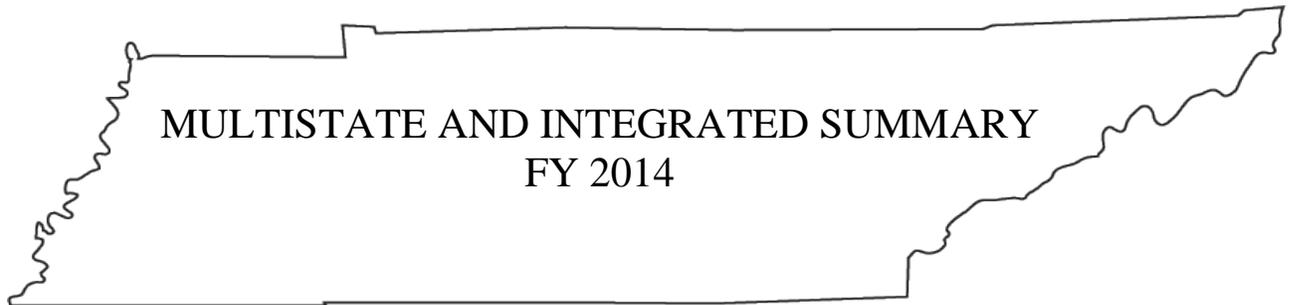


THE UNIVERSITY OF TENNESSEE EXTENSION



MULTISTATE AND INTEGRATED SUMMARY  
FY 2014

AREERA SECTIONS 105 and 204

SMITH-LEVER FUNDS

Submitted to:

United States Department of Agriculture

National Institute of Food and Agriculture

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## **I. Introduction**

In FY 2014, the University of Tennessee Extension met the multistate and integrated targets established for its Smith-Lever funds under Sections 105 and 204 of the Agricultural Research, Education and Extension Reform Act (AREERA) of 1998. The targets were recertified during FY 2008. This report is a summary of expenditures and specific program activities.

## **II. Multistate Extension Summary**

UT Extension programs that represented both multistate and integrated efforts have been listed only in the integrated programs section of this report.

### ***A. 4-H Positive Youth Development***

#### ***4-H Health Rocks (National)***

Tennessee Extension specialists conducted a webinar for 4-H Health Rocks state coordinators from 23 states. The content focused on effective ways to use evaluative data for program planning and accountability. Tennessee continues to have the largest Health Rocks program in the nation, and in the 2014 program year, more than 20,000 youth completed 10 hours of the Health Rocks curriculum.

#### ***National 4-H Congress (National)***

Tennessee Extension 4-H specialists worked cooperatively with Extension personnel from across the nation to implement the 2014 National 4-H Congress in Atlanta. Tennessee 4-H specialists provided leadership and operating support for this national event.

#### ***Southern Region 4-H Horse Championships (Regional)***

Tennessee Extension 4-H personnel assisted in conducting the Southern Region 4-H Horse Championships held in Raleigh, North Carolina. Youth demonstrated their hands-on equine management skills and gained knowledge in equine science.

#### ***4-H Volunteer Leader Conference of Southern States (Regional)***

Tennessee Extension 4-H specialists worked cooperatively with Extension personnel from across the Southern Region to plan and conduct the 2014 4-H Volunteer Leader Conference of Southern States in Eatonton, Georgia. The forum helped volunteer leaders to develop their skill set, cooperate with other volunteers from throughout the region, and strengthen 4-H programs in their local communities.

#### ***Southern Region 4-H Teen Leadership Conference (Regional)***

Tennessee Extension 4-H personnel worked collaboratively with State Extension Specialists in all Southern Region states in hosting a regional teen leadership conference at the Clyde M. York 4-H Camp in Crossville, Tennessee. This conference is jointly planned and conducted by the University of Tennessee, University of Kentucky, University of Georgia, and University of Florida. Extension professionals from these institutions work with an advisory group of 15 teens. More than 150 members, Extension personnel, and volunteers from across the region gained practical knowledge in implementing service-learning programs and supporting project groups in their communities.

### ***B. Agriculture and Natural Resources***

### ***Tri-State Beef Conference (North Carolina, Virginia)***

In 2014 beef producers experienced record prices for feeder cattle, cull breeding animals, and finished cattle. Even at these record levels, prices continue to be highly volatile and sensitive to news both on the domestic and international fronts. Extension personnel from Tennessee, Virginia and North Carolina planned and conducted the third Tri-State Beef Conference in 2014.

Regionally and nationally known speakers presented educational information on cattle health management, nutrition, respiratory disease management, and beef cattle outlook. The event was held in Abingdon, Virginia with 166 producers, 23 Extension personnel, and 49 agribusiness representatives. The producers were from eight states (Tennessee, Virginia, North Carolina, West Virginia, Kentucky, South Carolina, New York, and Ohio). All producers were surveyed at the end of the conference, and 100% indicated that they planned to adopt new practices. The economic impact of those new practices totaled \$334,400 in additional farm income.

### ***Household and Structural Integrated Pest Management Program (National)***

The University of Tennessee Extension's Urban Integrated Pest Management program has developed successful management strategies for pests found in and around structures. This success has brought our program national recognition as we were requested to teach 2,822 pest management professionals from throughout the country in 2014. Assuming that we saved at least one account for each of these contacts, our strategies were worth about \$1.4 million to the pest management industry. In 2014, quiz scores from the four Wood-destroying Organisms and General Rodent Control sessions have increased from pre- to post-training by 42% and 23%, respectively.

### ***Apicultural Programs (National)***

Agriculture depends on healthy honey bees, maintained by beekeepers to pollinate numerous crops. The University of Tennessee is one of 17 institutions collaborating to reverse managed bee decline. As lead institution, the University of Tennessee formed, certified, and maintained the eXtension Bee Health Community of Practice with Extension professionals representing 37 states and 4,455 subscribers. In 2014, Bee Health added 1,374 new subscribers and had 273,179 video views, a 5% increase in video views over last year. The University of Tennessee participated in the Bee Informed Partnership National survey that indicated severe winter weather conditions contributed to greater colony losses in the southeast compared to nationwide losses.

## ***C. Family and Consumer Sciences***

### ***eXtension Involvement (National)***

Tennessee Extension personnel have addressed over 800 Frequently Asked Questions through eXtension. In 2014, highlights of Tennessee Extension's Family and Consumer Sciences eXtension involvement included the following:

- 12 Tennessee Extension personnel served on the Community of Practice for *Families, Food and Fitness*.
- 11 Tennessee Extension personnel served on the *Financial Security for All* Community of Practice.

- Four Tennessee Extension personnel served on the *Food Safety* Community of Practice, including the leader, a specialist in the UT Extension Department of Family and Consumer Sciences.
- Two Tennessee Extension personnel served on the on the Community of Practice for *A,B,C's of Omega 3's*.
- Five Tennessee Extension personnel were active on the *Family Caregiving* Community of Practice.

Tennessee Extension personnel shared implementation strategies, outcome measurement, and evaluation protocols with their Community of Practice colleagues.

### **III. Integrated Research and Extension Summary**

In cases where UT Extension integrated programs are also multistate programs, the states have been delineated in parenthesis.

#### ***A. 4-H Positive Youth Development***

##### ***4-H Healthy Living Professional and Volunteer Development Needs Assessment: A Follow-Up Survey (National)***

As a follow-up to a 2013 national study, Tennessee Extension specialists completed a survey of 97 local Extension 4-H professionals, 26 state Extension 4-H professionals, and 22 4-H adult volunteers. “Hands-on” learning techniques that promote engagement were the most important development need identified for local and state Extension 4-H professionals and volunteers. Among all respondents in this study, 46% identified a lack of resources as the major barrier to integrating an all-encompassing view of human health into all aspects of 4-H programming. This was also the barrier identified by the highest number of respondents in each group (local 4-H professionals, state 4-H professionals, and volunteers). The results are being used to conduct professional development, training, and technical assistance for Extension professionals and volunteers.

#### ***B. Agriculture and Natural Resources***

##### ***Organic and Sustainable Crop Production Program***

Organic and Sustainable Crop Production Program is an integrated research and Extension initiative composed of faculty from six departments and centers in the University of Tennessee Institute of Agriculture. The group manages a 90-acre farm dedicated to organic production, research, and education in conservation tillage techniques, variety trials, organic pest management, reducing soil-borne pathogens and managing weeds, and assessment and encouragement of native bees. In 2014, Extension and research faculty coordinated the Tennessee Organic Production Network, which brought together different sectors of the agriculture industry in Tennessee (growers, producer organizations, industry, NGOs, government officials and agencies, university research and Extension) to encourage organic crop research and Extension programs.

##### ***Solar Energy and Energy Sustainability***

In 2013, the University of Tennessee Department of Biosystems Engineering and Soil Science initiated an integrated research and Extension program to promote solar energy and sustainability. In 2014, this integrated research and Extension program was conducted in 24 counties where multiple aspects of home energy efficiency, solar energy, and energy lessons for youth are being studied.

##### ***Quality Deer Management (Regional)***

In 2014, we continued our integrated research and Extension program in Quality Deer Management, and we taught 968 landowners from nine Southeastern states. Participants reported

that they learned science-based strategies for managing white-tailed deer, and an end-of-program survey showed an average 70% knowledge gain.

#### ***Agronomic Variety Testing Program (Kentucky)***

Agronomic crop producers in Tennessee and Kentucky need unbiased variety performance data on which to base their purchasing decisions. Replicated variety tests were conducted on corn, soybeans, wheat, and some specialty crops at seven of UT's Research and Education Centers. County Standardized Variety Trails were conducted on corn, soybeans, and wheat in large strip-trials on producer's farms in 28 Tennessee counties and five Kentucky counties. Data from all of these crop trials were compiled and published together on the variety trial website and printed copies were distributed to farmers, seed industry representatives, consultants and other interested clientele. Based on surveys conducted by extension agents with grain producers in northwest Tennessee, over 90% of the producers reported that they base their variety buying decisions on data provided in UT variety test publications. In 2014, the increased income per year to those grain producers was over \$102.4 million.

#### ***Native Grasslands Management (Kentucky, Alabama)***

Native grasslands were once abundant in the region and today can play a vital role in agricultural systems (forages, biofuels production) and conservation of imperiled ecosystems in Tennessee and across the eastern United States. An integrated, multi-disciplinary research and extension program has been established to develop and disseminate information about native grassland management strategies that are profitable and practical for Tennessee producers. During 2014, eight field days were conducted and demonstration projects were maintained on eight Research and Education Centers in Tennessee, two sites in Kentucky, and one site in Alabama.

### ***C. Family and Consumer Sciences***

#### ***Community, Local, and Regional Food Systems (Kentucky, Mississippi, North Carolina, Virginia)***

A multi-state working group of 20 Extension and research specialists from five institutions (University of Kentucky, North Carolina State University, Mississippi State University, Virginia Tech, and the University of Tennessee) worked throughout 2014 to strengthen the region's local food systems. This group developed common measures to document the impact of Extension's efforts in community, local, and regional food system initiatives. The group updated *Master Food Volunteer* curriculum to include local food.

#### ***UT Obesity Research Center***

In 2014, seventeen UT Extension specialists from Family and Consumer Sciences, Animal Science, Plant Sciences, and Food Science and Technology continued their service on the UT Obesity Research Center, a multi-disciplinary team formed to study and take action in obesity prevention and treatment. This effort is collaboratively funded by the UT Office of Research, UT Extension, Tennessee Agricultural Experiment Station and the College of Education, Health and Human Sciences. Integrated programs continue to explore such issues as access to affordable food and increasing physical activity.

### ***Tennessee Shapes Up***

UT Extension Family and Consumer Sciences faculty implemented an integrated research and Extension program called *Tennessee Shapes Up* in 71 Tennessee counties in an effort to reverse the obesity trend in Tennessee. Impact data was collected using a behavior checklist survey. A select number of participants were surveyed to determine program impact. The behaviors measured are the healthy lifestyle practices essential in achieving and maintaining healthy weight and preventing chronic disease. Various program evaluations reached 1,887 participants and demonstrated these results:

- 56% reported eating more grains.
- 66% reported decreased consumption of high-sugar foods.
- 72% reported engaging in physical activity for 30 minutes or more on 5 or more days per week.
- 47% reported improvements in blood pressure.
- 56% reported improvements in blood sugar.
- 84% reported using labels to make healthier choices.
- 33% reported losing weight. A total of 3,203 pounds were lost with average weight loss per participant of 2.65 pounds.

### ***Healthy Steps (North Carolina)***

Tennessee was one of only three states to show increases in the numbers of obese low-income preschool children from 2008 to 2011. Research shows that children who were overweight in kindergarten were four times more likely to become obese nearly a decade later than five-year-olds of a healthy weight. *Healthy Steps*, a nutrition and physical activity curriculum produced by the UT Extension Department of Family and Consumer Sciences, uses popular preschool themes to teach nutrition and physical activity, such as counting, home, and family. *Healthy Steps* incorporates into these themes the *Color Me Healthy* curriculum from the North Carolina State University. *Healthy Steps* was implemented in 18 Tennessee counties in 2014 with more than 3,000 contacts. Surveys were completed by Voluntary Pre-K, Head Start and center-based classroom teachers at the end of the program to document program outcomes:

- 100% reported preschool children in their classes were more actively engaged in physical activity.
- 100% reported preschool children in their classes were more willing to taste fruit.
- 97% reported preschool children in their classes were more willing to taste vegetables.
- 87% reported preschool children in their classes were more willing to taste whole-grain foods.
- 87% teachers reported using physical activities from *Healthy Steps* at least three times per week.

# IV. Summary of Multistate and Integrated Expenditures with Smith-Lever Funds

U.S. Department of Agriculture  
 Cooperative State Research, Education, and Extension Service  
 Supplement to the Annual Report of Accomplishments and Results  
 Actual Expenditures of Federal Funding for Multistate Extension and Integrated Activities

Fiscal Year: 2013

Select One:  Interim  Final  
 Institution: University of Tennessee Extension  
 State: Tennessee

	Integrated Activities (Hatch)	Multistate Extension Activities (Smith- Lever)	Integrated Activities (Smith- Lever)
<u>Established Target %</u>		7.4%	9.4%
<u>This FY Allocation (from 1088)</u>		\$8,921,886	\$8,921,886
<u>This FY Target Amount</u>		\$660,219	\$838,657
<b>Title of Planned Program Activity</b>			
A. 4-H Positive Youth Development		\$237,010	\$2,289,988
B. Agriculture and Natural Resources		\$829,538	\$2,772,093
C. Family and Consumer Sciences		\$118,505	\$964,205
<b>Total</b>		\$1,185,053	\$6,026,286
<b>Carryover</b>		-0-	-0-

**Certification:** I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays represented here accurately reflect allowable expenditures of Federal funds only in satisfying AREERA requirements.

  
 Tim L. Cross, Dean, UT Extension

April 1, 2015

## **V. Contact Information**

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