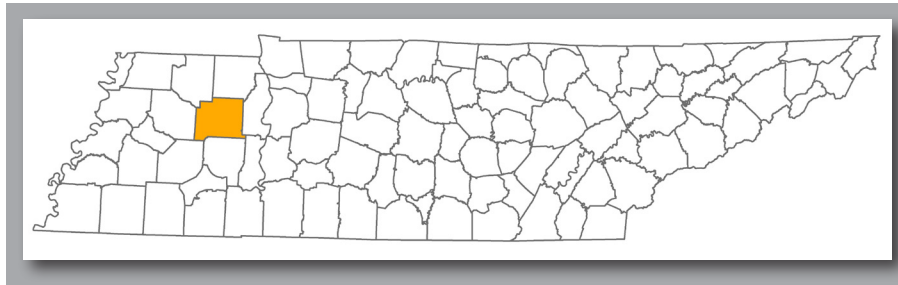


Contribution of Agriculture to the CARROLL COUNTY Economy

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This publication provides estimates of the total (multiplier-based) economic impact of agriculture in Carroll County.² This analysis accounts for the total effect of county agriculture throughout the local economy. Economic impact is measured in terms of: 1) output or revenue (the value of sales of all local goods and services) and 2) employment.³

DEFINITIONS

Agriculture: Crop and livestock production (i.e., farming); food and fiber processing, such as ice cream plants and textile mills; farm inputs, such as fertilizer plants and feed mills; and forestry-based products, such as sawmills and paper mills.

Multiplier Effect: Impact on the non-agricultural part of the economy. Examples of the multiplier effect include farmers and other agricultural businesses purchasing local inputs (e.g., utilities), and local spending by agricultural workers and owner-operators.

Output: Revenue (value of sales) of all local goods and services.

For Carroll County in 2015:

1) Total direct agricultural output is estimated at \$83.5 million. With multiplier effects, agricultural output has a total estimated economic impact of \$105.5 million. This means, for every dollar of direct output from agriculture, the total economic impact on the county's economy is \$1.26 (i.e., the 105.5 divided by the 83.5) (Figure 1, "Output").

2) There are 1,020 workers employed in county agriculture. With multiplier effects, an estimated 1,217 jobs are generated by county agriculture, or one direct agricultural job leads to 1.19 jobs (i.e., 1,217 divided by 1,020) in the county (Figure 1, "Employment").

¹Contact Author: dhughe17@utk.edu, 865-974-7463. For an explanation of the model used, see Hughes 2018. For state-level impacts, see Menard et al., 2016.

²Additional information regarding county farming can be found in the most recent (2012) Agricultural Census at the following: [Carroll County](#)

³See Hughes (2018) for an explanation of the model used. See Menard et al. (2016) for state-level impacts.



Figure 1. Agriculture’s impact on Carroll County output and employment, 2015.

The *output multiplier* is \$1.26. A dollar of output in agriculture leads to \$1.26 in county-level output (i.e., the dollar plus the \$0.26 multiplier effect).
 The *employment multiplier* is 1.19. A job in agriculture leads to 1.19 in county-level jobs (i.e., the job plus the 0.19 multiplier).

References

J. Menard, B.C. English, and K. Jensen. "Tennessee Ag Stats 2015." AIM-AG, Agricultural and Resource Economics. University of Tennessee Institute of Agriculture. 2016.
 Hughes, D. "A Primer in Economic Multipliers and Impact Analysis Using Input-Output Models." University of Tennessee Extension, W 644. 2018.

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