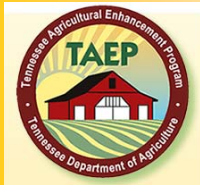


County Level Economic Impacts from the Tennessee Agricultural Enhancement Program (TAEP)



Report to the Tennessee Department of Agriculture

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March 2008

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AIM-AG was established in 1998 as part of the Department of Agricultural Economics, Agricultural Experiment Station. The mission of AIM-AG is to assess and project the impacts of agri-industry development on the Tennessee economy and to analyze market opportunities for **economically** efficient agri-industry development within the state.

<http://aimag.ag.utk.edu>

County Level Economic Impacts from the Tennessee Agricultural Enhancement Program (TAEP)

Background

The Tennessee Agricultural Enhancement Program (TAEP) is designed to support agriculture in Tennessee by providing cost share funds to producers for long term investments in their livestock and farming operations. These cost share programs help producers maximize farm profits, adapt to current market situations and prepare for the future. In addition, TAEP is also allowing producers to make positive economic impacts in their communities. The TAEP is funded through an appropriation for farm developments in the state's budget as proposed by Governor Phil Bredesen and supported by the Tennessee General Assembly. The purpose of this document is to project the economic impacts, by county, of TAEP investment.¹

The Tennessee Department of Agriculture provided county level budget information to AIM-AG for this analysis. This information includes the total TAEP budget allocations for the first three fiscal years of the TAEP by county for the cattle, hay storage, animal feed storage and producer diversification programs. Only TAEP funds going directly to producers in the county are utilized in this analysis. Allocations for statewide TAEP investments (advertising, capital development projects, etc.) were excluded in order to focus on county level investments. Fiscal year budgets were based on dollar allocations of each producer program at the start of each fiscal year. Conditions during the year may have caused changes to be made in expenditures per category. Department of Agriculture staff also provided estimates as to the share of producer funding within each program. Since producers tend to spend more than the minimum cost share match, these estimates are considered very conservative. The TAEP allocations budget allocations, by county and fiscal year are shown in Table 1. A county-by-county map of the TAEP allocations made directly to producers is shown in Figure 1.

¹ A statewide analysis is available in the document, "An Analysis of the Economic Impacts from the Tennessee Agricultural Enhancement Program (TAEP): How TAEP Strengthens The State's Economy," Agri-Industry Modeling and Analysis Group, Department of Agricultural Economics, The University of Tennessee, March 2008.

Table 1. TAEP Allocations, by County, FY-06 through FY08

County	FY 06	FY 07	FY 08
		<u>Dollars</u>	
Anderson	9,192	34,539	60,708
Bedford	35,800	119,924	462,131
Benton	11,525	18,485	95,981
Bledsoe	13,400	128,615	575,324
Blount	26,132	53,655	221,834
Bradley	28,678	33,221	204,316
Campbell	9,650	23,825	50,530
Cannon	25,450	85,051	317,927
Carroll	19,275	37,456	168,520
Carter	21,146	26,186	69,392
Cheatham	23,875	69,437	182,310
Chester	18,750	73,500	174,093
Claiborne	32,968	86,764	401,514
Clay	57,875	71,665	530,231
Cocke	33,274	47,701	206,936
Coffee	21,754	93,560	292,704
Crockett	24,300	97,096	452,671
Cumberland	29,330	43,364	388,613
Davidson	14,396	15,894	61,817
Decatur	33,044	89,874	366,997
DeKalb	31,425	78,064	292,193
Dickson	31,773	57,757	378,267
Dyer	11,875	59,850	171,009
Fayette	13,598	56,178	156,253
Fentress	21,000	54,550	470,703
Franklin	42,297	94,029	456,920
Gibson	42,753	140,659	317,346
Giles	47,550	162,225	493,277
Grainger	57,985	161,984	474,969
Greene	81,886	191,726	652,988
Grundy	6,550	48,037	73,865
Hamblen	14,825	38,425	191,967
Hamilton	5,650	33,602	129,017
Hancock	12,541	48,542	208,899
Hardeman	6,550	21,095	89,173
Hardin	11,875	52,959	243,907
Hawkins	70,221	216,866	642,723
Haywood	7,250	22,875	58,759
Henderson	27,680	178,967	635,893
Henry	13,545	54,659	328,708
Hickman	50,590	89,368	314,951
Houston	7,400	15,963	149,912
Humphreys	14,975	58,969	315,780
Jackson	16,150	66,610	163,812
Jefferson	29,747	100,590	321,077
Johnson	16,249	47,467	114,594
Knox	65,284	73,984	203,830
Lake	0	1,725	8,175
Lauderdale	6,700	33,302	149,246
Lawrence	45,910	237,916	606,400
Lewis	12,545	31,696	54,959
Lincoln	85,275	303,618	567,453
Loudon	35,360	68,877	264,145
McMinn	50,847	81,127	361,532
McNairy	16,650	38,272	150,290

County	FY 06	FY 07	FY 08
		<u>Dollars</u>	
Macon	41,950	163,231	366,941
Madison	30,827	66,468	242,782
Marion	10,292	32,482	33,675
Marshall	34,425	70,706	232,769
Maury	40,910	109,548	338,324
Meigs	11,084	31,230	161,173
Monroe	33,215	67,185	240,074
Montgomery	36,311	105,722	375,878
Moore	18,370	100,838	170,897
Morgan	15,235	28,769	126,704
Obion	14,652	62,808	197,072
Overton	62,733	174,644	611,058
Perry	10,875	46,816	130,305
Pickett	19,900	41,953	334,335
Polk	5,000	8,389	57,629
Putnam	22,830	65,687	349,020
Rhea	10,575	33,290	142,222
Roane	16,875	63,088	199,657
Robertson	63,426	122,448	312,390
Rutherford	45,043	99,164	407,787
Scott	0	24,423	18,500
Sequatchie	5,150	13,239	65,112
Sevier	9,975	31,054	100,772
Shelby	4,420	9,941	43,471
Smith	27,575	88,447	346,683
Stewart	7,925	53,836	163,601
Sullivan	39,607	88,821	257,309
Sumner	66,387	100,757	263,054
Tipton	32,050	26,215	97,665
Trousdale	15,125	45,739	190,259
Unicoi	3,275	12,058	26,303
Union	5,825	19,386	78,523
Van Buren	10,450	37,180	137,129
Warren	98,571	242,167	674,591
Washington	44,650	85,365	286,766
Wayne	30,350	104,261	290,234
Weakley	17,465	42,043	215,964
White	40,320	121,643	668,965
Williamson	58,155	65,817	243,153
Wilson	65,520	174,738	722,989
Totals	2,629,648	7,153,941	25,419,276

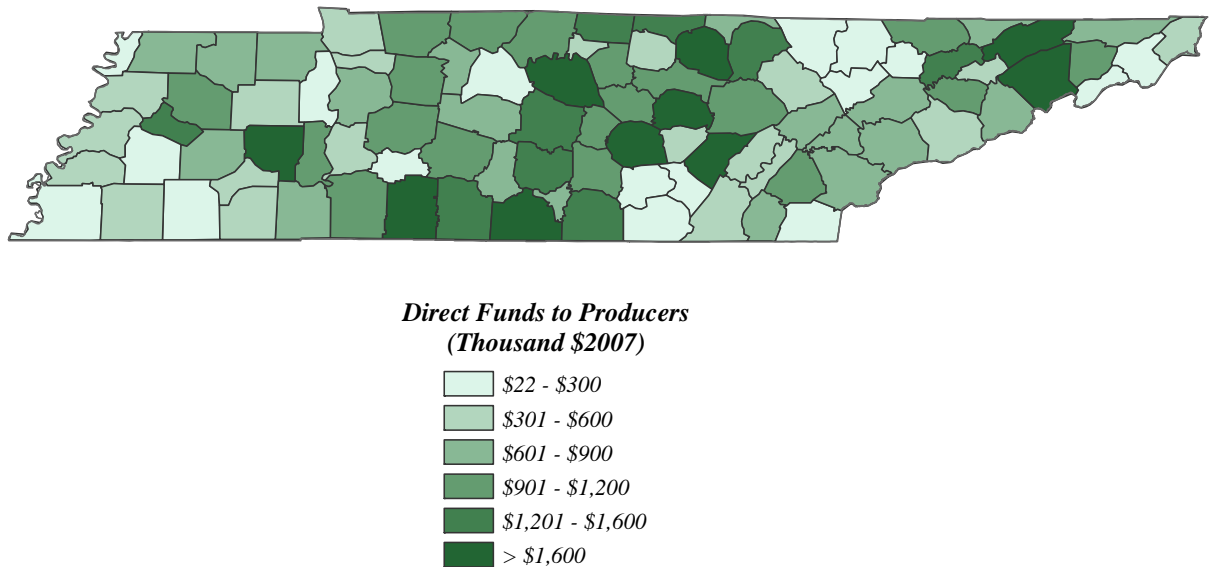


Figure 1. TAEP Funding to Producers, by County, FY06 to FY08

The TAEP county allocations were inflation adjusted to reflect the same year dollars and then summed to get the total amount allocated per county across the three years. Data regarding the distribution among the Cattle Improvement, Hay Storage, Animal Feed Storage, and Producer Diversification program areas were not available at the county level. However, this distribution information was available at the state level. Therefore the state level proportions across the three years were applied to the county data. The statewide TAEP area totals in \$2007 and their proportions are shown in Table 2.

Table 2. Statewide TAEP Allocations (\$2007)

Program Area	Totals Across FY06-FY08	Share of Total
Cattle Improvement	\$18,282,345	59.2%
Hay Storage	\$6,898,697	22.3%
Animal Feed Storage	\$2,247,000	7.3%
Producer Diversification	\$3,470,102	11.2%
Sum Across Program Areas	\$30,898,144	

In addition to the state's investment through the TAEP, producers also invested in projects through the TAEP. Again, county level data was not available. However, state level data was available. The statewide ratio of producer investment dollars to state TAEP investment dollars across the three fiscal years was calculated to project producer investment at the county level. The statewide TAEP and producer investment, along with the ratio of producer to TAEP investment, is shown in Table 3.

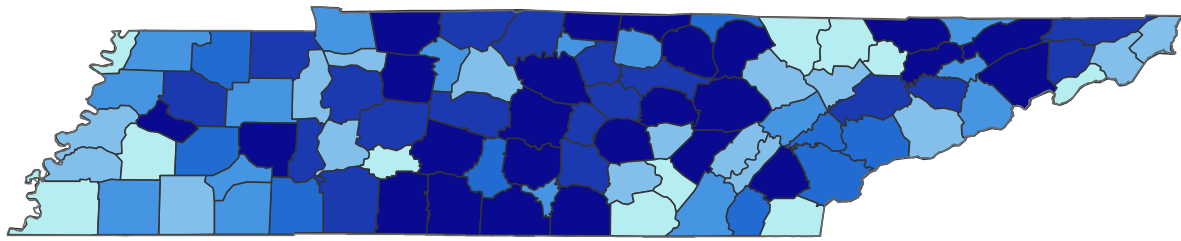
Table 3. Statewide TAEP and Producer Investment (\$2007)

Program Area	TAEP Total FY06-FY08	Producer Total FY06-FY08	Ratio of Producer Dollars to TAEP
Cattle Improvement	\$18,282,345	\$24,735,057	1.35
Hay Storage	\$6,898,697	\$12,801,868	1.86
Animal Feed Storage	\$2,247,000	\$3,040,059	1.35
Producer Diversification	\$3,470,102	\$6,444,476	1.86
Sum Across Program Areas	\$30,898,144	\$47,021,460	1.52

County level input-output economic models in IMPLAN for each of the Tennessee counties were used along with the estimates of investment dollars to project the county level economic impacts from the TAEP. The estimates of combined TAEP and producer investment dollars for each county were assigned to the appropriate IMPLAN sectors. IMPLAN sectors were selected based upon activities associated with the Cattle Improvement, Hay Storage, Animal Feed Storage, and Producer Diversification program areas.

Projected County Level Economic Impacts

A map along with a table format of the county distribution of the projected economic activity from TAEP investment directly to producers for Cattle Improvement, Hay Storage, Animal Feed Storage, and Producer Diversification are displayed in Figure 2 and shown in Table 4. This economic activity includes the TAEP dollars invested, the producer investment, and the projected multiplier effects through the economy from these investments. A map of the county distribution of jobs projected to result from TAEP investment is shown in Figure 3. As can be seen in Figures 2 and 3, every county in Tennessee received economic benefits from TAEP funding to producers.



**Economic Activity
(Thousand \$2007)**

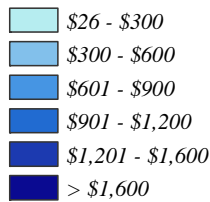


Figure 2. Projected Economic Activity from TAEF Funding, by County, FY06 to FY08

Table 4. Economic Activity from TAEF Dollars Invested, Producer Investment and Projected Multiplier Effects (\$2007), by County

County	FY 06-08
Anderson	\$333,718
Bedford	\$2,127,716
Benton	\$376,566
Bledsoe	\$2,083,638
Blount	\$1,124,361
Bradley	\$914,479
Campbell	\$269,636
Cannon	\$1,288,514
Carroll	\$647,968
Carter	\$362,853
Cheatham	\$820,681
Chester	\$825,008
Claiborne	\$1,623,572
Clay	\$1,994,304
Cocke	\$860,437
Coffee	\$1,337,337
Crockett	\$1,683,532
Cumberland	\$1,784,240
Davidson	\$363,622
Decatur	\$1,506,087
DeKalb	\$1,219,618
Dickson	\$1,644,716
Dyer	\$786,022
Fayette	\$706,020
Fentress	\$1,827,224
Franklin	\$1,988,852
Gibson	\$1,521,027

Table 4. Economic Activity from TAEP Dollars Invested, Producer Investment and Projected Multiplier Effects (\$2007), by County

County	FY 06-08
Giles	\$2,377,940
Grainger	\$1,998,792
Greene	\$3,051,023
Grundy	\$374,815
Hamblen	\$798,007
Hamilton	\$646,691
Hancock	\$743,399
Hardeman	\$332,757
Hardin	\$1,016,763
Hawkins	\$2,845,504
Haywood	\$258,466
Henderson	\$2,620,344
Henry	\$1,388,708
Hickman	\$1,435,808
Houston	\$490,398
Humphreys	\$1,246,708
Jackson	\$730,048
Jefferson	\$1,341,413
Johnson	\$521,215
Knox	\$1,351,798
Lake	\$26,232
Lauderdale	\$558,897
Lawrence	\$3,092,190
Lewis	\$292,334
Lincoln	\$3,052,285
Loudon	\$1,146,871
McMinn	\$1,704,123
McNairy	\$643,281
Macon	\$1,766,216
Madison	\$1,185,182
Marion	\$231,688
Marshall	\$1,059,983
Maury	\$1,766,283
Meigs	\$589,363
Monroe	\$1,135,180
Montgomery	\$1,688,676
Moore	\$779,034
Morgan	\$523,261
Obion	\$865,313
Overton	\$2,517,561
Perry	\$529,858
Pickett	\$1,148,569
Polk	\$212,066
Putnam	\$1,491,680
Rhea	\$562,037
Roane	\$890,699
Robertson	\$1,586,479
Rutherford	\$1,954,798
Scott	\$122,370
Sequatchie	\$247,425
Sevier	\$481,067
Shelby	\$224,698
Smith	\$1,450,513
Stewart	\$623,813
Sullivan	\$1,457,613

Table 4. Economic Activity from TAEP Dollars Invested, Producer Investment and Projected Multiplier Effects (\$2007), by County

County	FY 06-08
Sumner	\$1,564,967
Tipton	\$464,134
Trousdale	\$741,835
Unicoi	\$114,016
Union	\$297,304
Van Buren	\$550,441
Warren	\$3,152,501
Washington	\$1,528,930
Wayne	\$1,257,541
Weakley	\$942,392
White	\$2,767,167
Williamson	\$1,382,589
Wilson	\$3,266,600
Totals	\$113,230,397

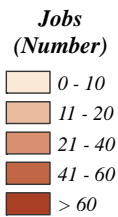
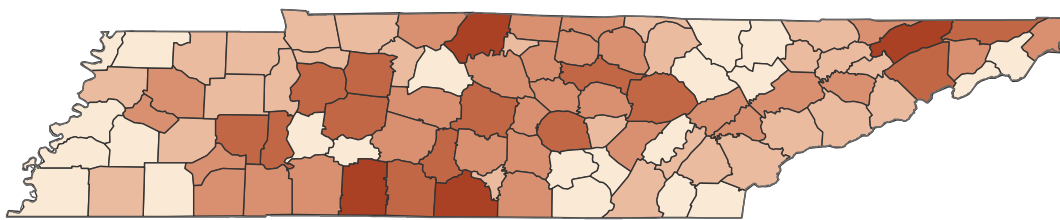


Figure 3. Projected Jobs Added from TAEP Funding, by County, FY06 to FY08