



Executive Summary Report - 2017 Agricultural & FFA Program Report

In 2017, 5,545 programs, comprising 45 states used The AET record keeping system, but 4,132 programs illustrated consistent use in the areas of student logins, SAE and FFA records and serves as a representative sample of programs. Table 1 provides a summary of chapters in this 2017 sample and compares their rank in National FFA membership to validate the sample contains proportionate values and represents national rankings.

Table 1 - AET Sample summary & National Membership Ranking (n=4,132)

AET Sample Rank	State	AET Sample Chapter #	AET Sample FFA Student #	% of National Chapters	% of National Students	National FFA Rank (Chapter)
1	TX	657	85,927	62%	70%	1
2	OK	297	22,889	83%	86%	2
3	CA	275	76,447	82%	85%	6
4	OH	256	21,728	81%	86%	8
5	IL	228	13,714	68%	73%	5
6	NE	171	7,364	93%	85%	19
7	NC	152	10,578	52%	54%	9
8	AR	145	9,113	71%	68%	13
9	PA	115	11,310	80%	88%	23
10	KS	106	5,441	54%	56%	16
11	CO	102	5,799	93%	84%	25
12	KY	100	10,493	66%	75%	22
13	IA	98	6,539	42%	42%	12
14	MI	93	6,796	80%	82%	24
15	OR	91	5,550	86%	82%	27
16	MN	81	5,389	44%	50%	18
17	ID	78	4,414	91%	86%	32
18	MT	76	4,556	84%	87%	30
19	GA	74	11,813	22%	28%	7
20	UT	73	6,291	88%	93%	34
21	AZ	67	8,739	86%	86%	35
22	AL	66	4,490	26%	30%	10
23	ND	64	4,457	74%	76%	33
24	WV	58	3,277	74%	61%	36
25	IN	57	4,382	28%	36%	14
26	WA	53	3,691	32%	35%	21
27	WI	52	6,181	21%	29%	11
28	WY	50	2,904	93%	94%	39
29	NM	44	2,228	61%	60%	37
30	SD	43	2,801	49%	61%	31
31	MO	37	2,941	11%	12%	3
32	VA	36	2,062	21%	24%	20



33	NY	33	1,579	30%	36%	26
34	FL	32	1,611	9%	9%	4
35	SC	27	1,823	26%	23%	28
36	TN	27	2,185	13%	15%	15
37	NV	23	2,075	85%	82%	43
38	MD	19	1,242	42%	52%	40
39	LA	18	2,309	9%	22%	17
40	DE	17	2,716	46%	66%	41
41	CT	15	2,367	75%	71%	44
42	NJ	15	1,126	45%	50%	42
43	AK	6	95	46%	36%	48
44	MS	3	108	3%	3%	29
45	MA	1	220	7%	10%	47
Total Values		4,132	399,760	Sample Ave. 54%	Sample Ave. 57%	

Table 2 provides a demographic summary of students and programs in this sample.

Table 2 Sample Program Demographics (n=4,132)

Program Demographic	Average (Per Program)	Most Often Value (Mode)	95% Confidence Range of Avg.
Number of Teachers	1.77	1	1.7 to 1.8
Active Students (all grades)	97.3	33	94 to 101
% of students with SAEs (Active)	57%	n/a	n/a
% of students with Journals (Active)	74%	n/a	n/a

2017 Agricultural Education Program Engagement

Table 3 provides a summary of engagement by SAE type per program and a national estimate of total SAE projects using the total FFA 2017-18 membership (8,130 chapters).

Table 3 Student SAE Involvement by Primary SAE Type (n=4,132)

SAE Descriptive Area	2017 SAE # (Per Program)	%	SAE National Estimate (N=8,130 Programs)
Placement SAE	41	43%	331,390
Entrepreneurship SAE	28	31%	227,392
Foundational SAE	17	20%	139,662
Research SAE	7	6%	54,752
Total SAEs Per Program	93		753,196



SAE engagement by AFNR area and relative value is listed in Table 4.

Table 4 Student SAE Involvement by Interest Area (n=4,132)

SAE Descriptive Area	2017 Average (Per Program)	2017 %	National Estimate (N=8,130 Programs)
Animal Systems	42.9	46.3%	348,610
Agribusiness Systems	6.0	6.5%	48,770
Leadership Education & Comm.	8.8	9.5%	71,568
Environmental Systems	3.6	3.9%	29,614
Food Products and Processing	4.8	5.1%	38,618
Power, Structural and Technical	8.5	9.2%	69,274
Natural Resources	2.5	2.7%	20,053
Plant Science	15.3	16.6%	124,764
Biotechnology	0.2	0.3%	1,924
Total SAE Interest	93		753,196

Student experiential learning activities for SAE, FFA and community are outlined in Table 5.

Table 5 Students 2017 Time Invested (Journal Hours) in Experiential Learning (n=4,132)

Descriptive Area	Average (Per Program)	%	National Estimate (N=8,130 Programs)
Journal Hours in SAE Projects	4,267.6	76.6%	34,695,957
Journal Hours in FFA Activities (Offices, CDE, Committees)	984.8	17.7%	8,006,432
Journal Hours in Community Service Activities	316.4	5.7%	2,572,334
Total Hours	5,568.8		45,274,723

How students report involvement in FFA activities is outlined in Table 6.

Table 6 Student Activities (#) by Common Areas of FFA Involvement (n=4,132)

Descriptive Area	Average (Per Program)	%	National Estimate (N=8,130 Programs)
Other FFA-related Activities (Convention, Camps, Meetings, etc.)	143.3	70%	1,164,713
FFA Office-related Activities	12.8	6%	104,381
CDE-related Journal Activities	38.5	19%	313,060
Committee-related Journal Activities	9.8	5%	79,731
Total FFA Activities	204.4		1,661,885



2017 Economic Values from SAE Engagement in Agricultural Education

Not only does SAE engagement involve time and learning, but also financial investments and potential earnings. Table 7 provides a summary of student SAE earnings for a typical agricultural education program.

Table 7 Income Values from SAE Engagement in Agricultural Education Programs in 2017 (n=4,132)

Area of SAE Income (SAE returns)	Average (Per Program)	%	2017 National Estimate (N=8,130 Programs)
Paid Work Income	\$23,466	31.2%	\$190,775,523
SAE Labor Exchange	\$5,322	7.1%	\$43,269,619
Cash/Market Sale	\$24,819	33.0%	\$201,779,302
Stock Show Sale	\$10,071	13.4%	\$81,879,017
Award/Scholarship/Premium	\$3,994	5.3%	\$32,470,340
Research Funding	\$2,489	3.3%	\$20,234,336
Used at Home	\$1,339	1.8%	\$10,884,228
Rental Income	\$3,638	4.8%	\$29,574,999
Total Value	\$75,137		\$610,867,365

SAE Direct spending is a key factor of economic growth and is outline in Table 8.

Table 8 SAE Investments in Operating Expenses (n=4,132)

Area of Economic Investing	Average (Per Program)	%	National Estimate (N=8,130 Programs)
Inventory for Resale	\$16,062	29.4%	\$130,581,489
Feed	\$10,433	19.1%	\$84,816,856
Other Expenses	\$5,246	9.6%	\$42,647,046
Fertilizer/Chemicals	\$3,369	6.2%	\$27,392,603
Rent	\$5,927	10.9%	\$48,186,081
Contract/Custom Hire	\$3,550	6.5%	\$28,857,959
Paid Work Expense	\$1,410	2.6%	\$11,466,693
Supplies	\$2,111	3.9%	\$17,161,098
Seed	\$1,827	3.3%	\$14,851,433
Fuel	\$1,090	2.0%	\$8,861,047
Entry Fees/Commissions	\$1,290	2.4%	\$10,485,153
Repairs/Maintenance	\$1,310	2.4%	\$10,646,738
Veterinary Medicine	\$986	1.8%	\$8,015,565
Total Value	\$54,609		\$443,969,761



Economic values also include non-current assets (long-term assets), such as breeding animals, machinery, buildings and land, which are additional drivers to local, state and national economies. Additional impacts can be measured using economic multiplier factors (\$1.90 per \$1 in spending IMPLAN Type II Multiplier). Table 9 provides a summary of agricultural education program values (direct spending and economic value).

Table 9 Direct Investments and Economic Impact Values from 2017 SAE Engagement (n=4,132)

Area of Economic Activities (SAE Investments)	Avg. Program Value Direct Spending (Per Program)	Avg. Program Economic Value ¹ (IMPLAN 1.90, Type II)
Total Operating SAE Expenses	\$54,609	\$103,757
Non-Current Asset Purchases	\$21,797	\$41,415
Total Value	\$76,406	\$145,172

1 - IMPLAN Model values represent direct, induced and indirect economic values derived from spending

Economic values from agricultural education programs (FFA Chapters) with SAE activities defines not only local values, but also national values to measure impacts to the national economy. Table 12 defines the 2017 national economic impact value from SAE engagement.

Table 12 National Direct Investments and Economic Impact Values from SAE Engagement (N=8,130)

Area of Economic Activities (SAE Investments)	National SAE Direct Spending	National Economic Value ¹ (IMPLAN 1.90, Type II)
Total Operating SAE Expenses	\$443,969,761	\$843,542,545.92
Non-Current Asset Purchases	\$177,211,962	\$336,702,727.06
Total Value	\$621,181,723	\$1,180,245,273

1 - IMPLAN Model values represent direct, induced and indirect economic values derived from spending.

Considering national values and total FFA student enrollment (673,302), each FFA member potentially represents \$923 in direct spending, \$1,753 in economic values from SAE project involvement and 67 hours of additional learning experiences.

Application of Information

This report provides a summary of agricultural education, which also represents FFA chapter metrics describing a typical U.S. agricultural education program and national estimates of value. Appropriate use of these values can serve to describe programs or make comparisons using AET reports for a specific program.