

**Extension Programs in Economics:
An Assessment**

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Extension Programs in Economics: An Assessment

Programs in economics have been an integral part of cooperative agricultural extension work since passage of the Smith-Lever Act in 1914. When created, the mandate given to extension was to

- Develop practical applications of research knowledge;
- Provide instruction and practical demonstrations of existing or improved practices or technologies in agriculture.

For example, a major emphasis during the 1920's and 1930's was in helping teach farm management concepts to farm operators in each state. Extension personnel with expertise in economics also taught farmers about marketing and helped operators organize cooperatives to buy and sell farm commodities.

Extension was created at a time when the United States was still a largely rural, agrarian nation. In 1910, for example, there were over 32 million farm residents on 6.4 million farms, representing one out of every three Americans (Banks, Beale and Bowles). The present situation is now very different. In 2002 there were about 3 million farm residents on 2.1 million farms, representing about one out of every 100 Americans. A recent ECOP document, *The Extension System: A Vision for the 21st Century*, stated:

“This nation’s extraordinary Extension network was developed to respond to early 20th Century needs when the economy was primarily agricultural, the population was predominantly rural, the industrial revolution was dominant, and the drivers of social change appeared contained within the boundaries of our nation. Nearly a century later the United States is primarily a heterogeneous, urban society dominated by technological and communications advances, myriad niches of employment and varied sources of wealth affected daily by global, economic and political alliances and turmoil” (p. 2).

This vision document by ECOP identifies challenges to those working in extension and encourages greater engagement. It delineates ways in which extension can become more

engaged at all levels. However, the document fails to mention one critical component being demanded from government organizations at all levels: Accountability. Members of Congress and other national, state and local policymakers want to know how their support for all government programs translates into improved societal welfare. In this area, outreach lags behind research and teaching.

For example, if a congresswoman called the USDA to learn what research is being done on the economics of technological change in tree fruit production, someone within CSREES would be able to use the CRIS database to identify who is doing research on this issue, where the work is taking place, how much money is being spent on the problem, the research papers that have been published and so on. On the extension side, CSREES might be able to identify someone working in this area, but could not give any sense as to expenditures on educational programs that had been provided to those who might be interested in this issue. More generally, information about who works in extension economics is not tracked at the federal level, let alone some sense about to their activities as extension economists.

In their book *Scholarship Assessed*, Glassick, Huber and Maeroff noted the importance of applied research (or outreach) as an output of all institutions of higher learning. Yet their survey of 1,380 institutions of higher learning found that fewer than one-third of the respondent universities conducted any independent assessments of their outreach faculty. How does one assess the quality of an extension program? And what might that assessment look like?

The purpose of this paper is to take a first step in answering three questions: (1) What is the current mix of extension economists in the United States, specifically by area of specialization, age, location (by state and on or off-campus), by gender and by educational degree? (2) Given the current age mix and hiring trends, what might extension economics look

like in 10 years? (3) What might a survey of extension economists reveal about where the most respected extension economic programs are located?

Profiling Extension Economics

As noted before, CSREES does not maintain lists of faculty in the states who work in extension, regardless of the field. Therefore, a critical first step in carrying out this study was to create such a list for extension economists who operate in each state. This was done by contacting the departmental heads or extension directors in each state and asking them to provide names of faculty with extension appointments, along with the FTE each has in extension and what is their major field of expertise. This information was collected in February and March of 2008. Additional information regarding areas of expertise, location and educational accomplishments were obtained from websites and by contacting the individual faculty. The list includes individuals who largely function as extension economists, even if they (occasionally) don't have any degrees in economics. It also includes faculty who are partially retired, those on soft money support, those who serve as administrators and those who work out of county extension offices but serve a multi-county area. Vacant positions that were in the process of being filled were also included. A summary of the results by state is provided in Table 1.

By this reckoning, there were 569 extension economists in the 50 states, of which 409 were on campus (including 15 vacancies). The total FTE in extension was 261.7 for on-campus and 145.7 for off-campus, for an average FTE per faculty member of 0.64 for on-campus and 0.91 for off-campus faculty. The largest contingent of extension faculty was in Texas, with 44 faculty (or almost 8% of all extension faculty nationally). Two states (Rhode Island and West Virginia) had no economists on extension appointments. Massachusetts has blended their monies and required that each of their teaching and research faculty devote 5% of their time to outreach activities.

What is striking about the table are the inconsistencies in funding for extension economics. Who would have expected that California, with the largest agricultural sector in the country, would have as many extension faculty as Colorado or Mississippi, and fewer than 18 other states? Or that a major agricultural state like Nebraska would have only 6 extension economists? Or that a state like Maryland, with a relatively small agricultural economy, would have 10 faculty with extension appointments? Also of interest is the wide variation in use of campus-based versus off-campus faculty. Several states (Kentucky, Missouri, Tennessee and Texas) have as many or more faculty working off-campus than on-campus. Twenty-one states have no extension economists located off-campus.

There are clearly regional differences in the popularity of extension programs in economics, as well as the mix of on and off-campus faculty. Nearly 40% of all extension economists are located in the southern region of the United States (see Table 2), with another 35% located in the North Central region. In particular, 53% of all off-campus extension faculty nationally are located in the southern region, with all but one state having at least one off-campus economist. By contrast, none of the northeastern states had faculty located off-campus. Nearly three out of every four extension economists were in the North Central and Southern regions.

Area of Expertise

Table 3 provides a summary of extension faculty by area of expertise. Note that a number of extension economists have more than one area of expertise, depending on state needs and individual interests. To facilitate this analysis, each faculty member was assigned to one area based on feedback from them and information gleaned from the internet. Subcategories were created in the table if there were more than five individuals working within a particular subcategory.

Farm management is the largest area of expertise, representing 25% of all on-campus and nearly 50% of all off-campus faculty. The farm management area is no longer a major focus in most graduate programs (see Perry), but represents about 1/3 of all extension faculty. Second in total numbers are faculty in the community and economic development area, with 13% of all faculty.

The adaptability of extension programs to statewide needs is evident in the diversity of specializations evident in the group of extension economists. There are, for example, commodity specialists for seafood, potatoes, cotton, poultry, citrus, soybeans, swine, horticulture, rice, and alternative crops. No doubt these positions were created with strong support from the industries they support. But there are also extension economists working in a wide variety of issues that broadly spill over into areas outside traditional agricultural and resource economics, such as Claudia Parliament's program in K-12 economics education, programs at Purdue and North Carolina State in natural resource leadership, Bonnie Carew's programs in rural health policy and Wally Tyner's programs in energy economics.

Table 4 provides a summary of expertise areas by region. Much of the regional mix in extension economists is as expected, but there are some surprises. Not too surprising was the fact that nearly a quarter of all extension economists in the northeastern area work on resource and environmental issues. What was surprising is that virtually no one in that same region works primarily in the community development area (although some do limited work in this area). Another distinction of the southern region apparent in this table is the greater use of commodity specialists, apparently at the expense of farm management economists. It is also noteworthy that the western region has the greatest proportion of community development economists.

Degrees Held and Gender

Among on-campus faculty, 325 (83%) held PhD degrees, 50 (13%), held MS degrees, and 12 held JD degrees (including five with both JD and PhD degrees). Ten of those holding PhD degrees received them from fields outside of economics or agricultural economics. For the off-campus faculty, 91 (59%) held MS degrees and only 47 (31%) held PhD degrees. Also noteworthy is that the average time between receiving the MS and PhD degrees for on-campus faculty was over six years, suggesting a substantial number took full-time jobs before returning to school to start or complete the PhD.

The gender mix in extension economics leans heavily toward men. Less than 15% of on-campus extension economists are female and only 12% of those holding the PhD degree are female. The mix only improves slightly when moving to off-campus positions. Eighteen percent of off-campus extension economists are women, but only 13% of off-campus faculty who hold the PhD degree are women. There has been a shift in recent years toward employing more women in extension economics positions, a point that will be discussed in the next section.

Faculty Mix by Age

Replicating the results from Tables 2-4 by age provides great insight into how areas of specialization, regional location, educational accomplishments and gender are shifting over time. These data can also be used to project what extension economics is going to look like in another decade and perhaps beyond. Because date of birth information was not readily available for each faculty member, the year each received their BS degree was used as a proxy for age. These data were obtained for 97% of all on-campus and 70% of all off-campus faculty. The results were sorted into four groups, representing faculty who received their BS degree (1) before 1970, (2) 1970-1979, (3) 1980-1989, and (4) 1990 to present. Assuming the average person received their BS degree at age 23, this breakdown suggests the first group are all eligible for retirement and

have probably already experienced substantial attrition from their ranks. In 10 years few individuals in this group will still be working. The second group is just beginning to enter the age to retire, so many of these economists will likely also no longer be working in 10 years. The third and fourth groups should still be working in 10 years.

Table 5 provides a summary of characteristics for on-campus faculty by age group. These numbers confirm that extension economists are an aging group, with 55% in the first two groups. In other words, 1/3 or more of all the on-campus extension economists in the country seem poised to retire in the next decade. Although the 1990-2004 group is larger in terms of years than the 1970-79 and 1980-89, it also has experienced the smallest number of hires. The trends are clear: Extension economics has been shrinking, and the recent economic troubles will do nothing but accelerate that shrinkage.

These numbers hide an important caveat, however. It is that the shrinkage is not uniform, but varies from place to place across the United States. Losses appear to be most severe in the northeast (see Table 6), where nearly 2/3 of all extension economists are in the two categories slated to be decimated by retirements over the next decade. By contrast, the Southern region doesn't appear to be suffering at all from shrinking extension programs in economics. The North Central region also appears to have about half of their extension economists in the younger two age groups.

The age mix for the off-campus faculty is more uniform (Table 7). Only 44 percent of the faculty FTEs for off-campus extension economists are in the first two age cohorts. In fact, the 1980-89 and 1990-2007 groups contain about the same percentage of faculty as the 1970-79 group. Again, the last group spans more years, suggesting some shrinkage is taking place, but at much lower rates than is occurring with on-campus positions.

The hiring patterns off-campus (as shown in Table 8) tend to reflect an even younger age cohort than is the case on-campus (Table 6). Why this the case is not clear, although one could suggest a number of potential causes:

- More new positions are being created off-campus rather than on-campus, creating more opportunities for new, younger faculty to enter the ranks of extension economists;
- Anecdotal evidence suggests off-campus positions pay less than on-campus positions, so there may be more attrition from off-campus positions into the private sector;
- Some of the brighter and more motivated off-campus faculty may complete degree work and otherwise distinguish themselves so that they get hired as on-campus statewide extension specialists. These moves would create openings for new, younger hires off-campus and add to the proportion of older faculty on-campus;

Table 9 provides a further breakdown by age, region and area of expertise. This level of detail stretches the limits of the data in some categories, because there are so few faculty within these categories. There are some interesting patterns, however. Note that percentages for each row add to 100%, so comparing across rows provides some indication of how hiring patterns have changed over time by region. For example, 27% of the extension economists in the North Central region who graduated with a BS before 1970 were in the farm management area, compared to 41% of the 1970-79 BS recipients, 21% of the 1980-89 BS recipients and 23% of those receiving the BS in 1990 or later. Farm management hires remain strong across regions and age categories, suggesting their expertise remains relevant. Agribusiness expertise tends to be more in demand recently than in past decades, beginning in the North Central region and spreading to the other three regions. Marketing expertise and commodity specialists seem to have experienced a small decline in importance.

Evaluating Extension Program Quality

The last part of this paper addresses the issue of evaluating the quality of extension programs in each state. Universities, following the lead of other public and private entities, have placed increased focus on accountability of programs. This effort, in turn, has motivated universities to place increased emphasis on developing performance measures to track improvements in student learning. The research community has long had an interest in evaluating research quality through use of citation indices, program rankings and the like. Evaluating the quality of outreach programs has proven more challenging. Most in the extension community will agree that an important signal of extension program quality is the impact that programs have on client groups. Developing a systematic way to evaluate impact, particularly when comparing between programs in different states, remains a very illusive task.

In approaching this idea of evaluating extension program quality, I borrowed from the work that I and others have done to evaluate the quality of graduate programs in our profession. The approach is very simple: Ask other professionals for their evaluation of extension programs in their area of expertise. The idea is that quality stands out and is recognized by peers across the country. Consequently, I sent surveys to all 550 or so extension economists asking them to identify up to 10 statewide extension programs in their area of expertise. They were then to use a 1-5 scale to rank the quality of these extension programs, where 5 equals an Excellent program and 1 equals a poor program. In assessing quality of programs, respondents were asked to consider (1) overall program impact, (2) regional and national reputation, (3) quality and appearance of materials produced by the program, and (4) types and quality of material available on the internet.

The response rate to the initial survey was extremely low from the off-campus extension economists. To me, this signaled that these faculty either were not interested in the study or,

more likely, felt unqualified to respond to the survey questions. For this reason, the survey effort shifted to the on-campus faculty. The sample size for this population was 394 faculty.

The survey response rate was 31% (see Table 10), with a greater proportion of responses coming from the Western region and lowest return rate in the North Central region. Of the 31% responding nationally, nearly one in three responses (9%) indicated that they didn't know enough about extension programs outside their state to identify and rank them. Another one in eight surveys (4%) were returned with the respondent indicating that they were not going to respond, usually because they felt that this was an inappropriate way to evaluate extension programs.

Despite having experience doing several of these ranking studies for graduate programs in our profession, I was still surprised by the negative reaction to the survey as expressed by a number of faculty. One response representative of this reaction was a letter from five Kansas State extension faculty, expressing concern that the survey focused on suppliers rather than users of extension services. Their underlying concern with the survey was that the results would lead to extension focusing more resources on "limited resource farmers and small towns" at the expense of production agriculture. They suggested that, instead, research on this topic should involve conducting a phone survey of those using extension services and asking them for feedback about those services.

I will concede that the approach used here is limited because of the population being surveyed. That said, a stakeholder survey would have its own significant flaws and is much more involved and expensive than this study. And this survey does indicate both the national profile and quality of extension programs, as evaluated by peers in the profession. Peer evaluation is a key component of published research and in the promotion and tenure process. Good extension economists are always on the lookout for new programs to present to their clientele groups. Many quality extension programs can be adapted to other situations and reused

elsewhere. The low response rate to the survey (particularly by off-campus faculty) along with the high rate of “Don’t Know” responses suggests that extension economists aren’t spending enough time together learning about what others do.

If I were a critic of extension programs, I could interpret the low responses and high level of professed ignorance as an indictment of extension economists. I would argue that the results indicate that the majority have become complacent in their positions, uninterested in learning about and doing anything new in their programs. But I am not going to take on the role of critic, in part because I know that some who chose not to respond are bright economists who offer excellent programs. I am going to be more generous in my interpretation and suggest that extension economists feel they are too busy to organize and attend meetings where program information is exchanged. Also, that what I was asking of them required a new way of evaluating extension programs that they were not accustomed to nor comfortable with.

Program rankings were received from 65 individuals. Sufficient responses were received to provide results in five areas – Farm Management, Marketing, Community Development, Agribusiness and Natural Resources.

Farm Management

The ranking results for farm management are summarized in Table 11. The response rate was 33% in this category (32 of 97 individuals surveyed), but only 20 respondents provided ranking information. Only those programs ranked by at least 10 (50%) of respondents in this area were reported in the Table. Three of the respondents did not provide numerical rankings, but simply indicated their top programs. Kansas State’s farm management program received the highest average ranking (4.7). Illinois, Purdue and Texas A&M were also highly regarded in the farm management area. Minnesota and Oklahoma State were ranked by nine respondents, Iowa

State by eight respondents, and UC-Davis by seven respondents. About 30 other programs were ranked by at least one respondent.

Marketing

The results for extension marketing are provided in Table 12. The response rate was 36% (20 of 55 individuals surveyed), but only 12 provided actual rankings. One did not provide numerical rankings. The table results are limited to those schools ranked by 50% or more of the 12 respondents. There seemed to be much more consensus on the top programs in marketing. Kansas State was mentioned by 10 of 12 respondents and received the highest average rating, 4.6. Oklahoma State was mentioned by all but one respondent and received an average score of 3.9. Texas A&M tied with Kansas State for the highest average score, but was mentioned on fewer survey responses. Iowa State, Illinois, Purdue and Georgia were also well regarded by survey respondents. Another 20 schools were mentioned by at least one respondent.

Community Development

The results for extension programs in community development are summarized in Table 13. The response rate was 27% (15 of 56 individuals surveyed), but rankings were limited to nine surveys. One did not provide numerical rankings. Like the marketing results, there was more uniformity of opinion in where the top programs are in community development. Wisconsin was included in rankings by all nine respondents and received the highest average score (4.5). Missouri and Penn State were mentioned on seven surveys, Missouri's score was the same as that for Wisconsin. Five other schools (Minnesota, Clemson, Ohio State, Illinois and Purdue) were all mentioned by more than half of the respondents and received above average scores. Another 18 schools were ranked by at least one respondent, although only Iowa State, Oklahoma State and Nevada-Reno were ranked by three respondents.

Agribusiness

The ranking results for Agribusiness extension programs are provided in Table 14. The response rate was 27% (7 of 26 individuals surveyed), rankings were provided by seven respondents. The top five extension programs in agribusiness are located at Purdue, Iowa State, Kansas State, Minnesota and Texas A&M. Purdue's program received the highest average score, 4.5. The other four programs received above average scores. Another 20 programs were ranked by respondents, only three (Florida, Kentucky and Oklahoma State) were mentioned on three surveys.

Natural Resources

The survey results for Land and Water Resources are given in Table 15. The response rate was the highest of any group at 46% (19 of 41 individuals surveyed), but only five provided rankings. North Carolina, Penn State, Oregon State, Colorado State and Florida all were identified by three of the five respondents. All but Florida received average scores of 4.0 or higher. Another 18 universities were ranked by respondents.

Innovative Programs

Those participating in the survey were also asked to identify up to five programs in the country that they believe have done a good to exceptional job of adapting to the needs of traditional and new clientele groups. In identifying these programs, they were instructed to look beyond their own area of expertise and evaluate all extension economics programs. Responses were received from 53 faculty. No ranking nor numerical evaluation was assigned to these results by respondents. Consequently, the frequency that each program was reported is an indication of its reputation for innovative programming.

Texas A&M was identified by 21 (40%) of respondents as an innovative program. The next most often identified innovative programs were Purdue (36%), Kansas State (30%), Illinois

(21%) and Iowa State (19%). Also mentioned by five or more respondents were Minnesota, Oklahoma State, Michigan State, Missouri and Wisconsin.

Summary and Conclusions

The purpose of this study was threefold: (a) To describe the current mix of extension economists in the United States, (b) to examine the current mix by age as a way of projecting what extension economics might look like in a decade and (c) to identify quality programs in extension economics, as evaluated by those within the profession.

The largest contingent of on-campus extension economists is located at Purdue, although more than 20 faculty with extension appointments are also found at North Carolina State and Texas A&M. West Virginia and Rhode Island have no extension economists. About 60% of extension economists nationally are located on campus, off-campus economists are particularly popular in the Southern region. Nearly three out of every four extension economists in the country are in the North Central and Southern regions.

Farm management specialists account for about one-third of all extension economists in the US. Community development, marketing, agribusiness, commodity, and resource specialists account for the bulk of the other specialty areas. There are some new and innovative extension programs located in some states, but these programs generally remain targeted at the traditional agricultural production clientele.

Analysis of the data by age does reveal that extension economics is changing. Faculty are becoming more diverse, particularly in the gender area. Movement is toward greater use of MS trained people in extension economics positions, particularly off-campus. There also seems to be a trend toward hiring more faculty for off-campus positions.

Anecdotal evidence suggests that the number of economists funded by extension has been in decline for a decade or more. Certainly the evidence suggesting that half the extension

economists will retire or be eligible for retirement in the next decade is consistent with the anecdotal information. But these retirement losses will be uneven. Extension economics in the Northeast region could well disappear in 20 years. There still may be a few extension economists in the Western region in 20 years, but they will probably be few in number and diversified in activity. Where extension seems most robust is in the Midwest and South. In my mind, it is not a coincidence that continued strength coincides with (a) strong agriculture-based economies and (b) the presence of extension economists located at off-campus sites. Extension continues to survive because of strong grass roots support, connections between professionals and the lay public. When extension personnel are located off-campus, they will naturally tend to develop more of these links. For this reason, departments need to make hiring of off-campus extension faculty a priority, then make sure that these off-campus faculty also have good ties to faculty on-campus.

Because these off-campus faculty become the public face for applied economics work in the state, it is also important that departments offer good wages so they can hire quality people. In my opinion, pooling resources to hire two quality people will do more for a department's public image than hiring three people at minimum salaries. These off-campus faculty also need to be mentored and given incentives to work with on-campus faculty, so that they retain their professional ties. My sense is that Texas A&M's system does this as well as anyone, so they offer a good model to emulate.

As noted, extension economics remains largely rooted in traditional agricultural production. Yet our profession as a whole has moved in a major way toward resource and environmental economics, as well as expanding into a number of new areas that have only marginal ties to agricultural production and marketing (see Perry). This divergence in focus can cause friction within departments, but it also seems that graduate programs are missing

opportunities to train and place graduate students. A few graduate programs ought to consider offering a two-track program for prospective PhD students. The first track would train students to do quality research suitable for publication in quality journals. These students would be hired into research-teaching tenure track positions in economics and applied economics programs. The second track would train students for positions in extension-teaching type positions. The program for these students would deemphasize the high powered math and statistics common to most PhD programs. Instead, students would receive a good grounding in economic theory and use of quantitative tools, along with experience working on challenging problems faced by extension economists. Alternatively, programs could increase the rigour of MS programs such that they have this same level of theory and quantitative training.

References

- Banks, V.J., C.L. Beale, and G.K. Bowles. *Farm Population Estimates for 1910-62*. USDA-Economic Research Service. ERS-130. 1963.
- Extension Committee on Organization and Policy (ECOP). *The Extension System: A Vision for the 21st Century*. National Association of State Universities and Land Grant Colleges, Washington, D.C. February 2002.
- Perry, G.M. "What is the Future of Agricultural Economics Departments and the Agricultural and Applied Economics Association?" *Review of Agricultural Economics* (in press).

Table 1. Number of Extension Faculty and FTE by State

State	On-Campus Faculty		Off-Campus Faculty		Total	
	Number	FTE	Number	FTE	Number	FTE
Alabama	9	7.26	6	6.00	15	13.26
Alaska	1	0.51	1	1.00	2	1.51
Arizona	4	2.50	0	0.00	4	2.50
Arkansas	2	0.40	7	5.75	9	6.15
California	8	6.30	3	3.00	11	9.30
Colorado	8	5.68	3	3.00	11	8.68
Connecticut	6	1.38	0	0.00	6	1.38
Delaware	2	2.00	0	0.00	2	2.00
Florida	7	4.35	5	3.20	12	7.55
Georgia	5	2.78	5	4.48	10	7.26
Hawaii	3	1.85	0	0.00	3	1.85
Idaho	4	2.35	3	2.80	7	5.15
Illinois	11	7.35	3	3.00	14	10.35
Indiana	27	14.80	0	0.00	27	14.80
Iowa	7	3.61	10	10.00	17	13.61
Kansas	11	8.00	3	3.00	14	11.00
Kentucky	11	8.20	14	14.00	25	22.20
Louisiana	9	6.20	0	0.00	9	6.20
Maine	2	1.10	0	0.00	2	1.10
Maryland	10	6.50	0	0.00	10	6.50
Massachusetts	13	0.65	0	0.00	13	0.65
Michigan	19	11.48	1	1.00	20	12.48
Minnesota	16	6.44	15	15.00	31	21.44
Mississippi	9	7.32	2	1.57	11	8.89
Missouri	11	10.15	16	16.00	27	26.15
Montana	3	3.00	0	0.00	3	3.00
Nebraska	5	3.50	1	0.50	6	4.00
Nevada	2	0.90	2	2.00	4	2.90
New Hampshire	1	0.80	0	0.00	1	0.80
New Jersey	5	2.50	0	0.00	5	2.50
New Mexico	7	3.67	0	0.00	7	3.67
New York	17	10.45	0	0.00	17	10.45
North Carolina	21	15.90	1	1.00	22	16.90
North Dakota	6	4.90	0	0.00	6	4.90
Ohio	17	7.90	0	0.00	17	7.90
Oklahoma	15	9.81	6	6.00	21	15.81
Oregon	7	4.96	6	2.50	13	7.46
Pennsylvania	9	6.29	0	0.00	9	6.29
Rhode Island	0	0.00	0	0.00	0	0.00
South Carolina	5	2.89	5	4.00	10	6.89
South Dakota	6	5.00	1	0.75	7	5.75
Tennessee	8	6.50	10	10.00	18	16.50
Texas	22	19.42	22	20.28	44	39.70
Utah	6	5.25	0	0.00	6	5.25
Vermont	1	0.70	0	0.00	1	0.70

Virginia	6	3.13	1	1.00	7	4.13
Washington	7	4.45	1	1.00	8	5.45
West Virginia	0	0.00	0	0.00	0	0.00
Wisconsin	11	6.33	5	2.96	16	9.29
Wyoming	7	4.30	2	0.95	9	5.25
Total	409	261.71	160	145.74	569	407.45

Table 2. Extension Economist Totals by Extension Region

Region	On-Campus		Off-Campus		Total	
	Number	FTE	Number	FTE	Number	FTE
Northeast	66	32.37	0	0.00	66	32.37
North Central	147	89.46	54	51.21	201	140.67
Southern	129	94.16	85	78.28	214	172.44
Western	67	45.72	21	16.25	88	61.97
Total	409	261.71	160	145.74	569	407.45

Table 3. Extension Economists by Area of Expertise

Area of Expertise	On-Campus			Off Campus		
	Number	FTE	Percent Without PhD	Number	FTE	Percent Without PhD
Administration	6	2.8	0%	0	0.0	0%
Agribusiness	27	15.1	11%	23	23.0	87%
Community Development						
Rural & Community Development	39	29.7	15%	14	12.5	79%
Economic Development	10	5.9	20%	1	0.3	0%
Other	7	4.2	0%	1	0.6	100%
Commodity Specialist						
Dairy	7	5.2	14%	2	0.9	0%
Other Livestock	11	6.9	9%	2	1.5	50%
Crops	14	11.5	0%	7	5.5	43%
Farm Management						
Farm Mgt	69	51.0	32%	71	68.4	86%
Risk Mgt	12	8.7	25%	9	8.1	78%
Finance & Other	17	9.6	18%	3	3.0	33%
Policy	20	10.3	0%	2	2.0	50%
Law & Taxation	15	10.4	64%	0	0.0	0%
Marketing						
Trade	6	1.4	0%	0	0.0	0%
Livestock	10	8.4	10%	0	0.0	0%
General & Other	39	24.2	13%	6	4.4	17%
Resource & Environmental	42	20.1	10%	8	5.8	50%
Other						
Cooperatives	6	4.6	17%	1	0.8	100%
Other	52	31.9	18%	10	9.0	20%
Total	409	261.7	17%	160	145.8	68%

Table 4. Percent of Faculty in Areas of Expertise by Region

Region	Agri-business	Community Development	Commodity Specialist	Risk/Farm Management	Marketing	Resource/ Environmental	Other
North Central	15	13	4	29	12	2	25
Northeast	2	3	6	32	10	24	24
Southern	10	13	13	18	17	8	21
Western	5	18	6	24	11	18	18

Table 5. Characteristics of On-Campus Extension Economists by Age Category

BS Year	Number of Faculty	Percent of Total	Percent of FTE	Percent Not Holding PhD	Percent Female
1950-1969	67	17	16	10	5
1970-1979	147	38	38	14	12
1980-1989	97	25	25	18	12
1990-2007	76	20	21	24	30

Table 6. On-Campus FTE Percentage Breakdown by Age for Each Extension Region

BS Year	Central	Northeast	Southern	Western	Overall
1950-1969	19	17	13	14	17
1970-1979	32	47	38	42	38
1980-1989	29	24	21	27	25
1990-2007	19	11	29	16	20

Table 7. Characteristics of Off-Campus Extension Economists by Age Category

BS Year	Number of Faculty	Percent of Total	Percent of FTE	Percent Not Holding PhD	Percent Female
1950-1969	11	10	8	45	9
1970-1979	38	34	34	55	8
1980-1989	31	28	26	58	10
1990-2007	32	29	31	75	38

Table 8. Off-Campus FTE Percentage Breakdown by Age for Each Extension Region

BS Year	North Central	Northeast	Southern	Western	Overall
1950-1969	7	0	11	6	10
1970-1979	26	0	33	38	34
1980-1989	23	0	24	38	26
1990-2007	44	0	32	19	31

Table 9. Percent of Faculty by Area of Expertise in Each Region for Each Age Group

BS Year	Region	Agri-business	Community Development	Commodity Specialist	Risk/Farm Manage	Marketing	Resource Environ	Other
1950-1969	North Central	3	10	3	27	13	7	37
	Northeast	0	0	0	36	9	27	27
	Southern	6	17	17	17	17	6	22
	Western	0	25	13	38	0	13	13
1970-1979	North Central	5	11	2	41	23	0	18
	Northeast	0	3	10	27	10	20	30
	Southern	9	11	13	13	21	11	23
	Western	0	19	4	19	15	27	15
1980-1989	North Central	14	19	5	21	10	2	29
	Northeast	0	8	8	31	8	38	8
	Southern	9	13	9	22	17	4	26
	Western	6	22	6	22	11	11	22
1990-2004	North Central	4	8	8	23	12	8	38
	Northeast	11	0	0	44	11	11	22
	Southern	16	16	13	23	10	10	13
	Western	20	0	10	30	10	10	20

Table 10. Summary of Ranking Survey Responses by Extension Region

Region	Sample Size	Responses		Didn't Know		Refused to Respond	
		#	Pct.	#	Pct.	#	Pct.
North Central	144	37	26	8	6	8	6
Northeast	66	19	29	8	12	1	2
Southern	121	39	32	10	8	4	3
Western	63	26	41	12	19	2	3
Total	394	121	31	38	10	15	4

Table 11. Assessment of Extension Program Quality in Farm Management Area (n=20)

State	Number Evaluating State	Average Score for Quality of Program
Kansas	10	4.7
Illinois	11	4.3
Purdue	10	4.3
Texas	11	4.0

Table 12. Assessment of Extension Program Quality in Marketing Area (n=12)

State	Number Evaluating State	Average Score for Quality of Program
Kansas	10	4.6
Texas	8	4.6
Iowa	8	4.3
Illinois	6	4.2
Oklahoma	11	3.9
Purdue	7	3.6
Georgia	7	3.3

Table 13. Assessment of Extension Program Quality in Community Development Area (n=9)

State	Number Evaluating State	Average Score for Quality of Program
Wisconsin	9	4.5
Missouri	7	4.5
Minnesota	4	4.4
Pennsylvania	7	4.0
Clemson	6	3.7
Ohio	5	3.6
Illinois	4	3.5
Purdue	5	3.2

Table 14. Assessment of Extension Program Quality in Agribusiness Area (n=7)

State	Number Evaluating State	Average Score for Quality of Program
Purdue	6	4.5
Iowa	5	4.2
Kansas	5	4.2
Minnesota	4	3.8
Texas	4	3.5

Table 15. Assessment of Extension Program Quality in Land and Water Resources (n=5)

State	Number Evaluating State	Average Score for Quality of Program
North Carolina	4	4.3
Pennsylvania	3	4.3
Oregon	3	4.3
Colorado	3	4.2
Florida	3	3.7