

2013 Survey Summary of University Pesticide Safety Education Programs (PSEPs) for the National Stakeholder Team for PSEP Funding

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Pesticide Safety Education Programs (PSEPs) are managed through the land-grant university system. They have been in place since the mid 1960's. Initially the programs were charged with training foresters, ranchers and farmers in the judicious use and safe handling of pesticides. In the 1970's the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) required certification of applicators who purchase/apply restricted-use pesticides. The US Environmental Protection Agency (EPA) working with the US Department of Agriculture and land-grant universities formally recognized PSEPs and provided base funding to support certified applicator education of commercial and private applicators using pesticides in agriculture, rights of way, aquatics, urban, residential, institutional, and public health sectors. Since then many states have implemented regulations requiring certification for others who apply any pesticide (general/restricted) as part of their profession (e.g., for-hire, public employees), greatly expanding the scope of people requiring training and safe handling resources. In 2000, EPA funding split among all 50 state university PSEPs was \$1,900,000 and by 2013 had decreased to \$500,000. In response to this dramatic reduction in funding the Weed Science Society of America published an issue paper in 2011, titled: "The Precarious State of PSEPs" (<http://psep.us/WSSA-PSEP-TechPaper.pdf>). Following this publication, the National Stakeholder Team for PSEP Funding was formed in October 2012 with three initial objectives, including (1) establishing a permanent federal source of funding, (2) determining the potential for university and state lead agency support, and (3) promoting the awareness of PSEPs and the importance of funding. An important first step toward meeting these objectives was to assess the current funding situation in states to ascertain the array of funding strategies and any obvious strengths and weaknesses.

PSEP Funding Survey

To assess the current level of PSEP funding, which primarily comes from university (e.g., salaries, travel, user fees for training and manuals) and state lead agency agreements (e.g., registration/certification fees), the National Stakeholder Team for PSEP Funding in April 2013 conducted a survey of university PSEPs located in the 50 states (Puerto Rico was not surveyed). A follow-up set of questions was completed in October 2013 to clarify some findings. All state PSEPs responded; however, three states were unable to provide sufficient data about their support. The survey also tabulated the number of full time equivalent (FTE) positions that directly service the core PSEP; note, the survey explicitly excluded support for county-based educators or state-wide specialists which are a significant component of most PSEPs. The amount from each university and state lead agency (SLA) "revenue" stream was tabulated. Information on university facility and administrative charges (overhead) associated with gifts and grants was collected. The survey focused primarily on university and SLA support; but recognizes there are other sources (Pesticide Registration Improvement Act, federal grants, industry). In order to maintain confidentiality of all university PSEPs, only summary numbers are reported.

The findings show extreme variability in the ranges among university PSEPs.

- total number of certified applicators per state – range: 400-63,000
- newly certified applicators per state – range: 50-7,500
- full time equivalent positions dedicated to PSEP per state – range: 0.02 – 9.0
- funding levels per state – range: \$10K to over \$500K
- predictable funding streams per state – range: university only to university, fees, and SLA agreements

Funding sources quantified from the survey (n=47) included the numbers of PSEPs supported by

- university allocations for salary/operations (n=31, 66%)
- revenue-based user fees for manuals/classes (n=42, 89%),
- grants/contracts (n=17, 30%), and
- funding agreements with the state lead agency (n=21, 45%).

The total amount of funds per state derived from these sources ranged from as little as \$1,000 to more than \$500,000. The best-funded programs typically received significant support from a combination of university dollars, cost-recovery revenue, and SLA Memorandum of Understanding (MOU) agreements and had more than 1.5 full time positions dedicated to PSEP.

Several important considerations result from great differences in states' geography, demographics, applicator numbers, and politics; there is a wide diversity of programs. Furthermore:

- There is not a one-size-fits-all situation and needs vary greatly among states (e.g., travel distances, certified applicator numbers, mandated responsibilities).
- Some states have a greater percentage of commercial applicators because "direct supervision" is prohibited or its definition is very restrictive; other states may have a higher training burden due to "registered" technicians (which are not classified as certified applicators; though Certification Plan and Reporting Database (CPARD) captures which states regulate/test technicians).
- Total number of applicators reported is simply the addition of number of private and commercial applicators; thus, a possible slight over estimation when a person carries both credentials.
- In many states, the scope for certified applicators goes beyond the use of restricted-use pesticides as mandated by FIFRA and includes applicators who apply general use products (e.g., public employees, for-hire applicators).
- Revenue from online training is currently minimal or nonexistent in most states.
- Production/revision of PSEP manuals represents a significant expense for many programs and can be difficult to cover costs through sales; sales of manuals are prohibited by one state.

The intent of this publication is to present the current funding situation and provide justifications for the many underfunded states to improve their funding levels. Changes to existing funding levels and strategies will require support from stakeholders: universities, SLAs, industry, the affected applicator community, and others who are advantaged by applicator certification. Each PSEP can use this document to plot out where they currently stand in comparison to the others in the country to aid in developing justifications and strategies for changes in their current funding model.

Number of Applicators per State

SLAs annually report the number of applicators holding a certified applicator credential; thus, the pool of possible training clientele. The numbers of certified applicators (private and commercial) per state in 2012 were obtained from CPARD (cpard.wsu.edu), which is the SLA reporting database for numbers of new, recertifying, and total certified applicators. However, this does not directly correlate to the actual number of people trained by PSEPs (manuals distributed, face-to-face/webinar classes, etc.). *Note that Puerto Rico was not included in the survey, but has over 1,000 newly certified per year and over 24,000 total applicators.*

Table 1 shows the breakdown for the numbers of states related to a range of certified applicators reported in CPARD. Figures 1 and 2 show the breakdown of newly certified and total number of certified applicators per state; these reflect each other well. Of the total of 874,854 total applicators in CPARD 2012 for the 50 states, 47.8% are commercial applicators (418,394) and 52.2% are private applicators (456,460). Of the 418,394 commercial applicators, 57.5% work in urban sectors: turf, ornamental, institutional, residential and structural pest management; thus, 27.5% of all certified applicators are urban. This large number of certified urban applicators is due more to individual state requirements for certification and less to the federal requirements for the purchase/application of restricted use pesticides.

Table 1. Number of States Having Commercial or Private Applicators in Set Ranges

Applicator Certification	Number of States Having Commercial or Private Applicators Numbering:					
	Under 1000	1,000 to 4,999	5,000 to 9,999	10,000 to 19,999	20,000 or more	
Commercial	2		19	13	14	2
Private	9		12	8	16	5

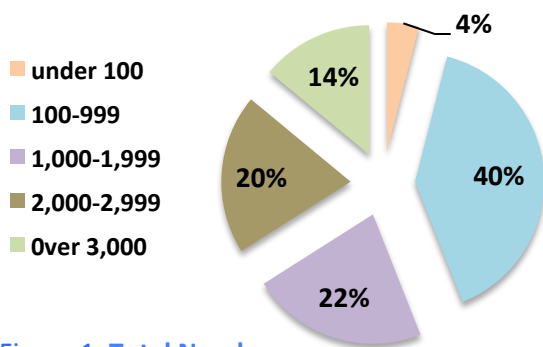


Figure 1. Total Number of NEWLY Certified Applicators

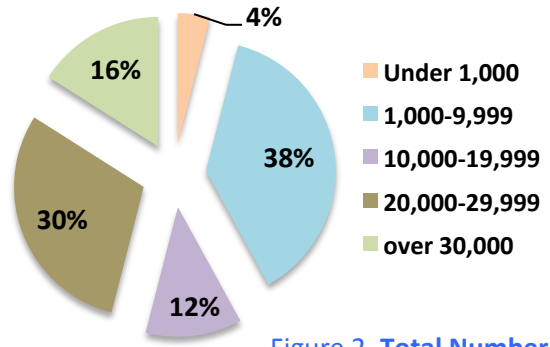


Figure 2. Total Number of Certified Applicators

Prior to FY2011 budget cuts, EPA used a funding formula that weighted more funding for commercial applicators compared to private applicators (60/40) since there is a greater financial burden for initial and recertification resources (training, manuals) in the commercial categories. However, EPA funding levels were reduced to \$500,000 in 2011 with \$5,000 to Rhode Island and Alaska and \$10,000 to other 48 states and Puerto Rico.

Full Time Equivalent Positions (FTE) for PSEP

All but one university has a designated PSEP coordinator. There is great variation in the percent of that position dedicated to PSEP versus other responsibilities. In addition, many universities have additional staff, which directly support PSEP (e.g., training faculty, support staff, publication staff). Figure 3 shows the range of FTE positions; from a low of 0.02 to 9.0. One FTE may include several part time people making up a full time equivalent.

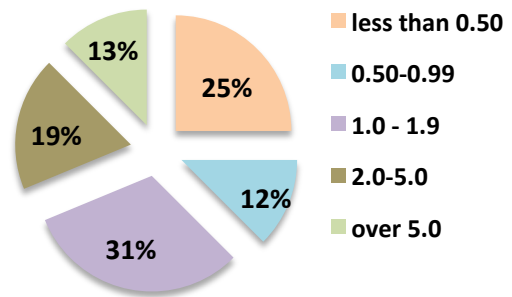


Figure 3. Core Staff + Coordinator Full Time Equivalent Positions (n=48)

Current Funding Levels for 2012

Forty-seven PSEPs reported the level of funding under which they currently operate, including salary/benefits, travel, supplies, goods, and equipment. The amounts for current funding were based on values reported by PSEPs. Forty percent of the programs are operating on less than \$74,000 per year, 58% on less than \$150,000 per year, and 22% on more than \$300,000 per year.

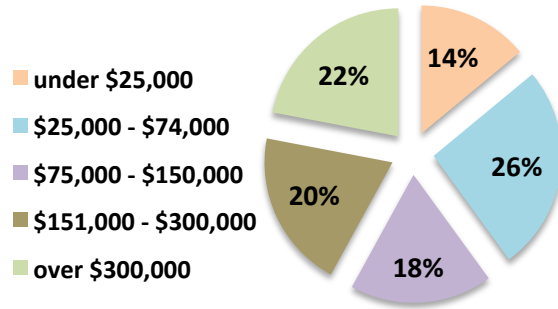


Figure 3. Total Operation Funding that Support PSEPs (n=47)

University and SLA Sources for PSEP Funding

A total of 30 PSEPs have direct university support for salary/operations; 17 are solely self-supported through fees, grants, and agreements. Forty-two PSEPs (89%) collect user fees, ranging from \$600 to more than \$500,000 with a median of \$40,000.

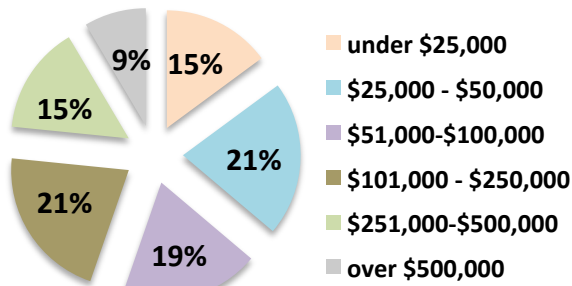


Figure 4. University Financial Support to PSEP Programs (n=50)

Sixteen PSEPs reported funding from grants and contracts for specific mission-related projects. Figure 4 includes all university-based revenue streams per year; 34% of PSEPs receive less than \$50,000, 21% receive \$50,000-\$100,000, and 23% over \$250,000.

SLA support is critical, especially since state-specific regulations created the burden. Twenty-one PSEPs (45%) receive some level of funding from the SLA; this may support a specific task or fund general operations (salary, goods, travel). Figure 5 shows 55% of PSEPs have no funding support from their SLA, 21% percent receive less than \$50,000, and 25% receive more than \$50,000 annually. The median for the 45% who receive funding is \$43,000.

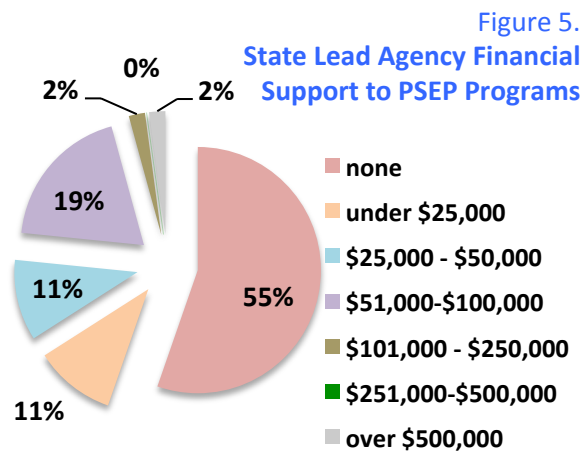


Figure 5. State Lead Agency Financial Support to PSEP Programs

Summary

Improving the self-sufficiency of PSEPs will require time and effort to work for policy/revenue changes within university systems and through SLA, legislative, and stakeholder initiatives to change policy and create new revenue streams. PSEPs must strive to implement cost-recovery efforts (fees, agreements) to fund primary enterprises such as training events and publications. The costs for training or publications should include the expenses

(salary, benefits, travel, goods, services, equipment, office and overhead) for coordination, development, revision, delivery, evaluation, and reporting. PSEPs should develop a business plan to assess their mission, expenses, revenue, potential for growth, and documentation for needed support by university administration, SLA administrators, industry stakeholders, and others who rely on the safe, judicious use of pesticide and training. Each PSEP needs to assess the possibilities to improve funding and implement strategies used in other states for new or increased funding streams.