

TENNESSEE AGRI-INDUSTRY BRIEF: COTTON PRODUCTION FACT SHEET

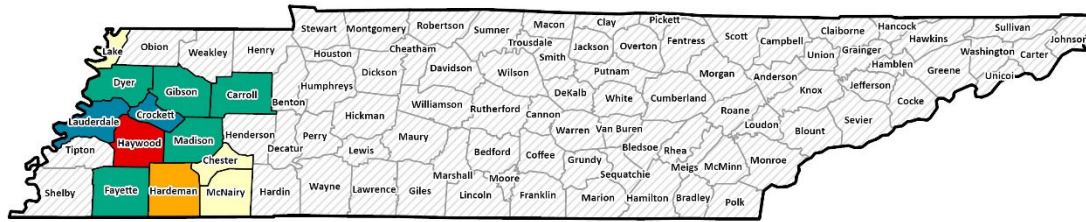
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BACKGROUND

Tennessee primarily grows upland cotton in the western part of the state. County-level harvested cotton acreages, production and yields for 2022 are shown in Figures 1, 2 and 3, respectively. U.S. state-level marketing year average cotton and cottonseed prices from August 1 to July 31 are indicated in Figure 4 and Figure 5, respectively. For Tennessee in 2023, the state-level marketing year average price¹ for cotton and cottonseed were \$0.699 per pound and \$241 per ton, respectively (USDA/NASS, 2024b).

¹Based on monthly prices received from August 1 to December 31, 2023 for both cotton and cottonseed, plus marketings for cotton (USDA/NASS, XXXX).



Tennessee Cotton Harvest, 2022
(Acres)



Figure 1. County-Level Cotton Harvested Acres in Tennessee, 2022

Source: USDA/NASS, 2023



Tennessee Cotton Production, 2022
(480 lb bales)

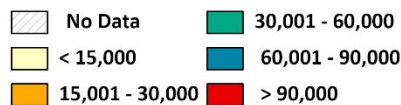
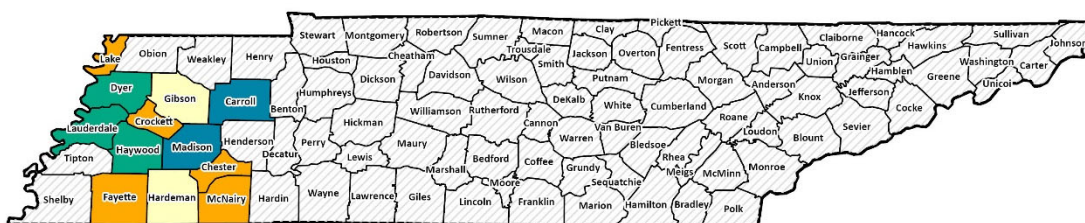


Figure 2. County-Level Cotton Production in Tennessee, 2022

Source: USDA/NASS, 2023



Tennessee Cotton Yields, 2022
(lbs/acre)



Figure 3. County-Level Cotton Yields in Tennessee, 2022

Source: USDA/NASS, 2023

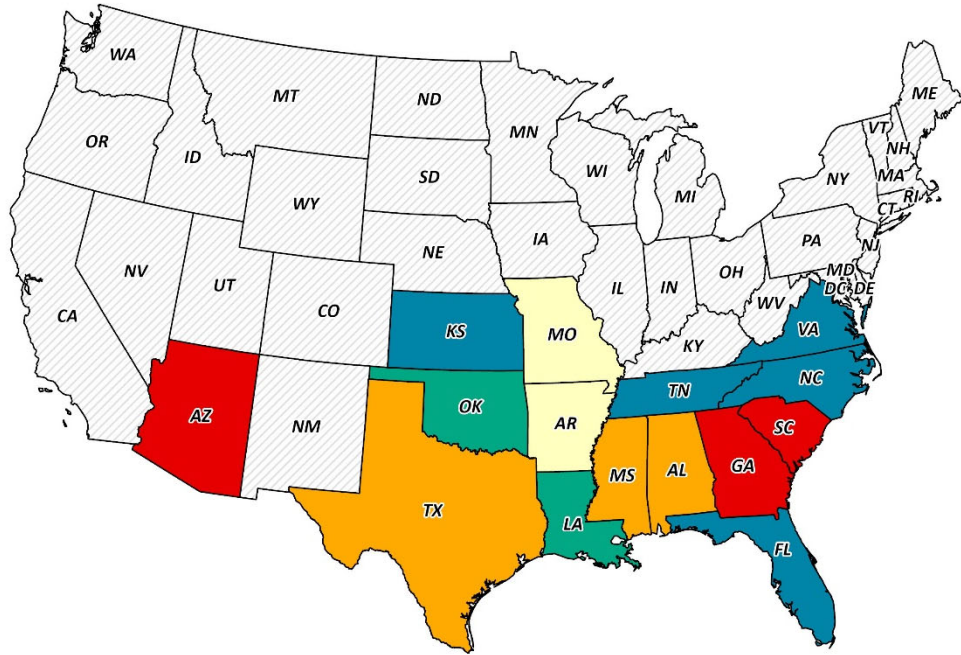
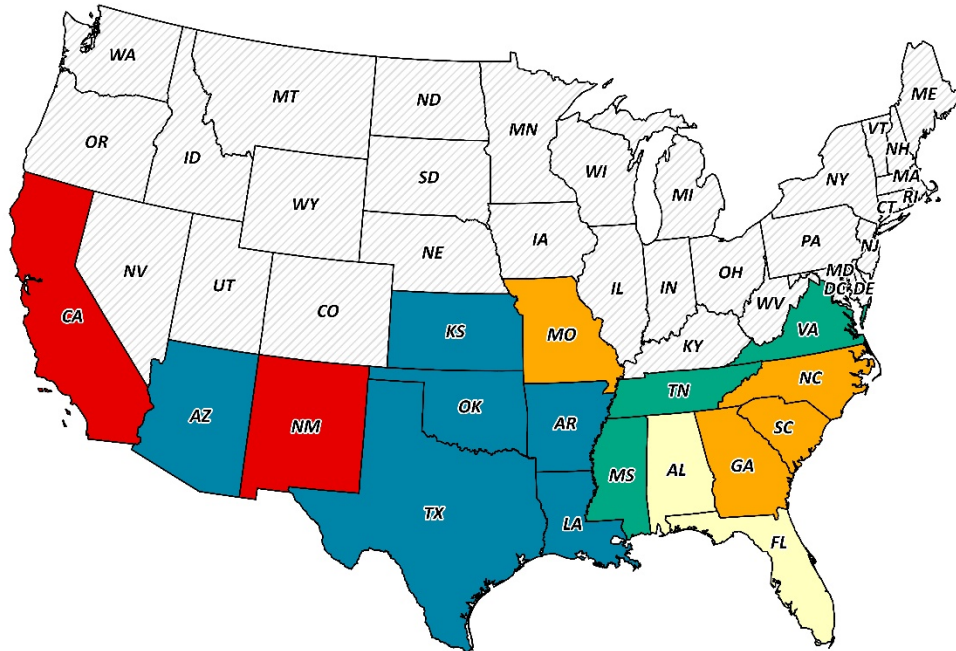


Figure 4. U.S. State-Level Cotton Prices Received, 2022
 Source: USDA/NASS, 2023



U.S. Cottonseed Prices Received, 2022
(Market Year Average) (\$/ton)



Figure 5. U.S. State-Level Cottonseed Prices Received, 2022
Source: USDA/NASS, 2023

ECONOMICS

CASH RECEIPTS

For Tennessee’s agricultural producers in 2022, cotton cash receipts at \$264.9 million ranked 6th (preceded by soybeans, broilers, cattle and calves, corn, and miscellaneous crops) for the agricultural commodities produced in the state. Compared to other states for 2022, Tennessee ranked 9th in cash receipts from cotton and 8th for cottonseed (USDA/ERS, 2023).

MULTIPLIER EFFECTS

Accounting for all cotton farming for the state, and including multiplier effects, the industry in 2022 contributed an estimated \$601.1 million in economic activity.² This economic activity was comprised of an estimated 5,538 individuals working part- or full-time in industries that support cotton farming, with a labor income of \$151.9 million. The 2022 economic activity and employment multipliers were 1.54 and 1.21, respectively. If cotton production increased total industry output (economic activity) by \$1 million, the state's economy would increase by an estimated \$0.54 million overall, and for each job supported in the same industry, an estimated 0.21 jobs would be supported in other industries (IMPLAN Group, LLC, 2022).

TRADE

Bulk agricultural trade for Tennessee's cotton in 2022 totaled \$960.9 million. China, Turkey, and Pakistan were Tennessee's largest trading partners for cotton (USDA/FAS, 2023).²

COTTON PRODUCTION

Tennessee's harvested cotton acreage from 2013 to 2023 is displayed in Figure 6. The average harvested acreage was 283,909 acres. Tennessee cotton production for that same time frame is displayed in Figure 7. Average production was 620,636 bales, based on 480-pound net weight bales. From 2013 to 2023, Tennessee cotton yields averaged 1,044.1 pounds per acre (Figure 8), with a marketing year average price of \$0.711 per pound (Figure 9). Tennessee's cottonseed production for that same time frame is displayed in Figure 10. Average production was 192,272.7 tons, with a marketing year average price of \$222.60 per ton (Figure 11) (USDA/NASS, 2024a & 2024b).

²Calculations based on IMPLAN's 2022 direct value of production of \$390.8 million, which includes on-farm consumption and is net of inventory changes. IMPLAN's cotton farming corresponds to NAICS codes 111920—establishments primarily engaged in growing cotton (US Census Bureau, 2023).

²USDA/FAS state export data limitations for agricultural shipments: 1) origin of movement is not necessarily the transportation origin (inland state intermediaries shipping agricultural commodities down the Mississippi River to the port in New Orleans may report Louisiana as the state of origin of movement, resulting in understating exports from agricultural states and overstating exports for others); and 2) consolidated shipments will reflect the state of origin where consolidated (USDA/FAS, 2023).

Compared to other states for 2023, Tennessee ranked 8th for harvested upland cotton acreage. The state ranked 5th in yields and 8th in production for that time frame. Texas ranked first in harvested acreage, as well as production. California ranked first in yields. For cottonseed production, Tennessee ranked 8th. Texas ranked first (USDA/NASS, 2024a).

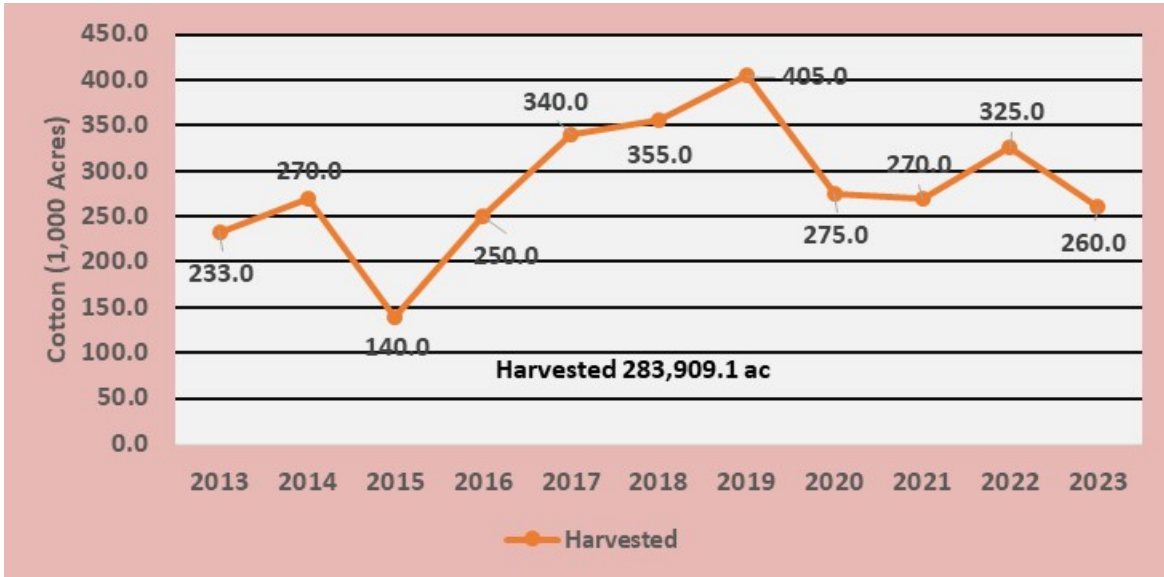


Figure 6. Tennessee Harvested Cotton Acres, 2013-2023
(Source: USDA/NASS, 2024a)

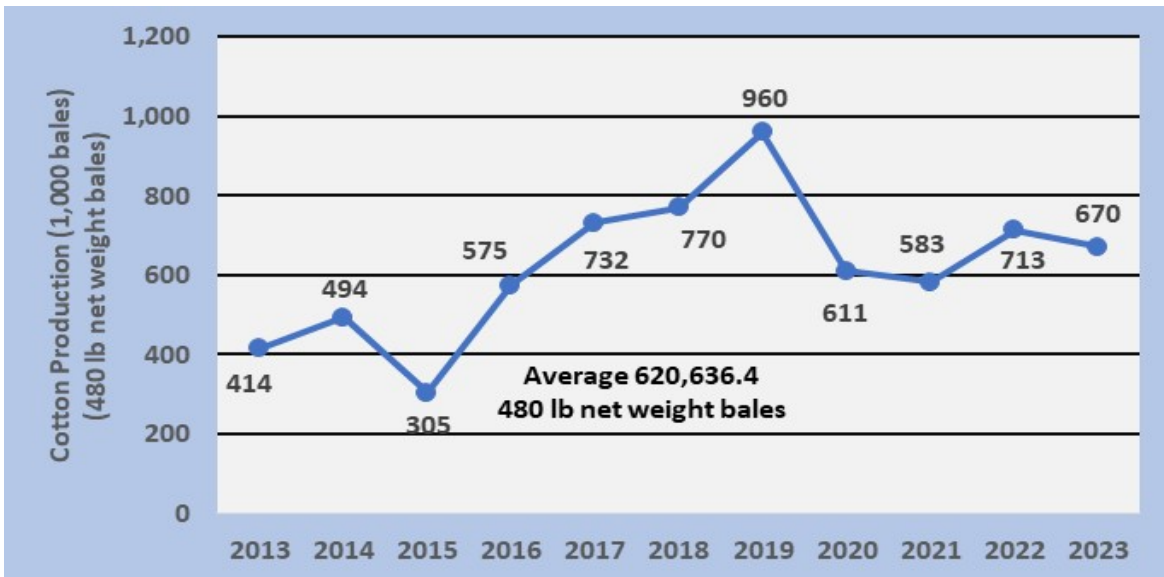


Figure 7. Tennessee Cotton Production, 2013-2023
(Source: USDA/NASS, 2024a)

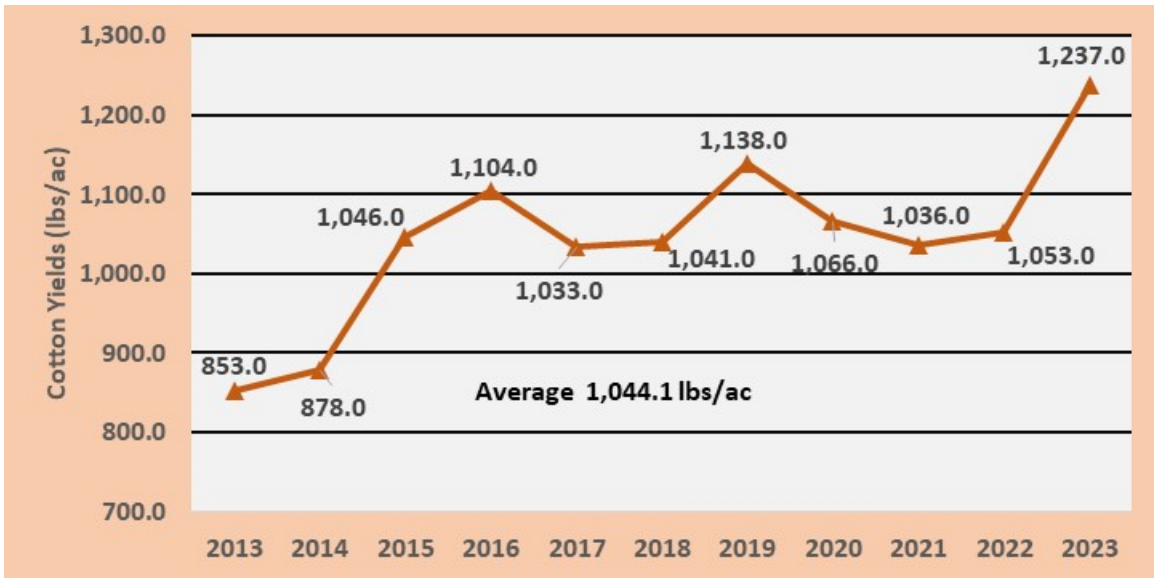


Figure 8. Tennessee Cotton Yields, 2013-2023
(Source: USDA/NASS, 2024a)

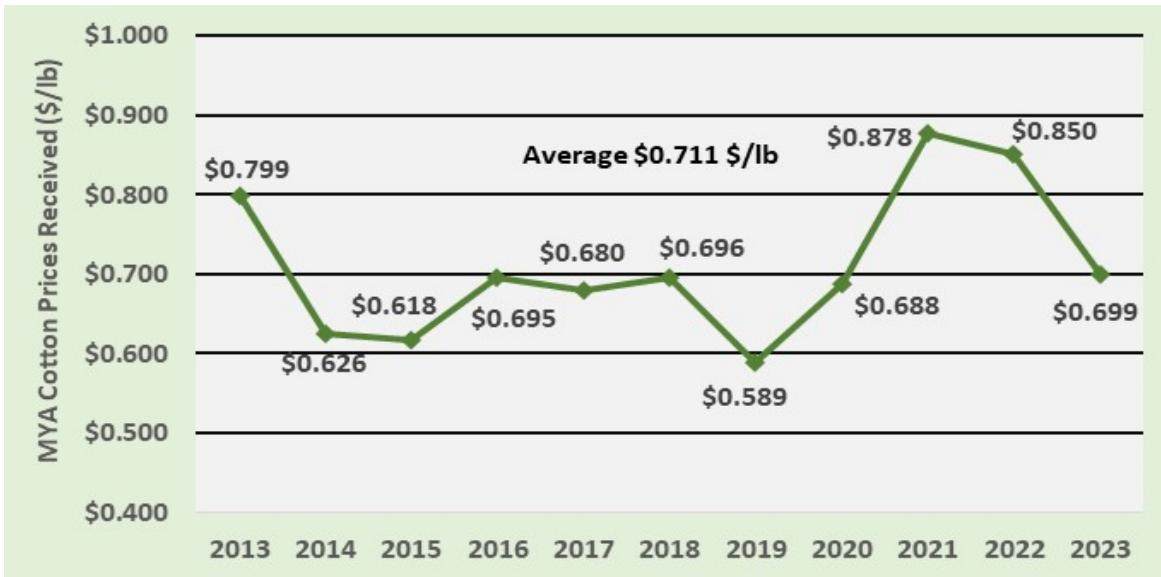


Figure 9. Tennessee Marketing Year Average Cotton Prices Received, 2013-2023
(Source: USDA/NASS, 2024b)

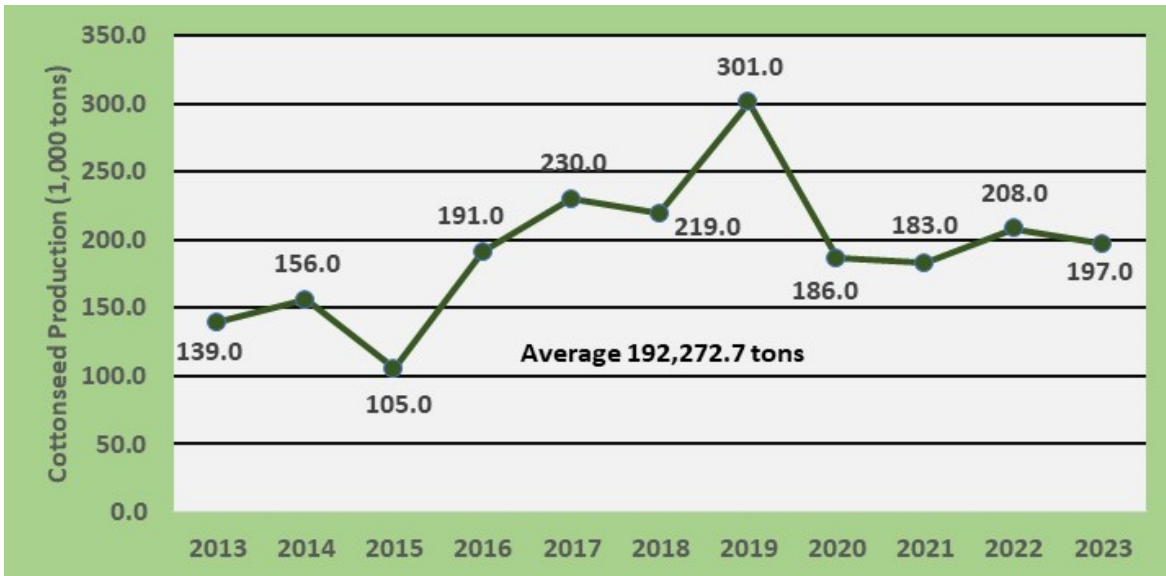


Figure 10. Tennessee Cottonseed Production, 2013-2023
 (Source: USDA/NASS, 2024a)

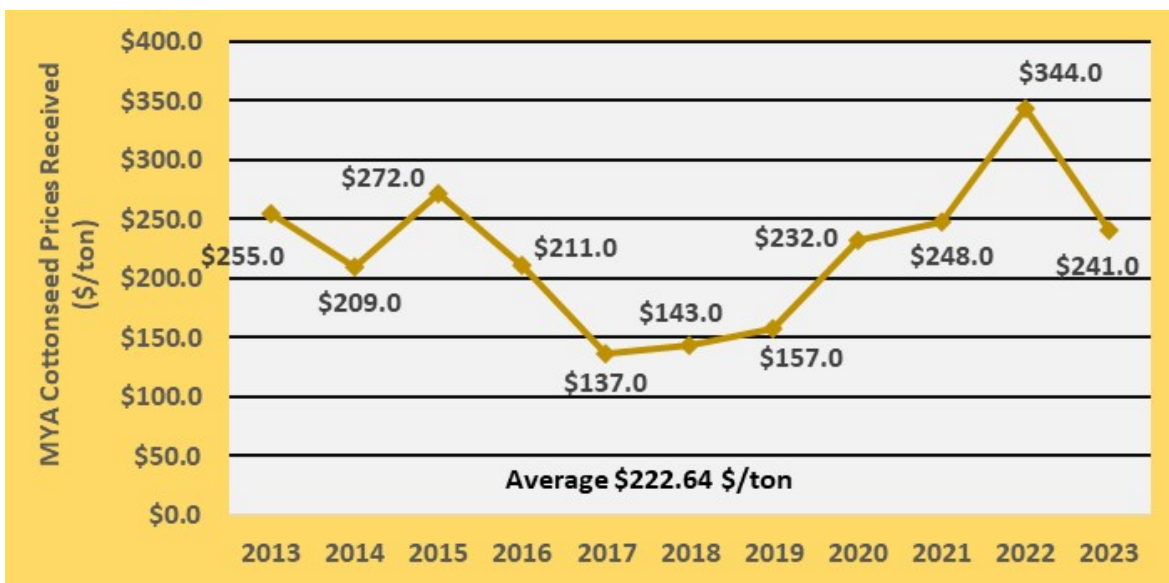


Figure 11. Tennessee Marketing Year Average Cottonseed Prices Received, 2013-2023
 (Source: USDA/NASS, 2024b)

COTTON PRODUCTION SUGGESTED READING

FIELD CROP BUDGETS

- Smith, A., and B. Bowling. 2023. "Field Crop Budgets for 2023." University of Tennessee Extension, Department of Agricultural and Resource Economics. D 33. Available at extension.tennessee.edu/publications/Documents/D33.pdf.
- Current Weekly Crop Comments and Market Highlights Information. Available at arec.tennessee.edu/extension/crop-economics.

CROP ECONOMICS

- Bowling, B., and A. Smith. 2023. "2023 Planted Acreage for Corn, Cotton, Grain Sorghum, Soybeans and Wheat in Tennessee by County." University of Tennessee Extension, Department of Agricultural and Resource Economics. W 442. Available at extension.tennessee.edu/publications/Documents/W442.pdf.
- Smith, A., and B. Bowling. 2023. "Tennessee Cropland, Irrigated Cropland and Pastureland Cash Rental Rates for 2023." University of Tennessee Extension, Department of Agricultural and Resource Economics. W 377. Available at extension.tennessee.edu/publications/Documents/W377.pdf.

IRRIGATION

- Leib, B., and T. Grant. 2019. "Irrigation Water Management (IWM) — A Simple Analogy." University of Tennessee Extension, Department of Biosystems Engineering and Soil Science. W 809-A. Available at extension.tennessee.edu/publications/Documents/W809-A.pdf.
- Leib, B., and T. Raper. 2019. "The Basics of Cotton Irrigation in Tennessee." University of Tennessee Extension, Departments of Biosystems Engineering and Soil Science and Plant Sciences. W 809-C. Available at extension.tennessee.edu/publications/Documents/W809-C.pdf.

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- U.S. Census Bureau. 2023. North American Industry Classification System. Available at census.gov/naics.
- U.S. Department of Agriculture, Economic Research Service (ERS). 2023. Data Files: U.S. and State-Level Farm Income and Wealth Statistics. "Annual Cash Receipts by Commodity, U.S. and States, 2008-2023F." Available at ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-u-s-and-state-level-farm-income-and-wealth-statistics.
- U.S. Department of Agriculture, Foreign Agricultural Service. 2023. Global Agricultural Trade System. Available at apps.fas.usda.gov/gats/ExpressQuery1.aspx.
- U.S. Department of Agriculture, National Agricultural Statistics Service (NASS). 2023. "Quick Stats Tools." Available at nass.usda.gov/Quick_Stats.
- U.S. Department of Agriculture, National Agricultural Statistics Service (NASS). 2024a. "Crop Production Annual Summary." Available at usda.library.cornell.edu/concern/publications/k3569432s?locale=en.
- U.S. Department of Agriculture, National Agricultural Statistics Service (NASS). 2024b. "Crop Values Annual Summary." Available at <https://usda.library.cornell.edu/concern/publications/k35694332>.



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