The Economic Impacts from the Tennessee Agricultural Enhancement Program (TAEP)

An Analysis Update for FY06-FY22



Report to the Tennessee Department of Agriculture December 2022

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An Analysis of the Economic Impacts from the Tennessee Agricultural Enhancement Program (TAEP)

Background

The Tennessee Agricultural Enhancement Program (TAEP) was established in 2005 to support agriculture in Tennessee by providing cost share funds to producers for long-term investment on Tennessee farms and rural communities. The purposes of these cost share programs are to help producers maximize farm profits, adapt to changing market situations, improve operation safety, and increase farm efficiency. In addition, TAEP enhances the economic impacts that producers can make in their local communities. The TAEP is funded through an appropriation for farm developments in the state's budget as proposed by Governor Bill Lee and supported by the Tennessee General Assembly and administered by the Tennessee Department of Agriculture (TDA). The cost share portion is also included in the economic impact analysis. The analysis assumes that the producer would not have used the funds that they provided for purchases of other inputs and/or living expenses within the community they live in.

Overview of Projected Impacts

- For fiscal years FY06 through FY22¹, state investment in the TAEP program in nominal dollars totals close to \$246.5 million.
- The overall economic impacts (with multiplier effects) from the TAEP on the state's economy in nominal dollars is \$1.6 billion from FY06 through FY22.
- For every \$1 of TAEP investment, an additional *\$6.55* is generated in the state's rural economies (multiplier includes the estimated total economic impacts from both TAEP funds + producers' matching funds).

Tennessee county level TAEP expenditures and projects for FY06 through FY22 are detailed in Figures 1 and 2.

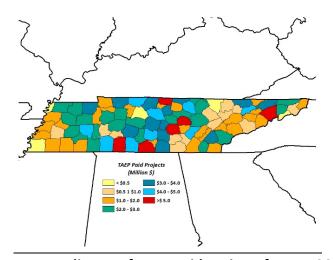


Figure 1. Expenditures of TAEP Paid Projects from FY06-FY22

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¹As of 12/18/22

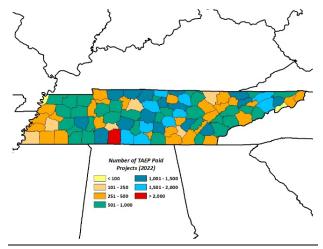


Figure 2. Number of TAEP Paid Projects from FY06-FY22

Source: TAEP Fact Sheet 2022 https://www.tn.gov/content/dam/tn/agriculture/documents/taep/2022/taep fs 2022.pdf)

About this Analysis

This analysis provides projections of the economic impacts resulting from the TAEP for fiscal years 2006-2022 (FY06-FY22). Economic impacts from eleven major program focus areas are projected: Dairy Solutions, Genetics, Hay Equipment, Hay Storage, Herd Health, Livestock Equipment, Livestock Solutions (formerly Livestock Feed Storage), Permanent Working Structures (formerly Working Facility Structures), Poultry Grower, Producer Diversification, and Row Crop Solutions (formerly Grain Storage). The Tennessee Department of Agriculture (TDA) provided budget information to AIM-AG for this analysis. TDA also provided estimates as to the share of producer funding within each grouping.

To project TAEP's economic impact on the States rural communities, TDA and producer expenditures from TAEP program were used along with IMPLAN, an economic input-output model. The change in economic activity is defined as the value of production by an industry per year added to the state's economy as a result of the impact analyzed. All dollar values in the document are in nominal dollars.

Two types of effects are presented:

- **Direct effects** are the immediate effects associated with the change in the final demand for a particular industry. For example, an increase in the final demand for soybeans of \$10 million will cause the farm sector to produce \$10 million worth of soybeans.
- Total effects include Direct + Indirect + Induced. Results are presented as Direct +
 Multiplier effects where Multiplier = Indirect + Induced. Indirect effects are the
 secondary effects (input suppliers) or production changes in backward-linked industries
 caused when input needs change due to the impact of directly affected industries.
 Induced effects is the response by all local industries caused by increased expenditures
 of new household income generated from the direct and indirect effects of the change in
 final demand for a specific industry.

Based on the expenditure data from FY06 through FY22, Hay Storage had the largest percent of the total TAEP expenditures at 24.9 percent, followed by Livestock Equipment (24.5 percent) and Row Crop Solutions (17.5 percent) (Figure 3). An overall summary of totals for each TAEP program focus areas is presented (Table 1). Based on the methodology and assumptions used, each TAEP dollar generates *\$6.55* in local economies.

For each program focus area (see Appendix), a table indicating past and current TDA and participating producers' expenditures is also presented, along with the proportioned cost-shared for that particular fiscal year. In addition, tables showing the economic impacts of these expenditures and the top industries impacted based on economic activity are then provided.

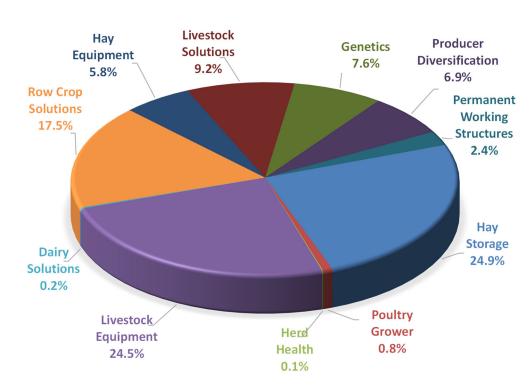


Figure 3. Proportion of Expenditures for the TAEP Program.

Table 1. Rollup of Estimated Economic Impacts from Tennessee Department of Agriculture's Tennessee Agricultural Enhance Program

TDA TAEP	TDA ^a		Pro	ducers	Total	
	Direct	Total ^b	Direct	Total⁵	Direct	Total ^b
	(\$1	,000)	(\$1	.,000)	(\$1	,000)
Genetics	\$20,013.3	\$33,452.4	\$51,794.1	\$86,644.0	\$71,807.4	\$120,096.5
Row Crop						
Solutions	\$31,619.4	\$55,295.2	\$132.701.1	\$232,019.5	\$164,320.5	\$287,314.7
Hay Storage	\$61,295.4	\$107,943.0	\$173,093.9	\$304,858.6	\$234,389.3	\$412,801.7
Livestock						
Equipment	\$70,889.6	\$113,283.9	\$159,842.6	\$255,474.6	\$230,732.2	\$368,758.5
Livestock						
Solutions	\$24,706.1	\$43,472.2	\$61,380.3	\$107,848.1	\$86,086.4	\$151,320.4
Poultry Grower	\$1,641.6	\$2,608.9	\$5,924.5	\$9,417.2	\$7,566.1	\$12,026.0
Producer						
Diversification	\$15,287.4	\$29,839.4	\$49,934.6	\$97,765.5	\$65,222.0	\$127,604.9
Permanent						
Working						
Structures	\$5,520.5	\$10,485.3	\$17,027.0	\$32,326.7	\$22,547.5	\$42,812.0
Herd Health	\$805.5	\$1,319.1	\$0.0	\$0.0	\$805.5	\$1,319.1
Hay Equipment	\$14,310.9	\$22,709.4	\$40,551.8	\$64,353.7	\$54,862.7	\$87,063.1
Dairy Solutions	\$386.1	\$621.8	\$1,367.9	\$2,201.3	\$1,754.0	\$2,823.1
Total	<mark>\$246,475.8</mark>	\$421,030.7	\$693,617.9	\$1,192,909.2	\$940,093.7	<mark>\$1,613,940.0</mark>

^aTennessee Department of Agriculture

Each TAEP dollar generates \$6.55 in local economies

^bIncludes economic activity multiplier effects

Appendix

Past and Current TAEP Focus Areas by Fiscal Year and Proportioned Cost Share

A.1. Genetics: assists producers in improving the genetics in their operations, increasing the quality, value, marketability, and reputation of Tennessee livestock

Fiscal Year				TDA's ^a	Producers'
(FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY06	\$498.2	\$1,547.1	\$2,045.2	24.4%	75.6%
FY07	\$601.9	\$2,439.4	\$3,041.3	19.8%	80.2%
FY08	\$1,246.1	\$3,099.8	\$4,345.9	28.7%	71.3%
FY09	\$924.8	\$2,097.5	\$3,022.4	30.6%	69.4%
FY10	\$1,142.3	\$2,657.1	\$3,799.4	30.1%	69.9%
FY11	\$1,454.3	\$3,507.0	\$4,961.3	29.3%	70.7%
FY12	\$1,583.9	\$3,971.5	\$5,555.4	28.5%	71.5%
FY13	\$885.9	\$2,281.6	\$3,167.5	28.0%	72.0%
FY14	\$1,806.9	\$4,521.7	\$6,328.6	28.6%	71.4%
FY15	\$773.4	\$2,271.2	\$3,044.6	25.4%	74.6%
FY16	\$1,210.6	\$3,368.6	\$4,579.2	26.4%	73.6%
FY17	\$1,210.9	\$3,087.4	\$4,298.3	28.2%	71.8%
FY18	\$2,257.0	\$5,760.3	\$8,017.3	28.2%	71.8%
FY19	\$1,173.5	\$2,976.1	\$4,149.6	28.3%	71.7%
FY20	\$1,046.3	\$2,658.5	\$3,704.8	28.2%	71.8%
FY21	\$1,154.6	\$2,9919.9	\$4,074.5	28.3%	71.7%
FY22	\$1,042.6	\$2,629.4	\$3,672.0	28.4%	71.6%
Total	\$20,013.3	<i>\$51,794.1</i>	\$71,807.4	27.9%	72.1%

^aTennessee Department of Agriculture

Genetics TAEP Estimated Economic Impacts				
TD)A ^a	Producers		
Direct	Total ^b	Direct	Total ^b	
\$20,013,267	\$33,452,438	\$51,794,113	\$86,644,022	

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Genetics Expenditures

- 1. Veterinary Services
- 2. Owner-Occupied Dwellings
- 3. Wholesale Drugs and Druggists' Sundries
- 4. Hospitals
- 5. Other Real Estate

^bIncludes economic activity multiplier effects

A.2. Row Crop Solutions (formerly Grain Storage): assists producers in managing, storing, and drying grains to provide higher returns and marketing flexibility

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY09	\$1,749.9	\$6,491.3	\$8,241.2	21.2%	78.8%
FY10	\$892.4	\$3,255.4	\$4,147.9	21.5%	78.5%
FY11	\$1,196.2	\$4,534.6	\$5,730.8	20.9%	79.1%
FY12	\$1,373.0	\$4,963.2	\$6,336.3	21.7%	78.3%
FY13	\$1,451.8	\$5,613.4	\$7,065.1	20.5%	79.5%
FY14	\$1,570.5	\$6,247.2	\$7,817.7	20.1%	79.9%
FY15	\$2,296.2	\$9,248.8	\$11,544.9	19.9%	80.1%
FY16	\$1,712.2	\$7,663.0	\$9,375.3	18.3%	81.7%
FY17	\$1,375.3	\$5,923.6	\$7,298.9	18.8%	81.2%
FY18	\$1,789.0	\$7,618.6	\$9,407.6	19.0%	81.0%
FY19	\$2 <i>,</i> 593.5	\$12,219.4	\$14,812.9	17.5%	82.5%
FY20	\$5,853.1	\$21,518.3	\$27,371.3	21.4%	78.6%
FY21	\$3,354.5	\$16,078.1	\$19,432.6	17.3%	82.7%
FY22	\$4,411.8	\$21,326.3	\$25,738.1	17.1%	82.9%
Total	\$31,619.4	\$132,701.1	\$164,320.5	19.2%	<i>80.8%</i>

^aTennessee Department of Agriculture

Row Crop Solutions TAEP Estimated Economic Impacts					
TD)A ^a	Producers			
Direct	Total ^b	Direct	Total ^b		
\$31,619,391	\$55,295,157	\$132,701,147	\$232,019,509		

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Row Crop Solutions Expenditures

- 1. Construction of New Commercial Structures, including Farm Structures
- 2. Farm Machinery & Equipment Manufacturing
- 3. Owner-Occupied Dwellings
- 4. Wholesale Machinery, Equipment, & Supplies
- 5. Other Real Estate

^bIncludes economic activity multiplier effects

A.3. Hay Storage: assists producers in building hay barns to improve storage and management of forages to improve herd nutrition

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY07	\$1,866.5	\$7,594.2	\$9,460.6	19.7%	80.3%
FY08	\$4,080.6	\$16,244.5	\$20,325.1	20.1%	79.9%
FY09	\$2,405.8	\$8,659.7	\$11,065.4	21.7%	78.3%
FY10	\$4,542.5	\$11,372.7	\$15,915.2	28.5%	71.5%
FY11	\$5,404.8	\$13,478.8	\$18,883.7	28.6%	71.4%
FY12	\$5,319.3	\$12,643.7	\$17,963.0	29.6%	70.4%
FY13	\$4,169.1	\$10,483.1	\$14,652.1	28.5%	71.5%
FY14	\$6,358.1	\$16,436.2	\$22,794.4	27.9%	72.1%
FY15	\$5,028.4	\$12,877.6	\$17,906.0	28.1%	71.9%
FY16	\$4,998.3	\$14,331.0	\$19,329.3	25.9%	74.1%
FY17	\$4,066.9	\$12,312.9	\$16,379.9	24.8%	75.2%
FY18	\$3,886.5	\$9,955.6	\$13,842.1	28.1%	71.9%
FY19	\$4,645.5	\$11,960.6	\$16,606.1	28.0%	72.0%
FY20	\$0.0	\$0.0	\$0.0	0.0%	0.0%
FY21	\$4,523.1	\$14,743.4	\$19,266.5	23.5%	76.5%
FY22	\$0.0	\$0.0	\$0.0	0.0%	0.0%
Total	\$61,295.4	\$173,093.9	<i>\$234,389.3</i>	26.2%	73.8%

^aTennessee Department of Agriculture

Hay Storage TAEP Estimated Economic Impacts					
TD	A ^a	Producers			
Direct	Total ^b	Direct	Total ^b		
\$61,295,440	\$107,943,049	\$173,093,889	\$304,858,622		

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Hay Storage Expenditures

- 1. Construction of New Commercial Structures, including Farm Structures
- 2. Farm Machinery & Equipment Manufacturing
- 3. Owner-Occupied Dwellings
- 4. Wholesale Machinery, Equipment, & Supplies
- 5. Other Real Estate

^bIncludes economic activity multiplier effects

A.4. Livestock Equipment: improves a producer's ability to properly and safely manage livestock on the farm (for example, squeeze chutes, creep feeders, feed bins, and working systems)

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY06	\$808.0	\$1,994.2	\$2,802.2	28.8%	71.2%
FY07	\$1,044.2	\$3,930.5	\$4,974.8	21.0%	79.0%
FY08	\$6,753.9	\$15,164.1	\$21,918.1	30.8%	69.2%
FY09	\$3,390.0	\$7,746.3	\$11,136.3	30.4%	69.6%
FY10	\$3,280.7	\$7,106.3	\$10,387.1	31.6%	68.4%
FY11	\$4,384.2	\$9,764.5	\$14,148.7	31.0%	69.0%
FY12	\$4,677.6	\$10,303.6	\$14,981.2	31.2%	68.8%
FY13	\$3,808.4	\$8,470.2	\$12,278.6	31.0%	69.0%
FY14	\$5,269.4	\$11,475.6	\$16,745.0	31.5%	68.5%
FY15	\$5,611.1	\$12,011.5	\$17,622.6	31.8%	68.2%
FY16	\$4,804.5	\$10,797.1	\$15,601.7	30.8%	69.2%
FY17	\$4,189.7	\$9,518.2	\$13,707.9	30.6%	69.4%
FY18	\$5,273.9	\$11,584.4	\$16,858.3	31.3%	68.7%
FY19	\$5,327.7	\$11,754.0	\$17,081.7	31.2%	68.8%
FY20	\$4,135.0	\$9,076.1	\$13,211.1	31.3%	68.7%
FY21	\$4,029.6	\$9,446.7	\$13,476.3	29.9%	70.1%
FY22	\$4,101.5	\$9,699.1	\$13,800.6	29.7%	70.3%
Total	<i>\$70,889.6</i>	\$159,842.6	\$230,732.2	30.7%	69.3%

^aTennessee Department of Agriculture

Livestock Equipment TAEP Estimated Economic Impacts					
TD	A ^a	Producers			
Direct	Total ^b	Direct	Total ^b		
\$70,889,592	\$113,283,946	\$159,842,606	\$255,474,574		

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Livestock Equipment Expenditures

- 1. Farm Machinery & Equipment Manufacturing
- 2. Wholesale Machinery, Equipment, & Supplies
- 3. Owner-Occupied Dwellings
- 4. Management of Companies & Enterprises
- 5. Wholesale Motor Vehicle & Motor Vehicle Parts & Supplies

^bIncludes economic activity multiplier effects

A.5. Livestock Solutions (formerly Livestock Feed Storage): assists producers in building feed storage sheds, silos, and installing feed management equipment to improve feed quality and cost efficiency

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY08	\$5,827.1	\$8,877.7	\$14,704.8	39.6%	60.4%
FY09	\$2,922.2	\$6,670.1	\$9,592.3	30.5%	69.5%
FY10	\$890.9	\$2,515.2	\$3,406.1	26.2%	73.8%
FY11	\$1,072.5	\$2,881.5	\$3,954.0	27.1%	72.9%
FY12	\$1,022.1	\$2,755.0	\$3,777.1	27.1%	72.9%
FY13	\$845.5	\$2,445.8	\$3,291.3	25.7%	74.3%
FY14	\$1,345.4	\$3,897.9	\$5,252.3	25.8%	74.2%
FY15	\$1,345.5	\$3,808.1	\$5,153.7	26.1%	73.9%
FY16	\$969.3	\$3,220.9	\$4,190.3	23.1%	76.9%
FY17	\$1,021.6	\$3,523.4	\$4,545.0	22.5%	77.5%
FY18	\$1,164.3	\$3,242.9	\$4,407.3	26.4%	73.6%
FY19	\$2,049.7	\$5,356.9	\$7,406.6	27.7%	72.3%
FY20	\$1,836.4	\$4,612.0	\$6,448.4	28.5%	71.5%
FY21	\$1,319.2	\$4,109.1	\$5,428.3	24.3%	75.7%
FY22	\$1,065.4	\$3,363.7	\$4,529.0	23.5%	76.5%
Total	\$24,706.1	<i>\$61,380.3</i>	<i>\$86,086.4</i>	28.7%	71.3%

^aTennessee Department of Agriculture

Livestock Solutions TAEP Estimated Economic Impacts				
TC)A ^a	Producers		
Direct	Total ^b	Total ^b	Total ^b	
\$24,706,121	\$43,472,246	\$61,380,311	\$107,848,142	

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Livestock Solutions Expenditures

- 1. Construction of New Commercial Structures, including Farm Structures
- 2. Farm Machinery & Equipment Manufacturing
- 3. Owner-Occupied Dwellings
- 4. Wholesale Machinery, Equipment, & Supplies
- 5. Other Real Estate

^bIncludes economic activity multiplier effects

A.6. Poultry Grower: assists poultry producers in operational improvements					
				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY16	\$156.0	\$811.0	\$967.0	16.1%	83.9%
FY17	\$46.8	\$246.6	\$293.4	15.9%	84.1%
FY18	\$107.6	\$467.4	\$575.0	18.7%	81.3%
FY19	\$73.3	\$280.4	\$353.7	20.7%	79.3%
FY20	\$372.9	\$1,225.8	\$1,598.8	23.3%	76.7%
FY21	\$374.1	\$1,306.1	\$1,680.2	22.3%	77.7%
FY22	\$510.8	\$1,587.2	\$2,098.1	24.3%	75.7%
Total	\$1,641.6	<i>\$5,924.5</i>	<i>\$7,566.1</i>	21.7%	<i>78.3%</i>

Total ^aTennessee Department of Agriculture

Poultry Grower TAEP Estimated Economic Impacts					
TD)A ^a	Prod	ucers		
Direct	Total ^b	Direct	Total ^b		
\$1,641,602	\$2,608,875	\$5,924,523	\$9,417,160		

Top Five Industries Impacted based on Economic Activity from TAEP Poultry Grower **Expenditures**

- 1. Farm Machinery & Equipment Manufacturing
- 2. Wholesale Machinery, Equipment, & Supplies
- 3. Owner-Occupied Dwellings
- 4. Management of Companies & Enterprises
- 5. Wholesale Motor Vehicle & Motor Vehicle Parts & Supplies

^aTennessee Department of Agriculture

^bIncludes economic activity multiplier effects

A.7. Producer Diversification: assists producers in diversifying their farming operations (for example, agritourism, fruit and vegetables, honeybees, horticulture, organics, and value-added products)

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY06	\$559.8	\$2,829.0	\$3,388.8	16.5%	83.5%
FY07	\$621.2	\$2,965.2	\$3 <i>,</i> 586.5	17.3%	82.7%
FY08	\$1,146.5	\$4,111.2	\$5 <i>,</i> 257.7	21.8%	78.2%
FY09	\$872.9	\$3,482.3	\$4 <i>,</i> 355.2	20.0%	80.0%
FY10	\$691.2	\$2,631.4	\$3,322.6	20.8%	79.2%
FY11	\$627.8	\$2,503.0	\$3,130.8	20.1%	79.9%
FY12	\$732.4	\$2,851.6	\$3 <i>,</i> 584.0	20.4%	79.6%
FY13	\$733.7	\$2,301.7	\$3,035.4	24.2%	75.8%
FY14	\$672.7	\$2,277.7	\$2,950.4	22.8%	77.2%
FY15	\$682.4	\$1,779.4	\$2,461.8	27.7%	72.3%
FY16	\$725.2	\$2,229.5	\$2 <i>,</i> 954.7	24.5%	75.5%
FY17	\$1,067.7	\$3,267.4	\$4,335.1	24.6%	75.4%
FY18	\$1,282.4	\$3,162.5	\$4 <i>,</i> 445.0	28.9%	71.1%
FY19	\$1,310.8	\$3,061.0	\$4,371.8	30.0%	70.0%
FY20	\$1,088.2	\$2,842.1	\$3,930.3	27.7%	72.3%
FY21	\$1,070.4	\$3,310.3	\$4,380.8	24.4%	75.6%
FY22	\$1,402.0	\$4,329.2	\$5,731.2	24.5%	75.5%
Total	\$15,287.4	\$49,934.6	\$65,222.0	23.4%	76.6%

^aTennessee Department of Agriculture

Producer Diversification TAEP Estimated Economic Impacts						
TDA ^a Producers						
Direct	Total ^b	Direct	Total ^b			
\$15,287,412 \$29,839,401 \$49,934,608 \$97,765,532						

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Producer Diversification Expenditures

- 1. Support Activities for Agriculture & Forestry
- 2. Other Amusement & Recreation Industries
- 3. Owner-Occupied Dwellings
- 4. Other Real Estate
- 5. Wholesale Other Nondurable Goods Merchant Wholesalers

^bIncludes economic activity multiplier effects

A.8. Permanent Working Structures (formerly Working Facility Structures): assists producers in improving farm safety, functionally, and longevity of livestock working equipment by providing a protective cover

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY15	\$1,106.3	\$3,070.8	\$4,177.1	26.5%	73.5%
FY16	\$544.9	\$1,783.4	\$2,328.3	23.4%	76.6%
FY17	\$698.8	\$2,351.3	\$3,050.1	22.9%	77.1%
FY18	\$349.1	\$1,062.1	\$1,411.2	24.7%	75.3%
FY19	\$518.7	\$1,658.0	\$2,176.6	23.8%	76.2%
FY20	\$920.1	\$2,366.0	\$3,286.1	28.0%	72.0%
FY21	\$563.8	\$1,827.3	\$2,391.1	23.6%	76.4%
FY22	\$818.8	\$2,908.3	\$3,727.1	22.0%	78.0%
Total	<i>\$5,520.5</i>	\$17,027.0	<i>\$22,547.5</i>	24.5%	<i>75.5%</i>

^aTennessee Department of Agriculture

Permanent Working Structures TAEP Estimated Economic Impacts					
TD)A ^a	Produ	ucers		
Direct	Total ^b	Direct	Total ^b		
\$5,520,482	\$10,485,335	\$17,027,004	\$32,326,661		

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Permanent Working Structures Expenditures

- 1. Construction of New Commercial Structures, including Farm Structures
- 2. Owner-Occupied Dwellings
- 3. Other Real Estate
- 4. Hospitals
- 5. Wholesale Other Durable Goods Merchant Wholesalers

^bIncludes economic activity multiplier effects

A.9. Herd Health: assists producers in improving whole herd health by encouraging a preventative vaccination protocol

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY20	\$340.6	\$0.0	\$340.6	100.0%	0.0%
FY21	\$235.1	\$0.0	\$235.1	100.0%	0.0%
FY22	\$229.8	\$0.0	\$229.8	100.0%	0.0%
Total	\$805.5	<i>\$0.0</i>	\$805.5	100.0%	0.0%

^aTennessee Department of Agriculture

Herd Health TAEP Estimated Economic Impacts						
T	DA ^a	Prod	ucers			
Direct	Total ^b	Direct	Total ^b			
\$805,461 \$1,319,111 \$0.0 \$0.0						

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Herd Health Expenditures

- 1. Veterinary Services
- 2. Owner-Occupied Dwellings
- 3. Wholesale Drugs & Druggists' Sundries
- 4. Hospitals
- 5. Other Real Estate

^bIncludes economic activity multiplier effects

A.10. Hay Equipment: assists producers in purchasing the latest equipment and technology to improve forage production

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a	Producers	Total	Share	Share
		(\$1,000)			
FY20	\$5,742.4	\$16,724.2	\$22,466.6	25.6%	74.4%
FY21	\$0.0	\$0.0	\$0.0	0.0%	0.0%
FY22	\$8,568.6	\$23,827.5	\$32,396.1	26.4%	73.6%
Total	\$14,310.9	\$40,551.8	<i>\$54,862.7</i>	26.1%	73.9%

^aTennessee Department of Agriculture

Hay Equipment TAEP Estimated Economic Impacts						
TD)A ^a	Prod	ucers			
Direct Total ^b		Direct	Total ^b			
\$14,310,932	\$22,709,396	\$40,551,753	\$64,353,676			

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Hay Equipment Expenditures

- 1. Farm Machinery & Equipment Manufacturing
- 2. Wholesale Machinery, Equipment, & Supplies
- 3. Owner Occupied Dwellings
- 4. Management of Companies & Enterprises
- 5. Wholesale Motor Vehicle & Motor Vehicle Parts & Supplies

^bIncludes economic activity multiplier effects

				TDA's ^a	Producers'
Fiscal Year (FY)	TDA ^a Produc	Producers	: Total	Share	Share
		(\$1,000)			
FY21	\$132.7	\$281.3	\$414.0	32.0%	68.0%
FY22	\$253.4	\$1,086.6	\$1,340.0	18.9%	81.8%
Total	<i>\$386.1</i>	<i>\$1,367.9</i>	\$1,754.0	22.0%	<i>78.0%</i>

^aTennessee Department of Agriculture

Dairy Solutions TAEP Estimated Economic Impacts						
TD	A ^a	Prod	ucers			
Direct	Total ^b	Direct	Total ^b			
\$386,110	\$621,755	\$1,367,927	\$2,201,344			

^aTennessee Department of Agriculture

Top Five Industries Impacted based on Economic Activity from TAEP Dairy Solutions Expenditures

- 1. Veterinary Services
- 2. Farm Machinery & Equipment Manufacturing
- 3. Owner Occupied Dwellings
- 4. Wholesale Machinery, Equipment, & Supplies
- 5. Other Real Estate

^bIncludes economic activity multiplier effects