A Financial Analysis of the FFA Career Development Events hosted by Texas A&M University-Commerce for the years 2012, 2013, 2014

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Background Information

- Annually at Texas A&M University-Commerce
  - Area V & VI Career Development Events are held
  - 1500+ Students
  - Hosted and facilitated by the School of Agriculture

National FFA Organization

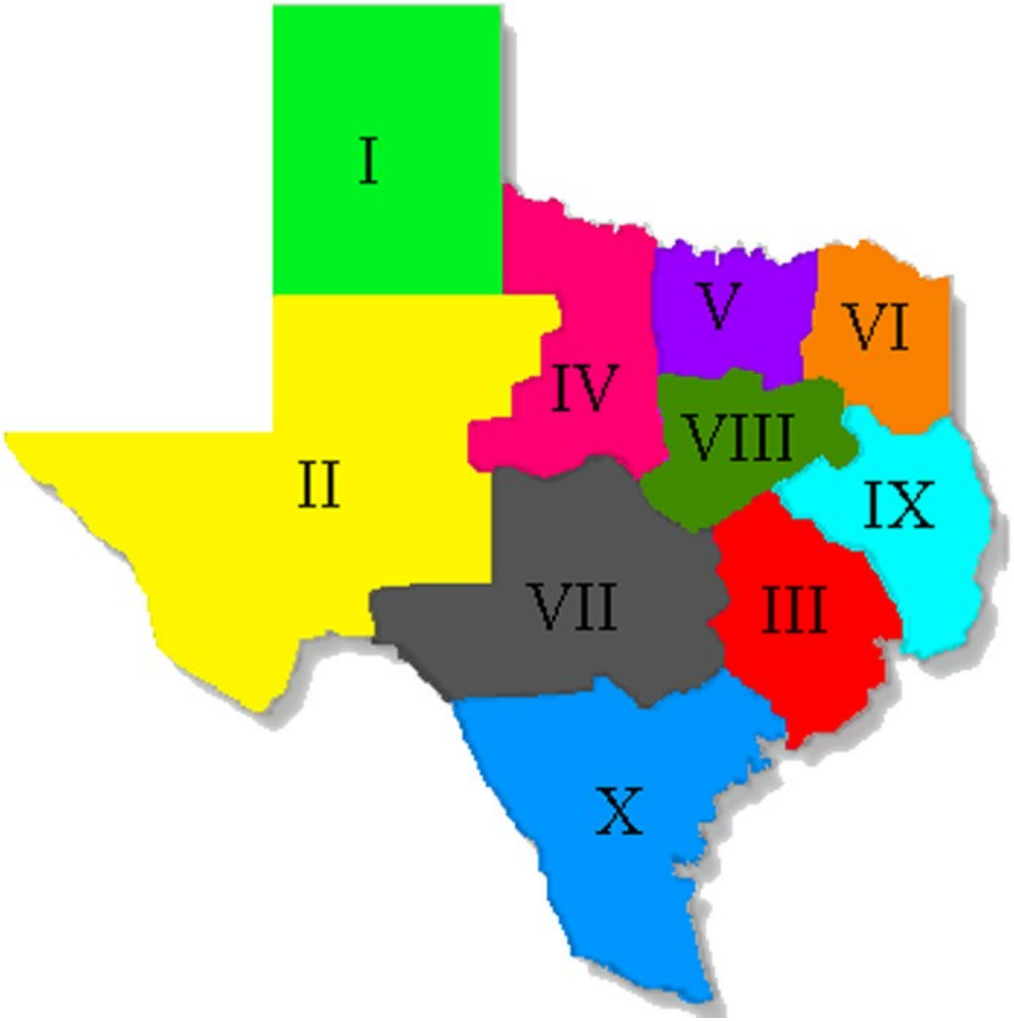
"The national organization of students enrolled in agricultural education courses; the organization consists of chartered state associations which are in turn composed of local chapters."

(Phipps, Osbourne, Dyer, & Ball, 2008, p. 383)

National FFA Organization

- National
- State
- Local

Areas in Texas



Texas FFA Association, 2014

Career Development Events (CDEs)

"Activities that allow students to apply classroom knowledge in a context than encourages students to learn more about their areas of interest; the context is competitive and encourages students to develop critical-thinking, decision-making, and problem-solving skills"

(Phipps, Osbourne, Dyer, & Ball, 2008, p. 406)

Table 1

2014 FFA Career Development Events Hosted by Texas A&M University-Commerce

	Area V		Area VI	
	Teams	Individuals	Teams	Individuals
Ag Mechanics	12	41	34	9
Dairy Cattle Evaluation	43	162	26	96
Farm Business Management	12	44	18	65
Floriculture	24	87	24	82
Livestock Evaluation	69	258	58	218
Milk Quality	37	135	28	106
Nursery/Landscape	13	45	15	57
Poultry Evaluation	43	151	27	100
Veterinary Science	39	142	27	95
Area Totals	292	1065	257	828
			Total Teams	549
			Total Individuals	1,893

Statement of the Problem

TAMUC had hosted CDEs for over half of a century, yet no financial reports had been produced or an analysis by event conducted.

Purpose of the Study

To determine the value of expenses, including in-kind contributions, associated with hosting each of the CDEs held at Texas A&M University-Commerce for the years 2012, 2013, and 2014.

Research Objectives

1. Determine the financial expenses for hosting each CDE.
2. Identify the in-kind contributions associated with hosting each event.
3. To determine the average cost per team of each event.
4. To determine the average cost per team of each event when in-kind contributions are included as expenses.

Related Literature

Role of CDEs

(The National FFA Organization, 2014)

Stress According to Teachers

- Preparing CDE teams for competition
  - 3rd largest stressor among ag sciences teachers
  - Placed above:
    - Organizing fundraisers
    - Preparing for livestock shows
    - Attending officer trainings
    - Supervising agricultural projects (SAEs)

(King, Rucker, & Duncan, 2013)

Quality of Competition

- CDEs Written Exams
  - Quality of questions is vital to overall quality of event
  - Level of fairness and difficulty of CDEs increase with extensive revising of questions

(Schlemmer, Yu, Ewell, & Ford, 2008)

Quality of Competition (cont.)

- Contests involving live animals
  - High quality events need:
    - Fully equipped, well lit covered facilities
    - Areas for students to give reasons
    - Knowledgeable officials
      - With previous experience
    - Knowledgeable group leaders
      - With previous experience

(Rusk & Culp, 2001)

Cost of Hosting Contests

- Costs include providing the following:
  - Adequate facilities
  - Experienced officials and workers
  - Prime specimens
  - Quality tests
- Costs should be covered by the host
- Revenue collected should cover costs

(Rusk & Culp, 2001)

Methods

Data Collection

- FAMIS Accounting System
- Documentation filed in the Agricultural Sciences office
- In-kind Contributions
  - Collected from notes and records from the coordinator of each event
  - Standard TAMUC's rental rates
  - Federal minimum wage of $7.25/hour

Table 1

Volunteers for CDEs

Event	2012	2013	2014
Livestock Judging	20	24	26
Nursery & Landscape	20	13	12
Veterinary Science	14	24	20
Poultry	8	18	18
Farm Business Management	2	3	3
Floriculture	20	23	23
Ag Mechanics	15	6	6
Dairy Judging	12	9	11
Milk Quality & Products	8	8	8

Data Analysis

Average cash expense cost per team was found by:

- Separating expenses into categories by event and by School of Agriculture's public relations expenses
- The multiple events average was added to all events as an expense.
- Expenses were totaled and divided by the number of teams entered.

Table 2

2012 CDEs Average Cash Expense Cost per Team

Event	Number of Teams	Total Cash Expenses	Avg. Cost per Team
Livestock Judging	131	4211.27	32.15
Nursery & Landscape	25	509.32	20.37
Veterinary Science	30	564.37	18.81
Poultry	65	1571.28	24.17
Farm Business Management	21	497.04	23.67
Floriculture	46	531.72	11.56
Ag Mechanics	24	486.74	20.28
Dairy Judging	81	5561.88	68.67
Milk Quality & Products	65	1029.72	15.84
Totals	488	$ 14963.34	$ 30.66

Table 3

2013 CDEs Average Cash Expense Cost per Team

Event	Number of Teams	Total Cash Expenses	Avg. Cost per Team
Livestock Judging	130	3222.14	24.79
Nursery & Landscape	24	1056.79	44.03
Veterinary Science	64	896.23	14.00
Poultry	67	891.25	13.30
Farm Business Management	28	891.25	31.83
Floriculture	50	891.25	17.82
Ag Mechanics	28	928.83	33.17
Dairy Judging	82	3272.07	39.90
Milk Quality & Products	63	1491.25	23.67
Totals	536	$ 13541.04	$ 25.26

Table 4

2014 CDEs Average Cash Expense Cost per Team

Event	Number of Teams	Total Cash Expenses	Avg. Cost per Team
Livestock Judging	135	7483.41	55.43
Nursery & Landscape	29	1298.71	44.78
Veterinary Science	72	689.36	9.57
Poultry	72	1494.69	20.76
Farm Business Management	32	689.36	21.54
Floriculture	52	809.24	15.56
Ag Mechanics	29	756.68	26.09
Dairy Judging	79	3389.31	42.90
Milk Quality & Products	70	689.36	9.85
Totals	570	$ 17300.14	$ 30.35

Data Analysis with In-Kind Contributions

Average cost per team with in-kind contributions was found by:

- Separated expenses into categories by event and by School of Agriculture's public relations expenses
- The multiple events average was added to all events as an expense.
- In-kind contributions were added as an expense.
- Expenses were totaled and divided by the number of teams entered.

Table 5

2012 CDEs Average Cost per Team including In-Kind Contributions

Event	Cost of Volunteers*	Cost of Facilities**	Cash Avg. Cost	Overall Avg. Cost
Livestock Judging	870.00	0.00	32.15	38.79
Nursery & Landscape	870.00	175.00	20.37	62.17
Veterinary Science	609.00	650.00	18.81	60.78
Poultry	348.00	0.00	24.17	29.53
Farm Business Management	87.00	0.00	23.67	27.81
Floriculture	870.00	175.00	11.56	34.28
Ag Mechanics	652.50	0.00	20.28	47.47
Dairy Judging	522.00	0.00	68.67	75.11
Milk Quality & Products	348.00	525.00	15.84	29.27
Totals	$ 5176.50	$ 1525.00	$ 30.66	$ 44.40

*Cost of volunteers was calculated using federal minimum wage rates and multiplying by 6 hours of labor.

**Standard Texas A&M University -Commerce rental rates for non-university entities were used in calculating cost of facilities.

Table 6

2013 CDEs Average Cost per Team including In-Kind Contributions

Event	Cost of Volunteers*	Cost of Facilities**	Cash Avg. Cost	Overall Avg. Cost
Livestock Judging	1044.00	0.00	24.79	32.82
Nursery & Landscape	565.50	175.00	44.03	74.89
Veterinary Science	1044.00	650.00	14.00	40.47
Poultry	783.00	0.00	13.30	24.99
Farm Business Management	130.50	0.00	31.83	36.49
Floriculture	1000.50	175.00	17.82	41.33
Ag Mechanics	261.00	0.00	33.17	42.49
Dairy Judging	391.50	0.00	39.90	44.68
Milk Quality & Products	348.00	525.00	23.67	37.53
Totals	$ 5568.00	$ 1525.00	$ 25.26	$ 38.50

*Cost of volunteers was calculated using federal minimum wage rates and multiplying by 6 hours of labor.

**Standard Texas A&M University -Commerce rental rates for non-university entities were used in calculating cost of facilities.

Table 7

2014 CDEs Average Cost per Team including In-Kind Contributions

Event	Cost of Volunteers*	Cost of Facilities**	Cash Avg. Cost	Overall Avg. Cost
Livestock Judging	1131.00	0.00	55.43	63.81
Nursery & Landscape	522.00	175.00	44.78	68.82
Veterinary Science	870.00	650.00	9.57	30.69
Poultry	783.00	0.00	20.76	31.63
Farm Business Management	130.50	0.00	21.54	25.62
Floriculture	1000.50	175.00	15.56	38.17
Ag Mechanics	261.00	0.00	26.09	35.09
Dairy Judging	478.50	0.00	42.90	48.96
Milk Quality & Products	348.00	525.00	9.85	22.32
Totals	$ 5524.50	$ 1525.00	$ 30.35	$ 42.72

*Cost of volunteers was calculated using federal minimum wage rates and multiplying by 6 hours of labor.

**Standard Texas A&M University -Commerce rental rates for non-university entities were used in calculating cost of facilities.

Revenue Data Analysis

Average total revenue per event was calculated by:

- Data were separated by event.
- Each event was totaled.
- The totals were then divided by the number of teams entered for each event.

Table 8

2012 CDEs Average Revenue per Team

Event	Number of Teams	Total Revenue	Avg. Revenue per Team
Livestock Judging	131	5940.00	45.34
Nursery & Landscape	25	1125.00	45.00
Veterinary Science	30	1350.00	45.00
Poultry	65	2925.00	45.00
Farm Business Management	21	945.00	45.00
Floriculture	46	2115.00	45.98
Ag Mechanics	24	1080.00	45.00
Dairy Judging	81	3690.00	45.56
Milk Quality & Products	65	2925.00	45.00
Totals	488	$ 22095.00	$ 45.21

Table 9

2013 CDEs Average Revenue per Team

Event	Number of Teams	Total Revenue	Avg. Revenue per Team
Livestock Judging	130	6710.00	51.62
Nursery & Landscape	24	1230.00	51.25
Veterinary Science	64	3290.00	51.41
Poultry	67	3410.00	50.90
Farm Business Management	28	1400.00	50.00
Floriculture	50	2530.00	50.60
Ag Mechanics	28	1400.00	50.00
Dairy Judging	82	4220.00	51.46
Milk Quality & Products	63	3300.00	52.38
Totals	536	$ 27490.00	$ 51.07

Table 10

2014 CDEs Average Revenue per Team

Event	Number of Teams	Total Revenue	Avg. Revenue per Team
Livestock Judging	135	7140.00	52.89
Nursery & Landscape	29	1450.00	50.00
Veterinary Science	72	3720.00	51.67
Poultry	77	3940.00	51.17
Farm Business Management	32	1660.00	51.88
Floriculture	52	2660.00	51.15
Ag Mechanics	24	1260.00	52.50
Dairy Judging	79	4100.00	51.90
Milk Quality & Products	70	3590.00	51.29
Totals	570	$ 29520.00	$ 51.60

Conclusions, Implications, and Recommendations

Conclusions

- The yearly CDEs hosted by TAMUC are a great financial burden to TAMUC.
- TAMUC has bared the burden of incurring in-kind contributions so that the CDEs may meet an adequate standard.
- The increased average costs per team, incurred by the added in-kind contributions, provided for a successful and adequate environment for the students participating in each of the events to perform at their maximum potential.

Implications

- It is rational to use functional off-campus facilities as opposed to requiring the long term investment for on-campus facilities, such as arenas for livestock and dairy.
- Some contests may never break even, but by hosting contests that have low cash costs per team and high number of entries, the university can afford to host the more expensive contests.

Implications (cont.)

FFA student organizations and FFA Advisor groups who consider relocation of contests away from a host college/university should be aware of the importance and value of event coordinators, volunteers, and facilities required for a successful event.

Recommendations

- Event record keeping for the CDEs should be more thorough.
- Additional research should be conducted to compare the costs of raising animals or plants by TAMUC for the use of the CDEs versus renting or purchasing animals and purchasing plants.
- Investigation of how other CDE event providers secure and manage resources for the contests they host should be considered.

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Questions?