

2008 Economic Value of Supervised Agriculture Experiences (SAE) & Teacher Travel in Texas

Report Completed by: Dr. Roger D. Hanagriff, Agriculture Experience Tracker / www.theaet.com
for questions or comments: roger@theaet.com cell: 936-661-4163

ABSTRACT

The following report is a summary report from a survey sent to all FFA Chapters (975) to inquire about the investment cost students and their families spend in purchasing and producing SAE projects, which were responded to by 347 chapters. A secondary aspect of the project was to measure teacher's annual travel and use of hotel rooms, which is an additional economic value to the Texas economy.

The focus of this report is to communicate the major findings in an illustrative and concise format. An additional focus of this report is to provide agriculture education programs in Texas information and a format to communicate their economic value to their program stakeholders.

Teachers from each program responded to an on-line survey where they report typical student investment cost in SAE's, miles traveled attending student educational events as well as utilized hotel rooms. The data is a representative sample of typical agriculture education programs in Texas and used to estimate the total economic value to Texas.

Results from the survey are that an average chapter represents 147 students that invest over \$93,000 in SAE projects. Student's SAE investment across Texas total over \$90 million in SAE investment to the Texas economy with economic impacts from these investments reaching over \$163 million. These investment cost are significant values to the Texas economy and in some rural areas may represent a significant impact to feed stores, farm suppliers and other local businesses. This sample represents teachers having 13 years of experience, annually traveling over 15,000 miles and utilizing 43 hotel rooms. Teacher travel provides an additional annual chapter value of over \$12,000, represents over \$12 million in spending value to Texas, which is over \$25 million in economic impacts to the Texas economy.

These values are in addition to the great education experiences of students involved in SAE projects and the value of traveling to attend education events. However, this report is related to economic value and the results are organized by common questions relating to economic impact.

2008

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Who Responded to the Survey?

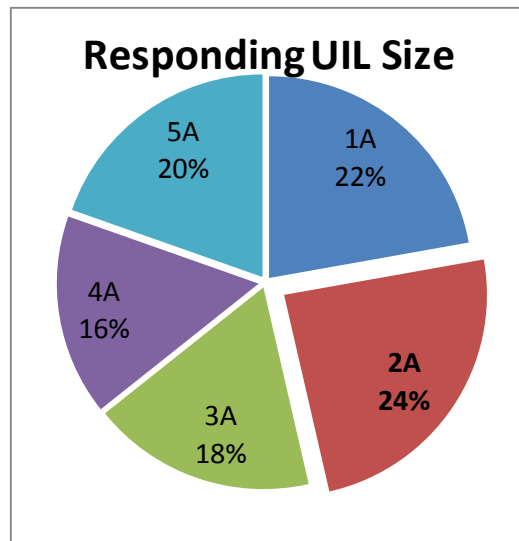
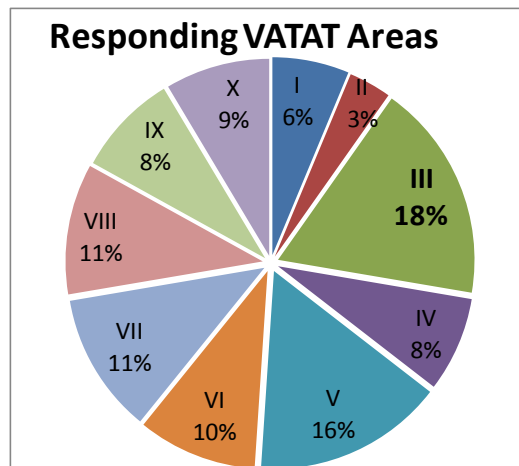
The 2008 survey was completed by 347 teacher programs in Texas, which using the 975 FFA programs results in a 36 percent response rate. The responding programs represented all VATAT Areas (see chart).

Schools also responded to UIL size to measure the size of schools. There was a nearly equal division across school sizes with 2A schools representing a slightly higher response of 24 percent of the sample (see chart).

Teachers responding to the survey had an average of 13 years teaching experience and have an average student enrollment in agriculture courses of 147 students with 80 that are FFA members. The average program also included 60 percent of students involved in FFA membership.

What is the Cost of Travel to Support Agriculture Education?

The cost of travel for teachers involves some SAE travel as well as other educational activities such as contest, educational trips and professional development. These costs are program budget values, but are also economic values to the Texas economy supporting transportation and lodging businesses (see table). The \$12,654 value represents the average travel cost for a program, with some programs reporting over 45,000 miles to a low of zero miles.



	Average Reported Values per Program	Average Cost Value (\$ per Unit)	Estimated Average Annual Budget Cost
Average Annual Miles Traveled	15,040	\$ 0.585	\$ 8,798.27
Average Annually Used Hotel Room Nights	43	\$ 88.92	\$ 3,856.21
Total Budget Cost			\$ 12,654.48

* Using July 1 Texas Comptroller Rate

* Using 2007 Average Texas Hotel Rate from TX Tourism

What is the Economic Impact of SAE and Teacher Travel in Texas?

The survey requested the typical investment cost needed to complete specific SAE projects, which creates value to the Texas economy (see table). The economic value of SAE projects are a value to the local and state economy from inputs such as feed, seed and fertilizer, with a large value of these cost going to local economies.

There is an average chapter SAE direct investment value of \$93,222 to the local economy with all 975 programs totaling nearly \$90.9 million in values to Texas. Economic impacts describe how the influx of the \$90.9 million actually represents \$163.6 million in economic value to the Texas economy (IMPLAN Value \$1.80 ag). Travel values also account for state value and add another \$25.8 million in economic impacts for a total economic value to Texas of \$189 million (see table).

	Percent Chapter with SAE	Average Expense to Support ONE SAE ¹	Average Unit per Chapter ²	Average Chapter Investment Value ³	Average SAE Investment Value to Texas Economy (975 Programs) ⁴	Average Economic Impact of SAE Programs (IMPLAN Mult.) ⁵
Market Swine	93%	\$ 666	34	\$ 17,772	\$ 17,327,562	\$ 31,189,611
Market Goat	87%	\$ 515	19	\$ 6,681	\$ 6,514,437	\$ 11,725,987
Market Beef (show steer)	67%	\$ 2,854	10	\$ 17,657	\$ 17,215,428	\$ 30,987,771
Commercial Show Steer*	25%	\$ 2,421	9	\$ 6,991	\$ 6,816,285	\$ 12,269,313
Market Sheep	73%	\$ 653	12	\$ 4,656	\$ 4,539,208	\$ 8,170,574
Registered Show Heifer	67%	\$ 2,921	7	\$ 14,028	\$ 13,677,447	\$ 24,619,404
Broilers	57%	\$ 292	8	\$ 1,220	\$ 1,189,547	\$ 2,141,184
Ag Mechanics	55%	\$ 1,277	11	\$ 5,926	\$ 5,778,130	\$ 10,400,635
Breeding Swine	33%	\$ 644	11	\$ 2,105	\$ 2,052,502	\$ 3,694,504
Commercial Show Heifer	26%	\$ 1,577	6	\$ 2,587	\$ 2,522,378	\$ 4,540,281
Breeding Beef	23%	\$ 3,678	8	\$ 3,926	\$ 3,827,459	\$ 6,889,427
Equine	22%	\$ 2,549	6	\$ 3,463	\$ 3,376,338	\$ 6,077,409
Breeding Goat	19%	\$ 652	15	\$ 1,667	\$ 1,625,292	\$ 2,925,525
Horticulture	18%	\$ 219	55	\$ 729	\$ 710,565	\$ 1,279,016
Turkeys	16%	\$ 515	12	\$ 499	\$ 486,144	\$ 875,060
Breeding Sheep	12%	\$ 493	9	\$ 597	\$ 582,282	\$ 1,048,108
Floriculture	8%	\$ 96	13	\$ 94	\$ 91,807	\$ 165,252
Crop / Forage Production	7%	\$ 2,386	11	\$ 1,570	\$ 1,531,020	\$ 2,755,837
Dairy	5%	\$ 1,385	5	\$ 960	\$ 936,100	\$ 1,684,980
Breeding Poultry	4%	\$ 168	6	\$ 68	\$ 65,879	\$ 118,583
Aquaculture	3%	\$ 366	1	\$ 27	\$ 25,898	\$ 46,616
Total Values				\$ 93,222	\$ 90,891,709	\$ 163,605,076
Program Travel Value ⁶				\$ 12,654	\$ 12,338,115	\$ 25,786,661
Total All Values to Texas				\$ 105,877	\$ 103,229,824	\$ 189,391,737

Footnotes:

1- Average of reported cost to raise a one SAE and represents only those having that SAE(n=347)

2- Value is the reported unit number and represents only those having that SAE(n=347)

3- Average total chapter investment for all chapters in Texas, regardless if they had or did not have the SAE. This is approach uses \$0 value for those without SAE and reported value for those with SAE and is a representative sample of all Chapters in Texas

4- SAE Investment values for all 975 programs in Texas(Value is#3 * 975)

5- Economic Impact SAE values for all 975 programs using \$1.80 IMPLAN value of agriculture production in Texas and \$2.09 for Travel Cost

6- Travel cost represent average reported values for program use of hotel rooms and miles traveled to ag education events

What is the Economic Value per Student?

Using the investment cost of SAE's per chapter and the numbers of students in that program as well as FFA members, the following are average student values related to SAE investment cost.

	Investment Value per Student
SAE Chapter Investment Value per Student in Agriculture Education	\$ 751.43
SAE Chapter Investment Value per Student in FFA	\$ 1,325.49

What is the Economic Value of MY PROGRAM?

Use the below table to complete an estimated economic value of your program from SAE projects. Using the average reported values provides a more conservative approach, but you can substitute values or strike values that best fit your program. Share this report and these values with your local sponsors, parents and school administration to illustrate the economic value of your student's SAE projects.

SAE Name / Unit	2007-08 Ave. Investment Per Unit (A)	Your Number of SAE's (B)	Your Program's SAE Investment (A*B)	Your Program's SAE Economic Impact (A*B)*\$1.80
Market Swine / hd	\$666.10			
Market Goat / hd	\$515.28			
Market Beef & Steers / hd	\$2,874.06			
Market Sheep / hd	\$653.22			
Registered Show Heifer / hd	\$2,921.47			
Show Broilers / pen	\$291.81			
Ag Mechanics / each	\$1,277.28			
Breeding Swine / hd	\$644.20			
Commercial Show Heifer / hd	\$1,576.63			
Breeding Beef / hd	\$3,677.57			
Equine / hd	\$2,549.38			
Breeding Goat Herd / hd	\$651.82			
Horticulture / each	\$218.75			
Turkey / pen	\$218.75			
Floriculture / each	\$95.71			
Crop/Forage Production / acre	\$2,385.64			
Dairy Production / hd	\$1,384.78			
Breeding Poultry / pen	\$167.50			
Aquaculture / each	\$366.00			
Total Values from SAE's				