Economics, Iowa State University  
1981 - 1983 Senior Economist, International Agriculture Service, Chase Econometrics

Awards / Professional Activities (total during career 14)

2016 Appointed Member of the Review Oversight Committee for the Genome Canada funded Project: “Application of Genomics to Improve Disease Resilience and Sustainability in Pork Production” (2016 to present)  
1999 "Article of the Year" Northeastern Agric. and Resource Econ. Assoc. for “Examining Packer Choice of Slaughter Cattle Procurement and Pricing Methods.”  
1998 Vice Chancellor’s Award in Excellence for Team Research, Texas A&M University  
1988 Distinguished Service Award, Meat Export Research Center, Iowa State University  
1974 Most Outstanding Student in Economics, Brigham Young University

Selected Other Professional Contributions
Nearly $7.3 million in total research project funding; Extensive international work, particularly in Latin America; Over 80 invited papers/presentations and over 30 selected papers; International reputation in U.S. and global market analyses of oilseed and products, sheep and lamb, livestock and meat, and checkoff programs; Invited Congressional testimony on trade topics.

Selected publications (total during career: 47 refereed articles, 5 books, 16 book chapters, 104 research reports, 146 other)


Richard T. Woodward  
Professor  
r-woodward@tamu.edu

Current Appointment

Position: Professor, Department of Agricultural Economics.  
Areas of specialization: Environmental and Natural Resource Economics  

Courses Currently Taught  
AGEC 636 – Markets, Welfare, and Policy  
AGEC 642 – Dynamic Optimization in Agricultural and Applied Economics  

Courses Previously Taught  
AGEC 350 – Environmental and Resource Economics  
AGEC 673 – Fundamentals of Resource & Environmental Economics  
AGEC 677 – Frontiers in Resource & Environmental Economics  
RPTS 655 – Biodiversity Science I  

Education

1997  Ph.D.: University of Wisconsin, Madison, Agricultural and Applied Economics  
1994  M.S.: University of Wisconsin, Madison, Agricultural Economics  
1984  B.A.: Middlebury College, Economics  

Past Appointments

2003 - 2010  Associate Professor, Dept. of Agricultural Economics, Texas A&M University  
1997 - 2003  Assistant Professor, Dept. of Agricultural Economics, Texas A&M University  

Selected Awards / Professional Activities (total during career 15)

2018-present  Co-Editor, Journal of Agricultural and Resource Economics  
2011-2017  Associate Editor, Economics Bulletin,  
2013  Outstanding Teaching of a Course Award, Southern Agricultural Economics Association  
2005-2011  Associate Editor, Marine Resources Economics  
2009 – present  Editorial Board, Land Economics  

List of Selected publications (total during career: 46 refereed manuscripts, 1 book, 7 book chapters)


Current Appointment


Education

2003  Ph.D. in Agricultural Economics, University of California, Berkeley
1998  B.S. in Economics, Peking University

Past Appointments

2015  Professor, Agricultural Economics, Texas A&M University
2009 - 2015 Associate Professor, Agricultural Economics Texas A&M University
2005 - 2009 Assistant Professor, Agricultural Economics, Texas A&M University
2003 - 2005 Assistant Professor, Assistant Professor, University of Guelph

Selected Awards / Professional Activities (total during career 12)

2012 - 2017 Associate Editor, *American Journal of Agricultural Economics*
2015  Chair, Econometrics Section, AAEA
2012, 2013 Topic leader, Labor and household economics, AAEA Annual Meeting
2010, 2011 Topic leader, Production economics, AAEA Annual Meeting
2009  Research Associate, Info-Metrics Institute, American University
2006 - 2009 Editorial board, *Journal of Agricultural and Resource Economics*

Selected Other Professional Contributions

Supervising and advising a large number of Ph.D. students. Referee for a wide range of professional journals and publishers in economics, agricultural economics and statistics. Committee member and presenter at various professional conferences and seminars. Extensive experience in grants and contracts with NSF, USDA, World Bank, USAID, and Inter-American Development Bank and other NGOs.

List of Selected publications (total during career 44)


Current Appointment

Extension Program Specialist III, Department of Agricultural Economics, Texas AgriLife Extension Service, Texas A&M University since 2015. Primary duty is to provide leadership and coordination of risk management education in South Texas (Districts 10, 11, and 12), and provide support for county agents, specialists and producers in applied research and marketing in District 11.

Education

1975 M.S. Texas Tech University, Agricultural Economics
1973 B.S. Texas Tech University, Agricultural Economics

Past Appointments

2010 - 2015 Extension Program Specialist II, Department of Agriculture Economics, Texas A&M University
2005 - 2009 Extension Program Specialist I, Department of Agriculture Economics, Texas A&M University
2004 - 2005 Loan Officer, Small Business Administration, Fort Worth, Texas
2002 - 2003 Management & Account Positions, Rent-A-Center, Fort Worth, Texas
2001 - 2001 Membership Director, U.S. Chamber of Commerce, Fort Worth, Texas
1999 - 2000 Marketing Director, All American Builders, Inc., Hurst, Texas
1997 - 1998 Executive Director, American Ostrich Association, Fort Worth, Texas
1978 - 1996 Management & Research Positions, Farm Credit Bank of Texas, Austin, Texas
1975 - 1978 Agricultural Economist, Federal Reserve Bank of Texas, Dallas, Texas

Awards / Professional Activities (total during career 19)

2017 Southern Risk Management Education Center Project of Excellence Award – Sugar Cane Aphid Excel Tool Project Team
2017 Texas Commission on Environmental Quality Excellence Award – The Agriculture Water Efficiency (AWE) Project Team
2016 Texas A&M AgriLife Extension Superior Service Award – Program Specialist
2016 Texas A&M AgriLife Extension Superior Service Unit Award – 2014-15 Farm Bill Education
2011 TCEQ Environmental Excellence Award for Agriculture Water Conservation, Agriculture Demonstration Initiative (ADI) Project
2010 AAEA Distinguished Extension/Outreach Program Group Award
2010 SAEA Distinguished Extension Program Team Award
2008 WAEA Outstanding Extension Program Award
2007 Texas A&M AgriLife Extension Superior Service Unit Award—Financial and Risk Management Assistance Team
Selected Other Professional Contributions

Education outreach, coordination and reporting: 96 grant reports; 525 Farm Assistance reports; 157 education programs with 7,716 contacts; 43 education and project coordination meetings with 831 attendees; 82 South Texas Farm Assistance Notes distributed to agents, specialist, and administrators. Mr. Young has participated in 14 grants for a total of $1,017,097.

Selected Publications (771 total during career: 6 refereed articles, 18 papers & proceedings, 48 extension publications, and 699 other, including 525 Farm Assistance Reports)


Samuel D. Zapata  
Assistant Professor and Extension Economist  
email: Samuel.zapata@ag.tamu.edu

Current Appointment

Assistant Professor and Extension Economist, Texas AgriLife Extension Service, Texas A&M University. Dr. Zapata serves as the Extension Economist Specialist for the 20-county area of the South Extension District. Dr. Zapata develops and coordinates extension educational programs and applied research related to Farm Management and Marketing by providing technical expertise and educational materials for producers, extension agents, specialists, clientele, and organizations.

Education

2012  Ph.D. Clemson University, Applied Economics  
2009  M.S. Clemson University, Applied Economics and Statistics  
2006  B.S. Pan-American Agricultural University “El Zamorano”, Agriculture

Past Appointments

2015 - Present  Assistant Professor and Extension Economist, Department of Agricultural Economics, Texas A&M University, Texas A&M AgriLife Extension  
2013  Data Scientist and Modeling Analyst, Cresco Ag LLC  
2011 - 2012  Graduate Research Assistant, The John E. Walker Department of Economics, Clemson University  
2007 - 2011  Graduate Research Assistant, Department of Applied Economics and Statistics, Clemson University  
2006 - 2007  Horticulture Instructor, Pan-American Agricultural University “El Zamorano”

Awards / Professional Activities (total during career 9)

2018  Outstanding Program in Agriculture and Natural Resources: Small Acreage Program. Texas A&M AgriLife Extension Service District 12.  
2016  Outstanding program delivered in Cameron County. “Small Acreage Production Education for Local Growers.” Texas A&M AgriLife Extension Service – Cameron County Office.  
2013  Third place on the poster competition at the 2013 Annual Meetings of the Southern Agricultural Economics Association.  
2009  Public Service and Agriculture Next Generation Graduate Fellowship, Clemson University.

Selected Other Professional Contributions

Lead and Co-founder of the Rio Grande Valley Small Acreage Program. Dr. Zapata has produced over 60 publications, and have made over 96 presentations to a combined audience of 2,432 participants. Dr. Zapata has participated in 14 publicly and internally funded projects for a total of $2,764,366.
Selected publications (total during career, 11 refereed articles, 11 extension publications, 66 other)


Yu (Yvette) Zhang  
Associate Professor  
email: yzhang@tamu.edu  

Current Appointment

Associate Professor, Department of Agricultural Economics, Texas A&M University  
Course Taught: AGEC105 (Honors), AGEC672  

Education

2010  Ph.D.  Texas A&M University, Economics  
2004  Ph.D.  Duke University, Biology with Graduate Certificates in Ecology and Complex and Nonlinear Systems  
1998  B.S.  Peking University, Biology

Past Appointments

2013 - 2018  Assistant Professor, Department of Agricultural Economics, Texas A&M University  
2010 – 2013  Visiting Assistant Professor, Department of Agricultural Economics, Texas A&M University  
2004 – 2005  Postdoctoral Researcher, Department of Molecular and Cellular Biology, University of Guelph

Selected Awards / Professional Activities

2015  Editorial Board, International Journal of Food Science, Nutrition and Dietetics  
2012 - 2014  Program Reviewer, Agricultural and Applied Economics Association Annual Meeting  
2011  Session Chair, Economics of the Internet and Wireless Communication, Midwest Economics Association Annual Meeting

Selected Other Professional Contributions

2017  Faculty Affiliate, Texas A&M Energy Institute  
2016  Faculty Associate, Texas A&M Human Behavior Lab

Dr. Zhang has been awarded $5,172,273 for research grants with $1,276,253 attributable to her program. She has published 15 publications in high-quality peer-reviewed journals and 1 book chapter. She has chaired/co-chaired in 5 PhD committees and 3 Master committees, served as committee members for 9 PhD students and 3 Master students.

List of Selected publications (total during career 16 refereed articles, 1 book chapter)


Zhang, Y. Y., M.A. Palma, S. Jin, and X. Yuan. “U.S. Consumer Reactions to China’s Shuanghui Acquisition of Smithfield Foods and Its Neural Basis”, Agribusiness, accepted.

Texas A&M University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, and doctoral degrees. Consistent with comprehensive standard 3.13.1, the following provides the institution’s official position on its purpose, governance, programs, degrees, diplomas, certificates, personnel, finances, and constituencies and is published in official university documents as noted.

**Purpose**

Classified by the Carnegie Foundation as a Research Doctoral University (Highest Research Activity), Texas A&M embraces its mission of the advancement of knowledge and human achievement in all its dimensions. The research mission is a key to advancing economic development in both public and private sectors. Integration of research with teaching prepares students to compete in a knowledge-based society and to continue developing their own creativity, learning, and skills beyond graduation.

The institution’s official mission statement, published both on the institution’s web page as well as in its annual university catalog, is:

Texas A&M University (Texas A&M) is dedicated to the discovery, development, communication and application of knowledge in a wide range of academic and professional fields. Its mission of providing the highest quality undergraduate and graduate programs is inseparable from its mission of developing new understandings through research and creativity. It prepares students to assume roles in leadership, responsibility and service to society. Texas A&M assumes as its historic trust the maintenance of freedom of inquiry and an intellectual environment nurturing the human mind and spirit. It welcomes and seeks to serve persons of all racial, ethnic and geographic groups, women and men alike, as it addresses the needs of an increasingly diverse population and a global economy. In the twenty-first century, Texas A&M University seeks to assume a place of preeminence among public universities while respecting its history and traditions.

**Governance**

The governance of the institution was described in the 2012 certification of compliance submitted to
Texas A&M University at College Station, the flagship institution of the Texas A&M University System, has branch campuses located in Galveston, Texas and Doha, Qatar. A ten-member Board of Regents, appointed by the Governor, directs the Texas A&M System. The appointment of each Regent follows Texas Education Code (TEC, Chapter 85, Section 21).

TEC outlines the duties and responsibilities of the Board of Regents. These responsibilities are also defined in System Policy 02.01 Board of Regents and TEC 51.352. The Board elects two officers: Chair and Vice Chair. There are four standing committees: Audit, Academic & Student Affairs, Finance, and Buildings & Physical Plant. Special committees may be appointed by the Chair with Board approval.

At Texas A&M University the President is the chief executive officer; the President is not the presiding officer of the Board of Regents. The President reports to the state-appointed Board of Regents through the Chancellor of the Texas A&M University System. System Policy 2.05 Presidents of System Member Universities defines the duties of the President. The appointment of the President follows conditions set forth in System Policy 01.03 Appointing Power and Terms and Conditions of Employment, section 2.2.

**Personnel**

The institution is led by the President and members of his cabinet:

Michael K. Young, President  
Carol A. Fierke, Provost and Executive Vice President, Chief Academic Officer  
Jerry R. Strawser, Executive Vice President and Chief Financial Officer  
Michael Benedik, Vice Provost  
M. Dee Childs, Vice President for Information Technology and CIO  
Michael G. O’Quinn, Vice President for Government Relations  
Col Michael E. Fossum, Vice President and COO, TAMU-Galveston  
Barbara A. Abercrombie, Vice President for HR & Organizational Effectiveness  
Blanca Lupiani, Interim Vice President and Associate Provost for Diversity  
Mark Barteau, Vice President for Research  
Carrie L. Byington, Senior Vice President TAMU Health Science Center, Dean of the College of Medicine, and Vice Chancellor for Health Services  
Daniel J. Pugh, Sr., Vice President for Student Affairs  
Joseph P. Pettibon, II, Vice President of Enrollment and Academic Services  
Gen Joe E. Ramirez, Jr. Commandant, Corps of Cadets  
Amy B. Smith, Senior Vice President and Chief Marketing and Communications Officer  
Scott Woodward, Director of Athletics
R. C. Slocum, Special Advisor to the President
David Batson, Sr. Associate Athletic Director, Athletic Compliance
Shane Hinkley, Vice President of Brand Development
Andrew P. Morris, VP of Entrepreneurship & Economic Development, Dean of the I-School

**Programs, Degrees, Diplomas, and Certificates**
See the Institutional Summary submitted to SACSCOC

**Finances**
See the Financial Profile 2017 submitted to SACSCOC.

**Southern Association of Colleges and Schools Commission on Colleges**

**INSTITUTIONAL SUMMARY FORM**
**PREPARED FOR COMMISSION REVIEW**

**GENERAL INFORMATION**

**Name of Institution:** Texas A&M University

**Name, Title, Phone number, and email address of Accreditation Liaison**
Michael T. Stephenson
Associate Provost for Academic Affairs and SACSCOC Accreditation Liaison
979.845.4016 mstephenson@tamu.edu

**Name, Title, Phone number, and email address of Technical Support person for the Compliance Certification**
Alicia M. Dorsey
Assistant Provost for Institutional Effectiveness
979.862.2918

**IMPORTANT:**

**Accreditation Activity (check one):**
Submitted at the time of Reaffirmation Orientation
Submitted with Compliance Certification for Reaffirmation
Submitted with Materials for an On-Site Reaffirmation Review x
Submitted with Compliance Certification for Fifth-Year Interim Report
Submitted with Compliance Certification for Initial Candidacy/Accreditation Review
Submitted with Merger/Consolidations/Acquisitions
Submitted with Application for Level Change

**Submission date of this completed document:**  March 15, 2018
EDUCATIONAL PROGRAMS

1. Level of offerings (Check all that apply)

Diploma or certificate program(s) requiring less than one year beyond Grade 12
Diploma or certificate program(s) of at least two but fewer than four years of work beyond Grade 12
Associate degree program(s) requiring a minimum of 60 semester hours or the equivalent
designed for transfer to a baccalaureate institution
Associate degree program(s) requiring a minimum of 60 semester hours or the equivalent
not designed for transfer
  X Four or five-year baccalaureate degree program(s) requiring a minimum of 120 semester
    hours or the equivalent
X Masters degree program(s)
  Work beyond the masters level but not at the doctoral level (such as Specialist in Education)
X Doctoral degree program(s)
Other (Specify)

2. Types of Undergraduate Programs (Check all that apply)

Occupational certificate or diploma program(s)
Occupational degree program(s)
Two-year programs designed for transfer to a baccalaureate institution
  X Liberal Arts and General
X Teacher Preparatory
X Professional
  Other (Specify)

GOVERNANCE CONTROL

Check the appropriate governance control for the institution:

Private (check one)
  Independent, not-for-profit
Name of corporation OR
  Name of religious affiliation and control:
1. History and Characteristics

**History.** Texas A&M University (TAMU) opened in 1876 as the state’s first public institution of higher education. TAMU is one of a select few institutions in the nation to hold land grant, sea grant (1971) and space grant (1989) designations. A mandatory military component was a part of the land grant designation until 1965; currently, it is one of only three institutions with a full-time Corps of Cadets, leading to commissions in all branches of service. TAMU has two branch campuses, one in Galveston, Texas, (established in 1962, officially merged with TAMU in 1991) and one in Doha, Qatar (established in 2003) and 13 approved off-campus instructional locations. In 2013, the Texas A&M University System Health Science Center merged with TAMU. This same year, TAMU acquired the School of Law from Texas Wesleyan University. Finally, TAMU is classified by the Carnegie Foundation as a Research University (very high research activity).

**Mission.** Texas A&M University is dedicated to the discovery, development, communication, and application of knowledge in a wide range of academic and professional fields. Its mission of providing the highest quality undergraduate and graduate programs is inseparable from its mission of developing new understandings through research and creativity. It prepares students to assume roles in leadership, responsibility and service to society. Texas A&M assumes as its historic trust the maintenance of freedom of inquiry and an intellectual environment nurturing the human mind and spirit. It welcomes and seeks to serve persons of all racial, ethnic and geographic groups as it addresses the needs of an increasingly diverse population and a global
economy. In the 21st century, Texas A&M University seeks to assume a place of preeminence among public universities while respecting its history and traditions.

**Enrollment Profile.** Fall 2016 total enrollment was 66,175 students (across all campuses and locations), with 60,435 (91.3%) located on the main campus in College Station. Undergraduate enrollment made up 77.4% of the total student body, with Hispanic, Black, and American Indian students making up 23.8% of the total student body. TAMU Galveston enrolled 2,178 students as of the fall, 2016, with TAMU Qatar enrolling 543 students.

**Admissions Process.** Automatic admission is available in two ways: (1) for Texas resident applicants in the top 10% of their high school graduating class; and, (2) for applicants who rank in the top 25% of their high school graduating class and achieve a combined SAT math and SAT critical reading score of at least 1300, with a test score of at least 600 in each component or 30 composite on the ACT with a 27 in the math and English components. The review of all other applicants is based on academic potential, distinguishing characteristics, exceptional circumstances, and personal achievements.

**Peer Institutions.** Georgia Institution of Technology; The Ohio State University; Pennsylvania State University; Purdue University; University of California at Berkeley, Davis, Los Angeles, and San Diego; University of Florida; University of Illinois at Urbana-Champaign; University of Michigan; University of Minnesota; University of North Carolina at Chapel Hill; University of Texas at Austin; and University of Wisconsin – Madison.

2. **List of Degrees**
List all degrees currently offered (A. S., B.A., B.S., M.A., Ph.D., for examples) and the majors or concentrations within those degrees, as well as all certificates and diplomas. For each credential offered, indicate the number of graduates in the academic year previous to submitting this report. Indicate term dates.

<table>
<thead>
<tr>
<th>Academic Program</th>
<th>Program Level</th>
<th>AY16-17 Graduates</th>
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<td><strong>Interdisciplinary Programs</strong></td>
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**College of Agriculture & Life Science**

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**College of Veterinary Medicine and Biomedical Sciences**

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**TAMU at Galveston Branch Campus Programs**

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3. Off-Campus Instructional Locations and Branch Campuses
List all locations where 50% or more credit hours toward a degree, diploma, or certificate can be obtained primarily through traditional classroom instruction. Report those locations in accord with the Commission’s definitions and the directions as specified below.

**Off-campus instructional sites**—a site located geographically apart from the main campus at which the institution offers **50% or more** of its credit hours for a diploma, certificate, or degree. This includes high schools where courses are offered as part of dual enrollment. For each site, provide the information below. **The list should include only those sites reported and approved by SACSCOC.** Listing unapproved sites below does not constitute reporting them to SACSCOC. In such cases when an institution has initiated an off-campus instructional site as described above without prior approval by SACSCOC, a prospectus for approval should be submitted immediately to SACSCOC.

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302 | Page
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<td>School of Public Health - McAllen Teaching Site</td>
<td>2101 South McColl Road</td>
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<td>McAllen, TX 78503</td>
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<td>PUBLIC HEALTH</td>
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<tr>
<td>Texas A&amp;M Higher Education Center at McAllen</td>
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<td>MULTIDISCIPLINARY ENGINEERING TECHNOLOGY</td>
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<td>Travis Park Plaza</td>
<td>711 Navarro Street, Suite 250</td>
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<td>JURISPRUDENCE</td>
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<td></td>
<td>San Antonio, TX 78205</td>
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Institutions with off-campus instructional sites at which the institution offers 25-49% credit hours for a diploma, certificate, or degree—including high schools where courses are offered as dual enrollment—are required to notify SACSCOC in advance of initiating the site. For each site, provide the information below.

<table>
<thead>
<tr>
<th>Name of Site</th>
<th>Physical Address (street, city, state, country)</th>
<th>Date Notified SACSCOC by SACSCOC</th>
<th>Date Implemented by the institution</th>
<th>Educational programs offered (specific degrees, certificates, diplomas) with 25-49% credit hours offered at each site</th>
<th>Is the site currently active? (At any time during the past 5 years, have students been enrolled and courses offered? If not, indicate the date of most recent activity.)</th>
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<tbody>
<tr>
<td>Texas A&amp;M - South Texas College</td>
<td>3201 Pecan Blvd., Bldg. G McAllen, TX 78501</td>
<td>2017</td>
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Branch campus—an instructional site located geographically apart and independent of the main campus of the institution. A location is independent of the main campus if the location is (1) permanent in nature, (2) offers courses in educational programs leading to a degree, certificate, or other recognized educational credential, (3) has its own faculty and administrative or supervisory organization, and (4) has its own budgetary and hiring authority. **The list should include only those branch campuses reported and approved by SACSCOC.** Listing unapproved branch campuses below does not constitute reporting them to SACSCOC. A prospectus for an unapproved branch campuses should be submitted immediately to SACSCOC.
<table>
<thead>
<tr>
<th>Institution</th>
<th>Address</th>
<th>Year</th>
<th>Major</th>
<th>Degree</th>
<th>Recent Activity</th>
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<td>Texas A&amp;M University at Galveston</td>
<td>200 Seawolf Pkwy Galveston, TX 77553</td>
<td>1992</td>
<td>MARINE BIOLOGY</td>
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<td>MARINE FISHERIES</td>
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<td>MARINE TRANSPORTATION</td>
<td>BS</td>
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<td>MARITIME ADMINISTRATION &amp; LOGISTICS</td>
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<td>OCEAN AND COASTAL RESOURCES</td>
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<td>Texas A&amp;M University at Qatar</td>
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<td>2003</td>
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4. Distance and Correspondence Education

Provide an initial date of approval for your institution to offer distance education. Provide a list of creditbearing educational programs (degrees, certificates, and diplomas) where 50% or more of the credit hours are delivered through distance education modes. For each educational program, indicate whether the program is delivered using synchronous or asynchronous technology, or both. For each educational program that uses distance education technology to deliver the program at a specific site (e.g., a synchronous program using interactive videoconferencing), indicate the program offered at each location where students receive the transmitted program. Please limit this description to one page, if possible.

*Initial date of approval to offer distance education – February, 2000*

<table>
<thead>
<tr>
<th>Credit Bearing Academic Programs</th>
<th>Synchronous, Asynchronous, or Both</th>
<th>Site</th>
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<td>Advanced International Affairs</td>
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<tr>
<td>Aerospace Engineering</td>
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<td>Agricultural Development</td>
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<tr>
<td>Agricultural Education</td>
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<td>Agriculture eLearning Development</td>
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<tr>
<td>Agricultural Systems Management</td>
<td>MS</td>
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<td>Analytics</td>
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<td>Applied Behavior Analysis</td>
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<td>Applied Statistics</td>
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<td>Computer Engineering</td>
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<td>Educational Administration</td>
<td>MEd</td>
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<td>Educational Human Resource Development</td>
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<td>Educational Psychology</td>
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<td>Family Nurse Practitioner</td>
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<td>Forensic Healthcare</td>
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<td>Health Education</td>
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<td>Hispanic Bilingual Education</td>
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<td>Hospitality Management</td>
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Bryan, TX; Round Rock, TX
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<td>College Station, TX; Livermore, CA; Sandia, NM</td>
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5. Accreditation

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<tr>
<th>Accrediting Agency</th>
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<td>Accreditation Council for Pharmacy Education</td>
<td>Irma Lerma Rangel College of Pharmacy</td>
<td>April 2014</td>
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<tr>
<td>American Bar Association</td>
<td>Texas A&amp;M University School of Law</td>
<td>October 2016</td>
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<td>American Chemical Society</td>
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<td>October 2017&lt;br&gt;February 2012</td>
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<td>American Psychological Association</td>
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<td>May 2015&lt;br&gt;May 2015&lt;br&gt;October 2017</td>
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<td>American Society of Agricultural and Biological Engineers</td>
<td>Agricultural Systems Management</td>
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<td>American Veterinary Medical Association Council on Education</td>
<td>Veterinary Medicine</td>
<td>December 2015</td>
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<td>Association to Advance Collegiate Schools of Business</td>
<td>The business baccalaureate, masters, and doctoral programs in Mays Business School</td>
<td>January 2017</td>
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<td>Didactic Program in Dietetics</td>
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<td>Commission on Accreditation of Athletic Training Education</td>
<td>Athletic Training</td>
<td>July 2013</td>
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<td>Commission on Accreditation of Healthcare Management Education</td>
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<td>Oral &amp; Maxillofacial Surgery</td>
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<td>March 2017</td>
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<td>Dental Hygiene</td>
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<td>• Orthodontics &amp; Dentofacial Orthopedics</td>
<td>Orthodontics &amp; Dentofacial Orthopedics</td>
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<td>• Pediatric Dentistry</td>
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<td>• Periodontics</td>
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<td>• Prosthodontics</td>
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<td>Council on Education for Public Health</td>
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<td>April 2011</td>
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<td>Accreditation Date</td>
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<tr>
<td>Engineering Accreditation Commission of ABET</td>
<td>College Station Undergraduate Programs in:</td>
<td>September 2016</td>
</tr>
<tr>
<td></td>
<td>• Aerospace Engineering</td>
<td></td>
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<tr>
<td></td>
<td>• Biological &amp; Agricultural Engineering</td>
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<tr>
<td></td>
<td>• Biomedical Engineering</td>
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<td></td>
<td>• Chemical Engineering</td>
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<td></td>
<td>• Civil Engineering</td>
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<td></td>
<td>• Computer Engineering</td>
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<td></td>
<td>• Electrical Engineering</td>
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<tr>
<td></td>
<td>• Industrial Engineering</td>
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<td></td>
<td>• Mechanical Engineering</td>
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<tr>
<td></td>
<td>• Nuclear Engineering</td>
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<td></td>
<td>• Ocean Engineering</td>
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<tr>
<td></td>
<td>• Petroleum engineering</td>
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<tr>
<td></td>
<td>• Radiological Health Engineering</td>
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<td></td>
<td>TAMU at Qatar Undergraduate Programs in:</td>
<td>October 2014</td>
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<tr>
<td></td>
<td>• Chemical Engineering</td>
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<tr>
<td></td>
<td>• Electrical Engineering</td>
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<tr>
<td></td>
<td>• Mechanical Engineering</td>
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<tr>
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<td>• Petroleum Engineering</td>
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<tr>
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<td>TAMU at Galveston Undergraduate Programs in:</td>
<td>October 2016</td>
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<td></td>
<td>• Offshore and Coastal Systems Engineering</td>
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<td>Engineering Technology Accreditation Commission of ABET</td>
<td>College Station Undergraduate Programs in:</td>
<td>October 2013</td>
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<tr>
<td></td>
<td>• Electronic Systems Engineering</td>
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<td></td>
<td>• Manufacturing &amp; Mechanical Engineering Technology</td>
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<td>Galveston Undergraduate Programs in:</td>
<td>October 2013</td>
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<tr>
<td></td>
<td>• Marine Engineering Technology</td>
<td></td>
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<tr>
<td>Forensic Science Education Programs Accreditation Commission (FEPAC)</td>
<td>Forensics &amp; Investigative Sciences Program</td>
<td>September 2016</td>
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<tr>
<td>Institute of Food Technologists</td>
<td>Food Science &amp; Technology</td>
<td>December 2016</td>
</tr>
<tr>
<td>Landscape Architectural Accreditation Board</td>
<td>Bachelor – Landscape Architecture</td>
<td>February 2015</td>
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<td>Master – Landscape Architecture</td>
<td>September 2017</td>
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<tr>
<td>Organization</td>
<td>Program or Degree</td>
<td>Date</td>
</tr>
<tr>
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</tr>
<tr>
<td>Liaison Committee on Medical Education</td>
<td>Medical Education Degree Program</td>
<td>August 2012</td>
</tr>
<tr>
<td>National Architectural Accrediting Board</td>
<td>Architecture</td>
<td>March 2017</td>
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<tr>
<td>Network of Schools of Public Policy, Affairs, and Administration</td>
<td>The Master of Public Service and Administration degree in the Bush School of Government and Public Service</td>
<td>April 2014</td>
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<tr>
<td>National Recreation and Park Association</td>
<td>Recreation, Park and Tourism Sciences</td>
<td>January 2016</td>
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<tr>
<td>Planning Accreditation Board</td>
<td>Urban and Regional Planning</td>
<td>March 2013</td>
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<tr>
<td>Society for Range Management</td>
<td>Rangeland Ecology and Management</td>
<td>April 2017</td>
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<tr>
<td>Society of American Foresters</td>
<td>Forestry</td>
<td>March 2013</td>
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<tr>
<td>Texas Education Agency</td>
<td>Programs in professional education</td>
<td>March 2011</td>
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</tbody>
</table>

(2) If SACS Commission on Colleges is not your primary accreditor for access to USDOE Title IV funding, identify which accrediting agency serves that purpose.

Not applicable.

(3) List any USDOE recognized agency (national and programmatic) that has terminated the institution’s accreditation (include the date, reason, and copy of the letter of termination) or list any agency from which the institution has voluntarily withdrawn (include copy of letter to agency from institution).

None.

(4) Describe any sanctions applied or negative actions taken by any USDOE-recognized accrediting agency (national, programmatic, SACSCOC) during the two years previous
to the submission of this report. Include a copy of the letter from the USDOE to the institution.

None.

6. Relationship to the U.S. Department of Education
Indicate any limitations, suspensions, or termination by the U.S. Department of Education in regard to student financial aid or other financial aid programs during the previous three years. Report if on reimbursement or any other exceptional status in regard to federal or state financial aid.

None.

Document History
Adopted: September 2004
Revised: March 2011
Revised: January 2014
## Financial Profile 2017

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Total All Revenues &amp; Other Additions (IPEDS Part B, line 25)</td>
<td>$3,448,016,331</td>
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<tr>
<td>Instruction (IPEDS Part C line 01, Column 1)</td>
<td>$869,772,172</td>
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<tr>
<td>Research (IPEDS Part C line 02, Column 1)</td>
<td>$745,169,263</td>
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<td>Public Service (IPEDS Part C line 03, Column 1)</td>
<td>$251,228,181</td>
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<td>Academic Support (IPEDS Part C line 05, Column 1)</td>
<td>$301,091,516</td>
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<tr>
<td>Student Services (IPEDS Part C line 06, Column 1)</td>
<td>$99,426,748</td>
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<td>Institutional Support (IPEDS Part C line 07, Column 1)</td>
<td>$114,397,808</td>
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<tr>
<td>Scholarships &amp; Fellowships, excluding discounts &amp; allowances (IPEDS Part C line 10, Column 1)</td>
<td>$95,452,110</td>
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<td>Auxiliary Enterprises (IPEDS Part C line 11, Column 1)</td>
<td>$228,444,634</td>
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<td>Hospital Services (IPEDS Part C line 12, Column 1)</td>
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<td>Independent Operations (IPEDS Part C line 13, Column 1)</td>
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<td>Other Expenses &amp; Deductions (IPEDS Part C line 14, Column 1)</td>
<td>$333,851,618</td>
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## Financial Indicators (From Audited FY 2016 Financial Statements)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>$5,868,331,289</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$676,361,109</td>
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<tr>
<td>Total Unrestricted Net Assets</td>
<td>$4,023,541,614</td>
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<tr>
<td>Expendable/Temporarily Restricted Net Assets</td>
<td>$189,683,286</td>
</tr>
<tr>
<td>Nonexpendable/Permanently Restricted Net Assets</td>
<td>$978,745,280</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$2,135,725,112</td>
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<tr>
<td>Tuition and Fees, Net</td>
<td>$563,324,692</td>
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<tr>
<td>Current Debt</td>
<td>$84,318,326</td>
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<tr>
<td>Long-term Debt</td>
<td>$1,355,011,877</td>
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</tbody>
</table>

## Signatures of Verification

We certify that the information provided in the Financial Profile and Indicators is correct.

[Signatures]

Chief Executive Officer

Chief Financial Officer

Respondent (if other than CEO or CFO)

Please Mail Signed Profile Form To:
SACSCOC
Attn: Profiles
1866 Southern Lane
Decatur, GA 30033

Texas A&M University, College Station, TX
MEMORANDUM

TO: Vice Presidents
    Directors Reporting to the President

SUBJECT: Delegation of Authority

To ensure that operations are unaffected when I am out of the office for extended periods of time, I hereby issue delegation of authority to the following individuals in the order they are listed. They are authorized to act on matters regarding Texas A&M University, Texas A&M University – Galveston, Texas A&M University at Qatar, Texas A&M University Health Science Center and Texas A&M University School of Law.

1. Karan L. Watson, Provost and Executive Vice President

2. Jerry R. Strawser, Executive Vice President for Finance and Administration & CFO

Tracy Cullen will know how to contact me if necessary.

Michael K. Young

cc: Mr. John Sharp