Unit Mission
To serve the Commonwealth of Kentucky by providing knowledge and information that will assist in solving social and economic issues and problems related to agriculture, resources, food and fiber industries, and rural economies important to the state, region and international community. This will be accomplished through research, resident instruction, and extension.

<table>
<thead>
<tr>
<th>Unit Objective</th>
<th>Related Goals/Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC Objective # 1 Prepare Students for Leadership in an Innovation-Driven Economy and Global Society</td>
<td>AEC Goal # 1 Prepare Students for Leadership in an Innovation-Driven Economy and Global Society</td>
</tr>
<tr>
<td>AEC Metric 1-1 Entering MS students’ average GRE’s will be 950 or higher</td>
<td>AEC Metric 1-10 80% of PhD students will graduate from the program within four years</td>
</tr>
<tr>
<td>AEC Metric 1-11 Department will have completed PhD program curriculum revision and have new 700-level classes in place</td>
<td>AEC Metric 1-12 75% or more of entering freshmen and transfers will graduate within five years of entering UK</td>
</tr>
<tr>
<td>AEC Metric 1-13 10% or more of undergraduates will have an internship or independent study by the time they graduate</td>
<td>AEC Metric 1-14 The department will obtain an exit survey from at least 50% of AEC seniors</td>
</tr>
<tr>
<td>AEC Metric 1-15 The Learning Outcomes Assessment process will be fully implemented</td>
<td>AEC Metric 1-2 At least 50% of MS students will have a paper or poster by the time they graduate</td>
</tr>
<tr>
<td>AEC Metric 1-3 75% of our full-time MS students will finish in 2 years</td>
<td>AEC Metric 1-4 Graduate student employment will be tracked</td>
</tr>
<tr>
<td>AEC Metric 1-5 Maintain total MS student number at 25 or less (but near 25) while recruiting both high quality in- and out-of-state prospects</td>
<td>AEC Metric 1-6 Keep PhD enrollment at more than 25 high quality students</td>
</tr>
<tr>
<td>AEC Metric 1-7 The PhD GRE score goal is 1052 or above</td>
<td>AEC Metric 1-8 100% of our PhD students will have a presentation at a professional meeting or a publication submitted or published before they graduate</td>
</tr>
<tr>
<td>AEC Metric 1-9 Departmental PhD’s will be candidates (have finished the agriculture qualifying exam) 30 months into the program</td>
<td>Ag Goal 1. Prepare Students for Leadership in an Innovation-Driven Economy and Global Society</td>
</tr>
<tr>
<td>UK Goal 1. Prepare Students for Leading Roles in an Innovation-driven Economy and Global Society.</td>
<td>Related Mission Area</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
</tbody>
</table>
Strategies
Develop plans and actions to integrate experiential education into the curriculum.
Aggressively promote student participation in personal and professional development opportunities beyond the classroom, including student research, student and professional organization membership, international travel experience, and internships.
Increase opportunities for distance learning.
Increase faculty recognition for excellence in academic and extracurricular advising
Implement incentives for leveraging graduate student financial support with grant funds.
Implement the University graduation agreements to enhance timely graduation of students.

Assessment Method

1. Entering MS students’ average GRE’s will be 950 or higher - average from the prior fall.
2. At least 50% of MS students will have a paper or poster by the time they graduate - poll of graduating graduate students.
3. 75% of full-time MS students will graduate in two years - tracked by DGS.
4. Track (MS & PhD graduates) employed in university, government, private sector, those who return to home countries, and those who are underemployed or unemployed.
5. Maintain total MS student number at 25 or less (but near 25) while recruiting both high quality in- and out-of-state prospects - count.
6. Keep PhD enrollment at more than 25 high quality students - count.
7. PhD entrants’ average GRE will be 1052 or higher - average from prior fall.
8. 100% of our PhD students will have a presentation at a professional meeting, or publication submitted or published before they graduate - poll.
9. Our PhD’s will be candidates (have finished the agriculture qualifying exam) 30 months into the program - DGS measures.
10. 80% of our PhD students will graduate from the program within four years - DGS measures.
11. We will have completed the PhD program curriculum revision and have the new 700-level classes in place by 2014.
12. 75% or more of entering freshmen and transfers will graduate within five years of entering UK - from UK statistics.
13. 10% or more of undergraduates will have an internship or independent study by the time they graduate - DUS.
14. Obtain an exit survey from at least 50% of our seniors - DUS.
15. The Learning Outcomes Assessment process will be fully implemented by 2014.

Actual Results

Data Tables
<table>
<thead>
<tr>
<th>Metric #</th>
<th>Title</th>
<th>Goal</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2010-13</th>
<th>2013-14</th>
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<tr>
<td>1</td>
<td>MS GRE’s</td>
<td>950</td>
<td>1121</td>
<td>982</td>
<td>1048</td>
<td></td>
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<tr>
<td>2</td>
<td>MS w/ Paper or Poster</td>
<td>50%</td>
<td>67%</td>
<td>78%</td>
<td>58%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>MS Finish in 2 years</td>
<td>75%</td>
<td>100.00%</td>
<td>40%</td>
<td>73%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Grad Student Placement *</td>
<td>Track</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>MS enrollment 25 or less</td>
<td>25</td>
<td>28</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PhD enrollment 25 +</td>
<td>23</td>
<td>26</td>
<td>31</td>
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<tr>
<td>7</td>
<td>PhD GRE’s</td>
<td>1052+</td>
<td>1202</td>
<td>1170</td>
<td>1063</td>
<td></td>
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<tr>
<td>8</td>
<td>PhD presentations</td>
<td>100%-</td>
<td>100.00%</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>PhD as Candidates in 30 months</td>
<td>75%</td>
<td>63%</td>
<td>42%</td>
<td>44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>PhD will finish in 4 years</td>
<td>80%</td>
<td>25%</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Complete new PhD curriculum * by 2014</td>
<td>progressing</td>
<td>progressing</td>
<td>progressing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>5-year undergrad graduation</td>
<td>75%</td>
<td>60%</td>
<td>62%</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Undergrad Internships by graduation</td>
<td>10%</td>
<td>33%</td>
<td>16%</td>
<td>18%</td>
<td></td>
<td></td>
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<tr>
<td>14</td>
<td>Undergrad exit survey from over</td>
<td>50%</td>
<td>72%</td>
<td>9%</td>
<td>52%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Complete Outcomes by 2014</td>
<td>progressing</td>
<td>progressing</td>
<td>fully implemented</td>
<td>and improving</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* see year
Descriptive Results
Descriptive Results

Year 1

*We graduated seven graduate students in 2009-2010, four PhD, and three MS. Two MS and three PhDs went to a university, one MS works for US government, and one international PhD returned home to work for his government.

*We have offered some of the potential 700-level classes we are proposing as part of the new PhD curriculum, so we are on schedule to have it implemented and approved by 2014.

*The department is on or ahead of schedule relative to college and university guidelines to complete our process by 2014.

Year 2

*We graduated four graduate students in 2010-2011, three PhD, and one MS. One international PhD went to government in home country, one went to industry, and one is a post doc and part-time instructor.

*As of 2010-2011 the PhD program has been approved in concept by the department. We are on schedule to have it implemented and approved by 2014. An MS program revision is before the University Senate for approval.

*In 2010-2011 we completed a full cycle of the assessment process and are now improving the instruments and methods of raising response rates. The department continues to be on or ahead of schedule relative to college and university guidelines to complete our process by 2014.

Year 3

*We graduated (or will graduate) nine students in 2011-2012, three PhD, and six MS. One PhD will become a faculty member in the department and the other two are interviewing for academic and government agency positions. Among the MS graduates, two entered PhD programs, one works for NOAA, one works in a law office, and two are currently in the job market.

*The MS program revision was approved by the University Senate and AEC 531 (Price Analysis) became a formally numbered course. Little progress has occurred on the PhD program revision, although a faculty member who will teach one of the PhD level courses (AEC 606) was hired.

*The undergraduate program received recognition for meeting all expectations in the assessment process and methods are improving with each iteration. Evidence of long-term learning is elusive, however.

Year 4
Analysis of Results and Reflection

Year 1

Only 62.5% of our PhD's were candidates in 30 months. Our goal is 75%. 62.5% is the highest rate since we started keeping records in 2003, so we are moving in the right direction.

25% of our PhD's finished in four years as opposed to our 80% goal. We have been as high as 66.3% and as low as 0, but clearly much work needs be done.

60% of our BS students finished in 5 years as opposed to our 75% goal. Our freshman rate was 58%, while it was 61% for transfers. Usually the numbers for freshmen are nearer 100%. This could be a serious situation if this is the beginning of a trend.

AEC graduated seven graduate students in 2009-2010, four PhD and three MS. Two MS and three PhDs went to a university, one MS works for the US government, and one international PhD returned home to work for his government.

We have offered some of the potential 700-level courses that were proposed as part of the new PhD curriculum and are now on track to have the new curriculum implemented by 2014.

The department is on track or ahead of schedule relative to college and university guidelines to complete the Learning Outcomes Assessment process by 2014.

Year 2

At least for the PhD program, the weak job market encourages students to delay graduation and work on publications. Some students who are not finishing in a timely manner appear unlikely to ever finish, but remain on our rolls.

AEC graduated four graduate students in 2010-2011 - three PhD and one MS. One international PhD went into government work in his country, one went into industry, and one is a post-doctoral student and part-time instructor. The MS student is in a PhD program.

As of 2010-2011, the PhD program has been approved in concept by the department. We are on schedule to have the curriculum changes implemented and approved by

Improvement Actions

Year 1

Only 62.5% of our PhD's were candidates in 30 months. Our goal is 75%. 62.5% is the highest rate since we started keeping records in 2003, so we are moving in the right direction. The chair and the DGS will continue working with faculty and students to continue improvement. What we are doing is working.

25% of our PhD's finished in four years as opposed to our 80% goal. We have been as high as 66.3% and as low as 0, but clearly much work needs be done. We have implemented a yearly survey of students and professors to assess progress and take action when students are moving too slowly. This has only been an active process for a year so it should improve.

60% of our BS students finished in 5 years as opposed to our 75% goal. Our freshman rate was 58% while it was 61% for transfers. Usually the numbers for freshmen are nearer 100%. This could be a serious situation if this is the beginning of a trend. The DUS and the undergraduate committee will investigate this issue and propose a response.

Year 2

After Senate approval of the MS program revision, we will submit the PhD program revision. The Graduate and Undergraduate Committees are meeting jointly to plan effective use of teaching resources.

Constrained assistantship sources may aid timely completion. Continue encouraging presentations and publications by funding travel, via the second-year PhD paper requirement, and through more intensive assistantship work.

We may want to revisit the goal of having fewer than 25 MS students.
2014. An MS program revision is currently before the Senate for approval.

A record number of graduate students presented at our national meetings in 2011, and there is much enthusiasm for continuing this trend.

In 2010-2011, AEC completed a full cycle of the Assessment process and is now improving the instruments and methods of raising response rates. The department continues to be on or ahead of schedule relative to college and university guidelines to complete the Learning Outcomes Assessment process by 2014.

**Year 3**

1. Entering MS students' GRE scores averaged 1048 for 2011-2012, which was an increase from 2010-2011 when the average was 982.

2. In 2011-2012, 58% of MS students completed a paper or poster, which is above the stated departmental goal.

3. For year three (2011-2012) of the reporting period, 73% of full-time MS students graduated in two years, compared to 40% for 2010-2011.

4. For 2011-2012, one PhD will become a faculty member in the department, while two others are interviewing for academic and government agency positions. Among the MS graduates, two entered PhD programs, one works for NOAA, one works in a law office, and two are currently in the job market.

5. The MS enrollment of 25 students for 2011-2012 is the goal for the number of graduate students in the department.

6. PhD enrollment for 2011-2012 was 31 students, which met the goal of more than 25 high quality students.

7. PhD entrants' average GREs for 2011-2012 was 1063, which exceeded the goal of 1052.

The PhD program revision requires more PhD-level classes than the four currently offered. With constrained teaching resources, we envision offering some PhD-level classes on an alternating year basis. The instructor of our math camp and a PhD-level quantitative course left the department and will take time to replace.

1. Maintaining high GRE scores for entering MS students will continue to be a priority of the department.

2. The department will continue the campaign to prioritize MS student travel funding for conference presentations, and to use the second-year paper and course term papers to encourage graduate students to publish journal articles.

3. Timely completion by students in the MS program is very close to meeting the goal and will remain a priority.

4. The PhD job market conditions are similar to last year, with the same incentives for students to delay graduation while they build up their CV's. Students on visas also have an incentive to delay graduation so they can remain in the U.S. as long as possible. The results are based on small numbers (i.e., 4 PhD students entered the program 4 years ago), so we expect much variation in year-to-year results.

5. While no action needed is currently needed, the department chair will continue to monitor this metric.

6. Although no action is necessary at present, the department chair will continue to monitor this metric.

7. The department will continue to seek highly qualified candidates for the PhD program with GRE scores above 1052.
8. 100% of all PhD students presented at professional meetings, submitted articles, or published articles prior to graduation, which met the stated goal.

9. In 2011-2012, only 44% of PhD students reached the candidacy stage in 30 months, which falls below the goal of 100%. Of the 9 who did not make timely progress, two have not been active in the program for some years, one withdrew from the program, three are straight-through students who began with the MS-level coursework, one is a part-time student who graduated in 2011, and one was advised by his major professor to delay his qualifying exam until his research was more advanced.

10. In 2011-2012, no students graduated from the PhD program within four years, which falls well short of the 80% goal.

11. The completion of the PhD program curriculum revisions are progressing and are on target for completion by 2014.

12. The undergraduate graduation rate slipped from 62% in 2010-2011 to 50% in 2011-2012 for unknown reasons.

13. The percentage of undergraduates who have participated in either an internship or independent study rose from 16% in 2011-2012 to 18% in 2012. This figure remains well below the goal of 100%.

14. In 2011-2012, 52% of all AEC seniors completed an exit survey, which is above the goal of 50%.

15. While the Learning Outcomes Assessment was fully implemented in 2011-2012, improvements are still being made to the process.

Year 4

Year 5

8. A positive result of achieving the 100% goal is that students are now more aware of the need to have presentations and publications on their CV when they enter the job market. The department is getting excellent grad student representation at conferences.

9. The chair will work with the DGS and graduate advisors to improve timely progress of PhD students to the candidacy stage.

10. The chair and the DGS will consult to determine if a four-year time line is too ambitious and to discuss impediments to the completion of the four-year time line.

11. Progress toward completion of the new PhD curriculum was aided by the hiring of a faculty member who will teach AEC 606, but hindered by the continued absence of a replacement for our departed math instructor.

12. The undergraduate graduation rate is slipping, for unknown reasons. Expected changes in pre-program requirements (i.e., minimum grades of C in ECO 201 and MA 123, key preparatory courses) are expected to aid timely completion of the undergraduate program. After these changes, we expect that more students will choose the AEC major for the right reasons, which will help us deliver instruction of more appropriate and consistent rigor.

13. Promotion of undergraduate internships is rapidly increasing, and will eventually be part of a new experiential education requirement in the next 1-2 years. We are working on specific ideas to make study abroad more affordable and less daunting to undergraduate students.

14. The undergraduate assessment process is evolving into an established routine in our second full year, and exit surveys are now more integrated into the capstone classes.

15. The undergraduate program received recognition for meeting all expectations in the Learning Outcomes Assessment process, and methods are improving with each iteration.
Unit Objective
AEC Objective # 2 Promote Research and Creative Work to Increase the Intellectual, Social and Economic Capital of Kentucky and the World Beyond its Borders

Related Goals/Metrics
AEC Goal # 2 Promote Research and Creative Work to Increase the Intellectual, Social and Economic Capital of Kentucky and the World Beyond its Borders
AEC Metric 2-1 Publication of at least three refereed journal articles per research FTE per year
AEC Metric 2-2 Grant expenditures will be $700,000 or more each year
Ag Goal 2. Promote Research and Creative Work to Increase the Intellectual, Social and Economic Capital of Kentucky and the World Beyond its Borders
UK Goal 2. Promote Research and Creative Work to Increase the Intellectual, Social, and Economic Capital of Kentucky and the World beyond its Borders.

Related Mission Area
Research and Creative Work

Strategies
Aggressively pursue extramural research funding from all sources.
Review the College’s “Targets of Opportunity” to identify research where cutting-edge science and critical mass exist to enhance national and international prominence.

Assessment Method
1. Publication of at least three refereed journal articles per research FTE per year - College Metrics.
2. Grant expenditures will be $700,000 or more each year - College Metrics.

Actual Results

Data Tables

<table>
<thead>
<tr>
<th>Metric #</th>
<th>Title</th>
<th>Goal</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2010-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Journal Articles/ FTE</td>
<td>3</td>
<td>4.31</td>
<td>2.21</td>
<td>2.08</td>
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<tr>
<td>2</td>
<td>Grant Expenditures</td>
<td>$700,000+</td>
<td>$1,233,935</td>
<td>$867,860</td>
<td>$849,692</td>
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</table>
# Descriptive Results

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
</table>

## Analysis of Results and Reflection

**Year 1**

We met all goals.

**Year 2**

Journal articles per FTE were calculated from the 2010 KAES report, and were below the goal. Data sources may be different than Year 1, which was under a different chair.

Grant expenditure for 2010-2011 were $876,860, 25.3% above the stated goal of $700,000.

**Year 3**

1. Journal articles per research FTE is again low this year. Only four faculty with a 20% or higher research appointment met the goal individually. Of the 10 faculty with more than a 50% research appointment, 8 did not meet the goal individually. Two of those 8 had atypically low-production years, one regularly publishes through respected venues other than refereed journal articles, and one transitioned from an administrative role in 2011.

2. Grant expenditures for 2011/2012 were $849,692, well in excess (21.4%) of the $700,000 goal.

**Year 4**

**Year 5**

## Improvement Actions

**Year 1**

The metrics for this objective were met. No action is planned.

**Year 2**

Faculty will be informed of lower-than-expected publishing activity, while graduate students are currently more active in publishing due to ongoing encouragement.

Extramural funding will continue to be a priority for the department.

**Year 3**

1. Maintaining a high priority on extramural funding helps ensure productivity in publishing, due to mandatory reporting involved with most grants, and their effectiveness in getting graduate students involved in research. Publishing per research FTE will naturally improve over the next few years, as the demographics of the department shift toward more faculty who require journal articles to get promoted. We also expect improvement as we continue the campaign to encourage publishing by graduate students.

2. The department will continue to maintain a high priority on extramural funding and to monitor this indicator.
Unit Objective
AEC Objective # 3 Develop the Department's Human and Physical Resources to Achieve Top 20 Stature

Related Goals/Metrics
AEC Goal # 3 Develop the Department’s Human and Physical Resources to Achieve Top 20 Stature
AEC Metric 3-1- Two student papers submitted for awards each year
AEC Metric 3-2 We will maintain active mentoring committees for all non-tenured faculty
AEC Metric 3-3 We will have teaching, research, and extension awards received by faculty annually
Ag Goal 3. Develop the Human and Physical Resources of the College to Achieve Top 20 Stature
UK Goal 3. Develop the Human and Physical Resources of the University to Achieve the Institution's Top 20 Goals.

Related Mission Area
Overall

Strategies
The department will strive to recruit, develop and retain nationally distinguished faculty.
We will opportunistically seek out resources to recruit exceptional mid-career faculty who bring elevated recognition and leadership to the department.
We will continue our plan for professional development and mentoring of new faculty.
We will continue reviewing and improving evaluation and coaching procedures, with appropriate rewards, that match performance expectations for all employees.
Pursue increased resources for high-quality research, instructional, and service programs.
Students will be mentored in undergraduate and graduate research projects and we will submit quality papers for University, regional, and national competitions.
We will recruit and equip student teams for competitions.

Assessment Method
1. At least two undergraduate or graduate papers, theses, or dissertations will be submitted for consideration in regional or national competitions each year - Poll by DUS & DGS.
2. We will maintain active mentoring committees for all non-tenured faculty - Chair Report.
3. We will have teaching, research, and extension awards received by faculty annually - Chair Report.

Actual Results
Data Tables

<table>
<thead>
<tr>
<th>Metric #</th>
<th>Title</th>
<th>Goal</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2010-13</th>
<th>2013-14</th>
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<tbody>
<tr>
<td>1</td>
<td>Student award nominations</td>
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<td>3</td>
<td>3</td>
<td>3</td>
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<td>2</td>
<td>Active Asst Prof Mentoring</td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
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<td></td>
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<tr>
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<td>T/R/E faculty awards</td>
<td>5</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>Year</td>
<td>Descriptive Results</td>
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</table>
### Analysis of Results and Reflection

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Improvement Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The metrics all exceeded goals, so no action is needed.</td>
<td>The metrics all exceeded goals so no action is needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All metrics met, one graduate student won an outstanding thesis award, additional award nominations are in progress.</td>
<td>1. AEC will continue to foster research and creativity in undergraduate and graduate papers, theses, and dissertations submitted for regional or national competitions.</td>
</tr>
<tr>
<td>2. The mentoring committees continue to work with new faculty.</td>
<td>2. We will retain commitment to new faculty mentoring committees.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. One student was nominated for an outstanding thesis award, and one student won both a College-wide outstanding graduate student award and a University-wide quality achievement award with a substantial monetary award.</td>
<td>1. Students will continue to be encouraged to submit papers, theses, and dissertations for regional and national awards. A member of our awards committee recently compiled an encyclopedic list of awards and due dates, and this committee has been extremely diligent in preparing award nominations. We hope to continue this in the future, especially for students and junior faculty.</td>
</tr>
<tr>
<td>2. The mentoring committees are continually assessed for effectiveness.</td>
<td>2. Ongoing oversight is needed to ensure that junior faculty are meeting frequently enough with their mentoring committees, and that they are interpreting advice as was intended by the mentoring committee. The chair plays an important role in mentoring, both formally (i.e., performance reviews) and informally. In the case of extension faculty, meetings with Gary Palmer at the college level have been productive.</td>
</tr>
<tr>
<td>3. A trio of AEC extension and research faculty won the 2012 KASEP outstanding extension project award. An extension faculty member is currently nominated for a University-wide award for outstanding service to the state. The department is currently nominating two staff for an University-wide award for promoting efficiency and cost savings.</td>
<td>3. The department will continue to encourage the submission of faculty for annual awards. While this does not contribute to specific metrics, we are encouraging staff members to attend University training sessions more than ever before. This is intended partly to increase their human capital for the department's short-term benefit, but mainly to empower them to reach their professional goals.</td>
</tr>
</tbody>
</table>

| Year 4 | |
| Year 5 | |
Unit Objective
AEC Objective #4 Promote Diversity and Inclusion

Related Goals/Metrics
AEC Goal # 4 Promote Diversity and Inclusion
AEC Metric 4-1 30% of faculty will participate in some international experience each year
AEC Metric 4-2 Emphasize faculty ethnic (1 or more) and gender diversity (2 or more female faculty)
AEC Metric 4-3 Attract and maintain a graduate student enrollment from underrepresented groups that is equal to or greater than the average at the University (7.8%)
AEC Metric 4-4 Maintain African American BS enrollment at or above the 6.6% (state's population)
AEC Metric 4-5 Maintain or surpass international undergraduate enrollment of 2%
AEC Metric 4-6 10% of students will have an international academic experience
AEC Metric 4-7 Female enrollment will reach 30%
Ag Goal 4 Promote Diversity and Inclusion
UK Goal 4. Promote Diversity and Inclusion

Related Mission Area
Overall

Strategies
Actively recruit students, faculty, and staff from underrepresented groups into Agricultural Economics.
Utilize alumni from underrepresented groups to assist in recruiting students and placement.
Actively pursue international undergraduate, graduate, and faculty exchange programs.
Utilize our undergraduate curriculum to provide diverse experiences.
Use our faculty and graduate student diversity to enhance the undergraduate experience.

Assessment Method
1. 30% of faculty will participate in some international experience each year - Chair's poll.
2. Emphasize faculty ethnic (1 or more) and gender diversity (2 or more female faculty) - Chair's report.
3. Attract and maintain a graduate student enrollment from underrepresented groups that is equal to or greater than the average at the University (7.8%) - DGS Report.
4. Maintain African American BS enrollment at or above the 6.6% (state's population) - DUS Report.
5. Maintain or surpass international undergraduate enrollment of 2% - DUS Report.
6. 10% of students will have an international academic experience - DUS report.
7. Female enrollment will reach 30% - DUS report.

Actual Results

Data Tables
<table>
<thead>
<tr>
<th>Metric #</th>
<th>Title</th>
<th>Goal</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2010-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International Experience</td>
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<td>54%</td>
<td>50%</td>
<td>45%</td>
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<td>2</td>
<td>Ethnic &amp; Gender Faculty</td>
<td>1 &amp; 4</td>
<td>1 &amp; 4</td>
<td>1 &amp; 4</td>
<td>1 &amp; 4</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>Minority Grad Studt</td>
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<td>4%</td>
<td>4%</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>African Amer. BS</td>
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<td>11%</td>
<td>9%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Internat'l BS</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>BS Intern'l Experience</td>
<td>10%</td>
<td>0%</td>
<td>3%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Female Enrollment</td>
<td>30%</td>
<td>20%</td>
<td>19%</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Descriptive Results

Year 1
Year 2
Year 3
Year 4
Year 5
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Improvement Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In 2009-2010, the goal for faculty participation in an international experience was surpassed by 24%.</td>
<td>1. Although this goal has been met, the department chair will continue to monitor this metric to insure continued faculty participation in international experiences.</td>
</tr>
<tr>
<td>2. For 2009-2010, the goal of at least one ethnic faculty member was met and the goal of two or more female faculty was surpassed with four female faculty members.</td>
<td>2. While no action is currently required, the department will strive to increase both ethnic and gender diversity in all future departmental hiring.</td>
</tr>
<tr>
<td>3. The AEC graduate student enrollment from underrepresented groups did not equal or surpass the average at the University (7.8%), but was 4% for 2009-2010.</td>
<td>3. The department will work to attract and maintain graduate student enrollment from underrepresented groups that is equal to or greater than the average at the University (7.8%).</td>
</tr>
<tr>
<td>4. The department's African American BS enrollment for 2009-2010 was 9%, exceeding 6.6% (Kentucky's African American population).</td>
<td>4. While the department continues to remain above the 6.6% state population for African American students, the department will continue its efforts to attract qualified, competent African American students to AEC programs.</td>
</tr>
<tr>
<td>5. For 2009-2010, the international graduate enrollment for AEC was 1%, below the goal of 2%.</td>
<td>5. It has been difficult to achieve an international undergraduate enrollment of 2%. We have had difficulty getting above 1%, the number achieved for 2011-2012. The undergraduate committee will lead us in this effort.</td>
</tr>
<tr>
<td>6. In 2009-2010, no students from the department participated in an international academic experience.</td>
<td>6. Many of our undergraduates had an international experience, but none of those who graduated in 2009-2010 had an international experience. The undergraduate committee will work to assist the faculty in adding more emphasis to this goal.</td>
</tr>
<tr>
<td>7. Female enrollment for the department in 2009-2010, fell short of the 30% goal at 20%.</td>
<td>7. Despite efforts to increase female enrollment to 30%, we remain at around 20%. Our gender equity committee will be reactivated and we will continue to monitor female enrollment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The percentage of faculty who participated in an international experience in 2010-2011 was 50%, well above the goal of 30%.</td>
<td>1. The department will continue to strive to increase both ethnic and gender diversity in all future departmental hiring, although no action is currently required.</td>
</tr>
<tr>
<td>2. Ethnic and gender diversity for the AEC faculty met or surpassed the goal metrics in 2010-2011. We also have an internationally diverse faculty, which is not recognized under the “minority” designation.</td>
<td>2. Although no action is currently required, the department will persist in its efforts to increase both ethnic and gender diversity in all future departmental hiring.</td>
</tr>
</tbody>
</table>
3. The graduate student enrollment from underrepresented groups for 2010-2011 was below the goal of 8%.

4. African American student enrollment for 2010-2011 was above the goal of 6.6%, equaling 9%. African American student enrollment was encouraged by helpful advising, the presence of Diversity Program (housed in our department), and the example set by African American student workers and staff.

5. For 2010-2011, the international undergraduate enrollment was below the goal of 2%.

6. The 3% of undergraduate population who participated in an international academic experience was below the 10% goal. However, AEC’s 2% of undergraduates with international experience is equal to the UK average per Tony Ogden in Herald-Leader, 10/23/11, p. A1. Major barriers to increasing the international experience are the high percentage of transfers who want to finish as soon as possible, high financial cost, conflicts with work schedules, and frequent reluctance to travel to unfamiliar places.

7. Female enrollment is nearly flat, near 20%. In 2011, this was discussed with B&E advisors; a similar pattern exists in B&E.

**Year 3**

1. Our faculty continue to be frequently involved in international work experiences, surpassing the goal of 30%.

2. In 2011-2012, we lost one female faculty member but gained another. Although it is not an explicit metric, we hired a new staff member in 2011 who is African American, and he plays an active role in creating a supportive environment for African American students, including assisting with UK’s 2012 MANRRS conference delegation.

3. The department struggles to meet the goal of 8% graduate students from underrepresented groups. However, we utilize Lyman T. Johnson fellowships to attract African American graduate students, and had two such fellowships in 2011.

4. The department continues to maintain a higher-than-average share of African-American undergraduate students, surpassing the goal of 6.6%.
5. The number of international undergraduate students for 2011-2012 remains static at 1%, below the goal of 2%.

6. We continue to fall far short of our international experience goals for undergraduates, despite active promotion of several opportunities within the College. Affordability is a major barrier for most of our students. We expect more participation when we implement an experiential education requirement in the future.

7. The gender imbalance in the AEC major continues, similar to that in the B&E undergraduate program, and may even be worsening slightly. Expected stricter pre-preprogram requirements may inadvertently improve the future gender imbalance due to the correlation between gender and academic performance (the female GPA averaged 0.25 higher in 2011, with the difference being statistically significant at the .01 level).

Year 4

Year 5
<table>
<thead>
<tr>
<th>Unit Objective</th>
<th>AEC Objective #5 Improve the Quality of Life for Kentuckians through Extension, Outreach and Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Goals/Metrics</td>
<td>AEC Goal # 5 Improve the Quality of Life for Kentuckians through Extension, Outreach and Service</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-1 Sustained Extension contacts at or above 2009 levels as measured by CATPAWS reports, county meetings, and in-service trainings</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-10 FA specialists will prepare and present 20-30 programs to non-cooperators annually</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-11 Extension faculty will attract $100,000 of grant plus gift support per FTE/year</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-2 Extension faculty will present at 1 professional or regional meeting per FTE/year</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-4 Extension faculty members will publish one refereed journal article per FTE/year</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-5 Extension faculty will develop, expand or maintain at least three outreach partnership agreements related to joint programming as measured by grant collaborations or board service per FTE/year</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-6 Farm analysis (FA) specialists will publish 4 documents based on farm analysis data yearly</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-7 FA specialists will carry enough cooperators to maintain the farm analysis database</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-8 FA specialists will publish Farm Analysis newsletter annually</td>
</tr>
<tr>
<td></td>
<td>AEC Metric 5-9 FA specialists will contribute 10 articles to the &quot;Blue Sheet&quot; yearly</td>
</tr>
<tr>
<td></td>
<td>Ag Goal 5 Improve the Quality of Life for Kentuckians through Extension, Outreach and Service</td>
</tr>
<tr>
<td></td>
<td>UK Goal 5. Improve the Quality of Life of Kentuckians through Engagement, Outreach, and Service.</td>
</tr>
</tbody>
</table>

| Related Mission Area | Overall |

**Strategies**

Sustain existing and promote new Extension collaborations within and outside UK.
Increase the deployment of new information technologies.
Sustain traditional Extension strengths while offering innovative new issues-oriented programs in agricultural economics to serve increasingly diverse stakeholders.

**Assessment Method**

1. Sustained Extension contacts at or above 2009 levels as measured by CATPAWS reports, county meetings, and in-service trainings - CATPAWS reports.
2. Extension faculty will attract $100,000 of grant plus gift support per FTE/year - Extension Coordinator's Poll.
3. Extension faculty will present at 1 professional or regional meeting per FTE/year - Extension Coordinator's Poll.
4. Extension faculty members will publish one refereed journal article per FTE/year - Extension Coordinator's Poll.
5. Extension faculty will develop, expand or maintain at least three outreach partnership agreements related to joint programming as measured by grant collaborations or board service per FTE/year - Extension Coordinator's Poll.
6. Farm analysis (FA) specialists will publish 4 documents based on farm analysis data yearly - KFBM Coordinator's Poll.
7. FA specialists will carry enough cooperators to maintain the farm analysis database - KFBM Coordinator's Poll.
8. FA specialists will publish the Farm Analysis newsletter annually - KFBM Coordinator's Poll.
9. FA specialists will contribute 10 articles to the "Blue Sheet" yearly - KFBM Coordinator's Poll.
10. FA specialists will prepare and present 20-30 programs to non-cooperators annually - KFBM Coordinator's Poll.

**Actual Results**
<table>
<thead>
<tr>
<th>Metric #</th>
<th>Title</th>
<th>Goal</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CES Contacts at 2009*</td>
<td>12,896</td>
<td>12,896</td>
<td>39,580</td>
<td>15,956</td>
<td></td>
<td></td>
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<tr>
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<td>CES Grants + Gifts</td>
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<td>$149,255</td>
<td>$137,515</td>
<td>$187,788</td>
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<td>1.6</td>
<td>3.4</td>
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<td></td>
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<tr>
<td>4</td>
<td>CES Refereed Pubs/ FTE/Yr</td>
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<td>1</td>
<td>0.5</td>
<td>2.4</td>
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<td>3.7</td>
<td>4.6</td>
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<tr>
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<td>KFBM Pubs from their data</td>
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<td>6</td>
<td>10</td>
<td>9</td>
<td></td>
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<tr>
<td>7</td>
<td>Cooperators to maintain data base</td>
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<td>27</td>
<td>40</td>
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<td>8</td>
<td>FA Specialists Newsletter Annual pub</td>
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<td>9</td>
<td>Articles to Blue Sheet</td>
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<tr>
<td>10</td>
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<td>40</td>
<td>42</td>
<td>41</td>
<td></td>
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</tr>
</tbody>
</table>
**Descriptive Results**

**Year 1**

We are below our goal of 30 cooperators per specialist with an average of 27 cooperators per specialist.

**Year 2**

Based on the July 2011 Cost and Returns report, Kentucky Farm Business Management (KFBM) has 362 cooperators and 9 specialists, for an average of 40 cooperators per specialist, well above the goal of 30.

Grants continue to be a strength of the extension programs.

CES presentations/FTE represent only presentations at two major conferences, but still exceed the goal. Measuring this goal is difficult in the off years for Faculty Performance Reviews.

**Year 3**

2011/2012 results for all metrics remain above target.

**Year 4**

**Year 5**
Analysis of Results and Reflection

**Year 1**

We are below our goal of 30 cooperators per specialist with an average of 27 cooperators per specialist.

We have merged the old Blue Grass area into the Lincoln trail area. With the move of our dairy specialist to the Ohio Valley, the terrible dairy economy, and one vacant position (for over six months), we have lost cooperators. Once things settle out and we have a new (second) Lincoln Trail specialist we should see growth.

We met all of our other goals.

**Year 2**

Based on the July 2011 Cost and Returns report, Kentucky Farm Business Management (KFBM) has 362 cooperators for 9 specialists, for an average of 40 per specialist, well above the goal of 30. The previous year there appear to have been 350 cooperators, based on this report, which conflicts with Year 1 data above.

Grants continue to be a strength of the extension programs.

CES presentations / FTE represent only presentations at two major conferences, but still exceed the goal.Measuring this goal is difficult in off years for Faculty Performance Review.

A capable new Kentucky Farm Business Management (KFBM) specialist was hired for the Lincoln Trail Association, an area with smaller farmers that has persistent difficulty recruiting enough cooperators to meet revenue goals.

Overall, integration of Kentucky Farm Business Management (KFBM) with the rest of the department is improving and is a source of optimism.

**Year 3**

1. Extension contacts for fiscal year 2012 were 15,956, below the fiscal year 2011 contacts, yet remaining above the goal of 12,896 contacts.

2. Extension faculty attracted $187,788 grants and gifts in 2011-2012, well above the

Improvement Actions

The department will hire a new second specialist for Lincoln trail and continue efforts to grow the program. Nothing more need be done for the others, as we met those goals.

The department will continue efforts to maintain competitive salaries for KFBM specialists, and emphasize recruitment of new cooperators in Lincoln Trail and Purchase. AEC will continue recent efforts to provide MS students with KFBM projects and internships.

Encourage CES analysis that serves clientele while also producing grants and refereed publications; some extension faculty are actively interested in doing more applied research. Encourage more extension faculty to participate in the extension section of our national association, the AAEA.

All goals have been met.

Having increased entry-level KFBM salaries to competitive levels in 2011, the next step is rebuilding the salary distinction between the entry level and the second career level.
goal of $100,000.

3. For 2011-2012, Extension faculty presentations/FTE averaged 3.4 and more than doubled over 2010-2011.

4. Extension faculty published 2.4 refereed journal articles/FTE in 2011-2012, which was more than double the goal of 1/FTE/year.

5. The number of outreach partnerships/FTE for 2011-2012 that were developed, expanded, or maintained by Extension faculty averaged 4.6/FTE, reflecting an increase of nearly 25%.

6. Farm analysis (FA) specialists publications complied from farm analysis data totalled 9 for 2011-2012, significantly above the goal of 4.

7. FA specialists carried 40 cooperators in 2011-2012, well above the goal of 30.

8. This indicator is on target.

9. FA specialists contributed 11 articles to the "Blue Sheet" in 2011-2012, one above the goal number.

10. FA specialists prepared and presented 41 programs to non-cooperators in 2011-2012, more than doubling the goal number of 20.

Grant, contract, and gift funding continue to flow disproportionately to extension programming as opposed to research. Extension faculty are engaged in disciplinary presentations and publications, interdisciplinary collaborations, and with clientele organizations. The Kentucky Farm Business Management (KFBM) specialist roster remained stable during 2011-12, allowing solid performance and service to cooperators.

Year 4
Year 5

This is underway thanks to terms proposed in a recent successful retention bid.

Extension programming is a comparative advantage of this department, yet we only have about 5 extension FTE, so rebuilding our extension faculty resources will be a priority in the future.

With the change in University leadership and likely changes to the budgeting framework, we are actively lobbying to educate the administration about the value of extension programming.