The Economic Importance of Food and Fiber

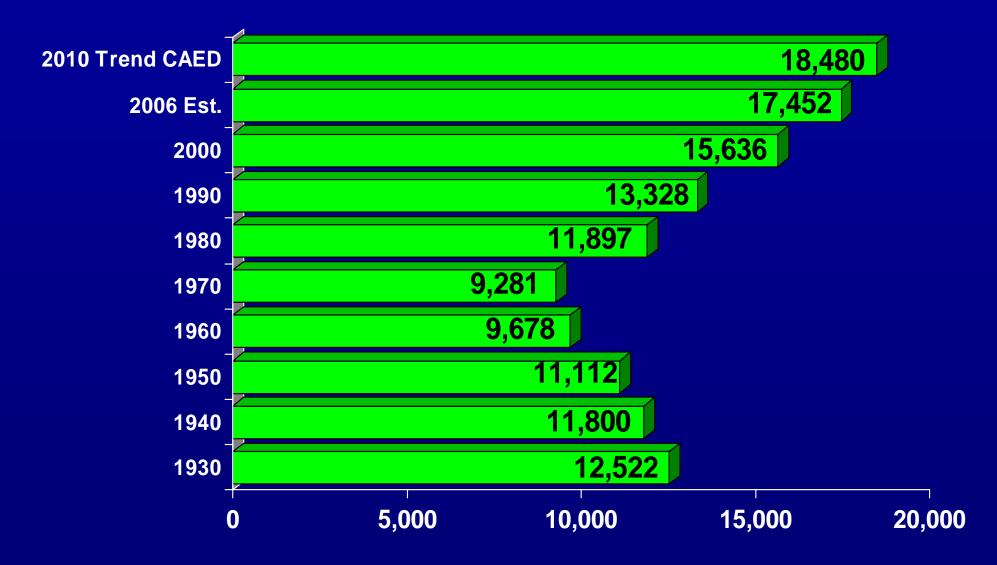
A Spotlight on Pierce County, Georgia

Prepared for: Pierce County Cooperative Extension April, 2007

> by: The Center for Agribusiness and Economic Development

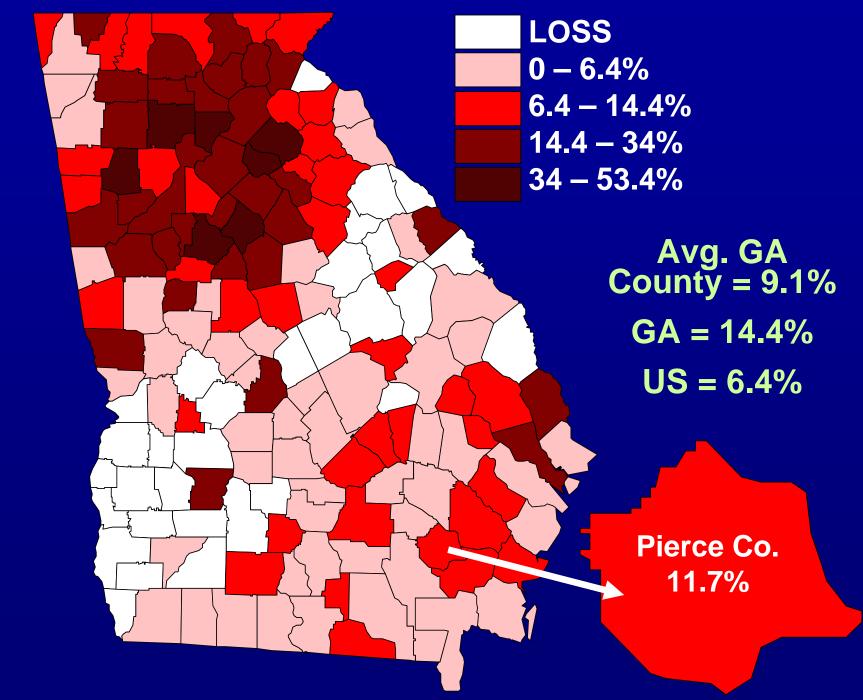
College of Agricultural and Environmental Sciences The University of Georgia

Total Population Pierce County



Primary data sources: U.S. Census Bureau, decennial censuses & estimate; CAED (Center for Agribusiness & Economic Development).

Population Change: 2000-2006



Percent of Land in Cropland & Forestland: 2002 23 – 40% 40 – 55% 55 – 70% 70 – 85%

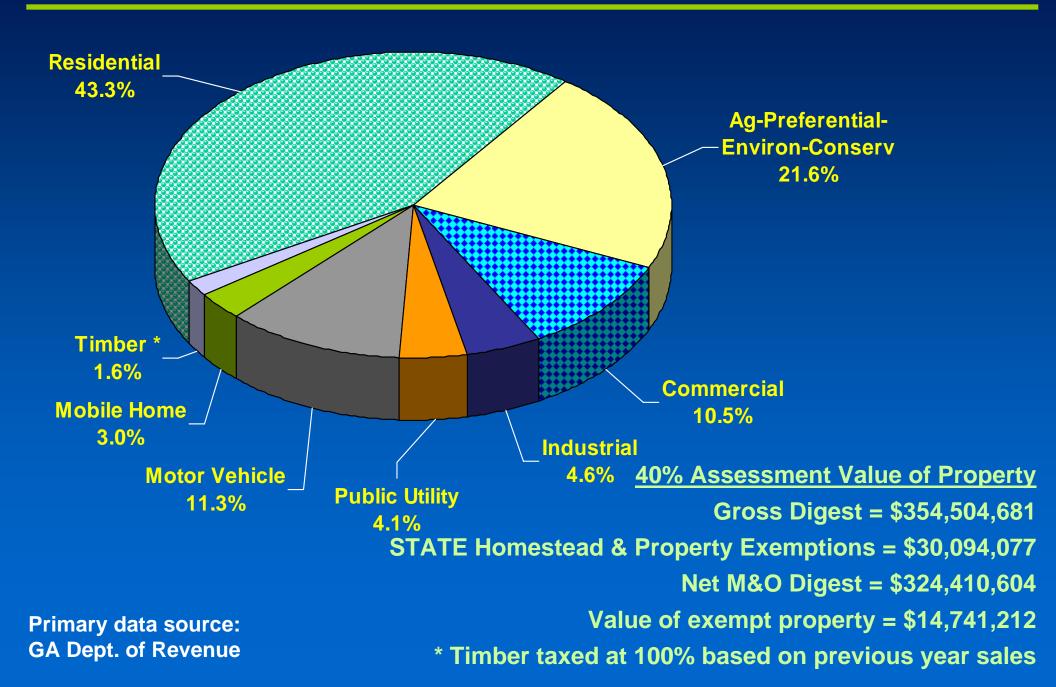
85% or more

GA Total = 78.5% GA Avg. Co. = 77.3% Metro Avg. Co. = 70.7% Nonmetro Avg. Co. = 82.6%

> Pierce Co. 80.1%

Primary data sources: U.S. Census of Agriculture, 2002 Forest Statistics for Georgia, 1997

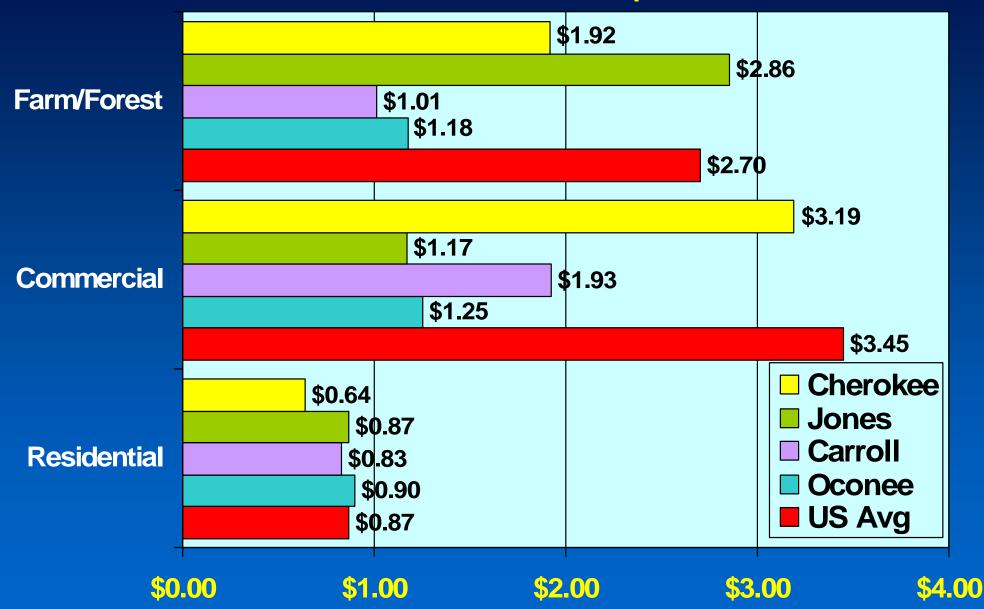
Components of 2005 Property Tax Gross Digest Pierce County



County Property Tax Digest Comparisons: 2005

County	% Resi- Dential	% Agri- cultural	% Com- mercial	% In- dustrial	% Motor Vehicle	% Other
Pierce	43.2	21.6	10.5	4.6	11.3	8.7
Appling	17.4	10.5	8.1	2.9	6.6	54.4
Bacon	30.3	24.4	13.7	9.6	12.1	9.9
Brantley	37.7	17.8	12.9	0.0	14.4	17.1
Ware	43.0	7.0	23.3	3.8	10.6	12.3
Wayne	29.9	14.3	12.9	27.8	8.7	6.3
Avg. GA Co.	41.5	21.7	13.3	7.9	8.4	7.8

Revenue : Expenditure Ratios \$ of Revenue for Each \$ of Expenditure



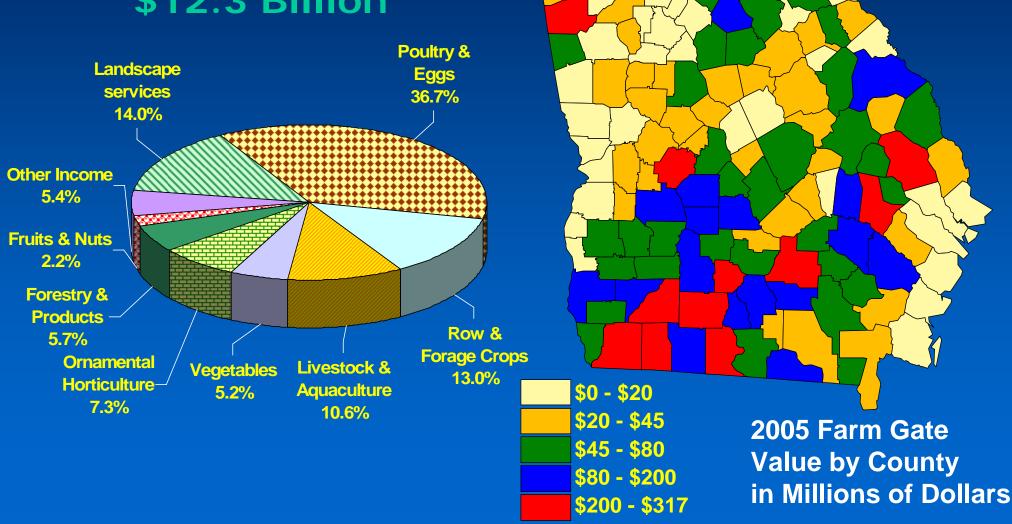
Dorfman, Jeffery, *The Economics of Growth, Sprawl and Land Use Decisions (presentation)*, Dept. of Ag & Applied Economics, UGA, January 2004.

Agriculture in Georgia

- Georgia's 2005 Farm Gate Value was \$10.6 billion. Adding the value of landscape services increased the total agricultural production value to \$12.3 billion.
- Total food and fiber production and directly related businesses account for a \$52.7 billion output impact on Georgia's \$614 billion economy.

Production Agriculture: 2005

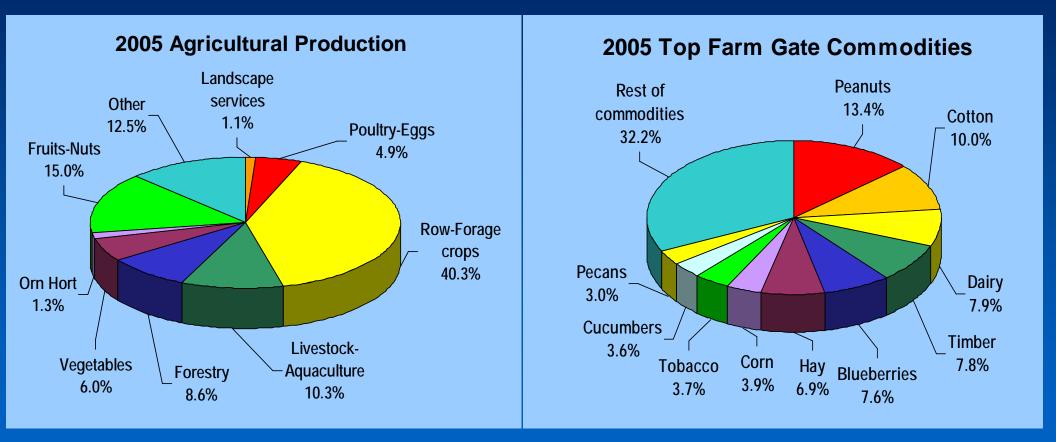
Georgia Total Agricultural Production Value \$12.3 Billion



What We Know about Pierce County

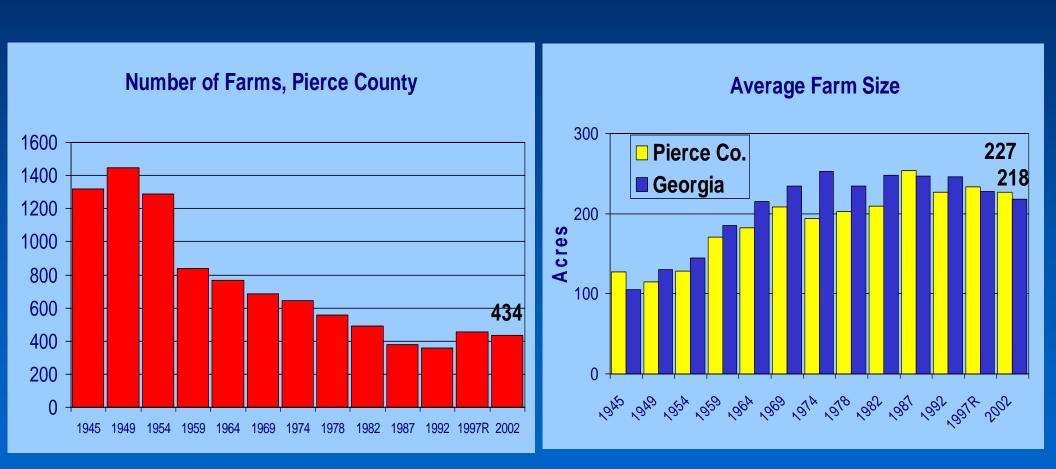
- 2005 Farm Gate Value in Pierce Co. was \$54.5 million. Adding \$582 thousand of landscape services increased the total agricultural production value to \$55 million.
- The highest value commodity group was row & forage crops, representing 40.3% of the total agricultural production value.

Pierce County 2005 Agricultural Production Value



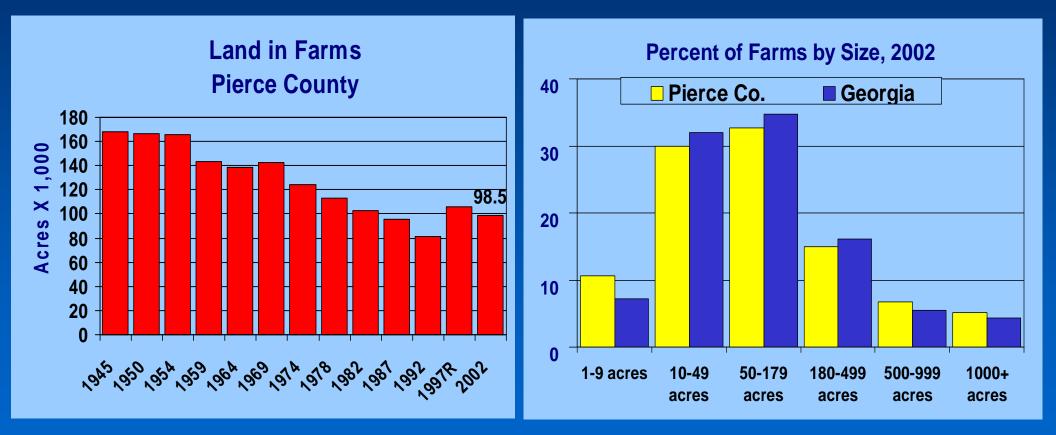
Total AG Value = \$55 million

Trends in Pierce County: Number of Farms & Average Farm Size



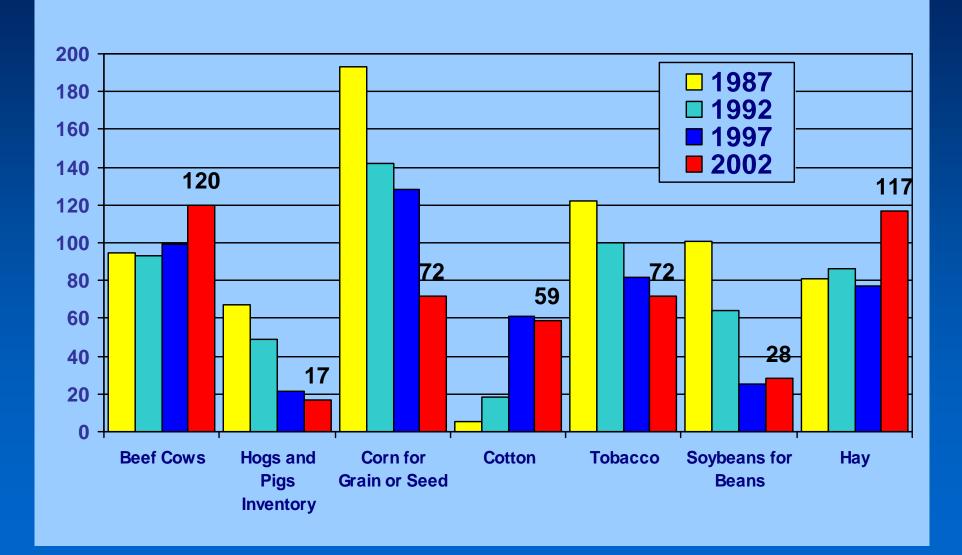
Source: 1945-2002 (quinquennial) Censuses of Agriculture

Trends in Pierce County: Land in Farms & Farms by Size



Source: 1945-2002 (quinquennial) Censuses of Agriculture

Trends in Pierce County Number of Farms by Commodity



Source: 1987-2002 (quinquennial) Censuses of Agriculture

How Do We Compare?

Georgia, Pierce and Surrounding Counties Farm Gate Value

□ \$ Per Farm (thousands) ■ \$ Per Acre



Sources: 2002 Census of Agriculture and 2005 Farm Gate Value Report

What We Did

The Center for Agribusiness and Economic Development performed an analysis of the county's economy, focusing on the role of food and fiber.



What We Asked County Economy Modeled

- How much of the county's total current economic output comes from food and fiber production and directly related processing? (A Snapshot of the Economy)
- What is the total (direct and indirect) Impact of food and fiber production and directly related industries?

Pierce County Economy Agriculture *OUTPUT*

	Output in \$ Millions	Percent	
Agriculture	55.061	10.4	
Construction	52.607	9.9	
Manufacturing	115.492	21.7	
Trans-Utilities-Info	62.113	11.7	
Trade	75.553	14.2	
Finance-Ins-RE	31.022	5.8	
Services	66.125	12.4	
Govt & Other	73.544	13.8	

Total County Economic Output = \$531.5 million

Pierce County Economy Agriculture + Directly Related Businesses *OUTPUT*

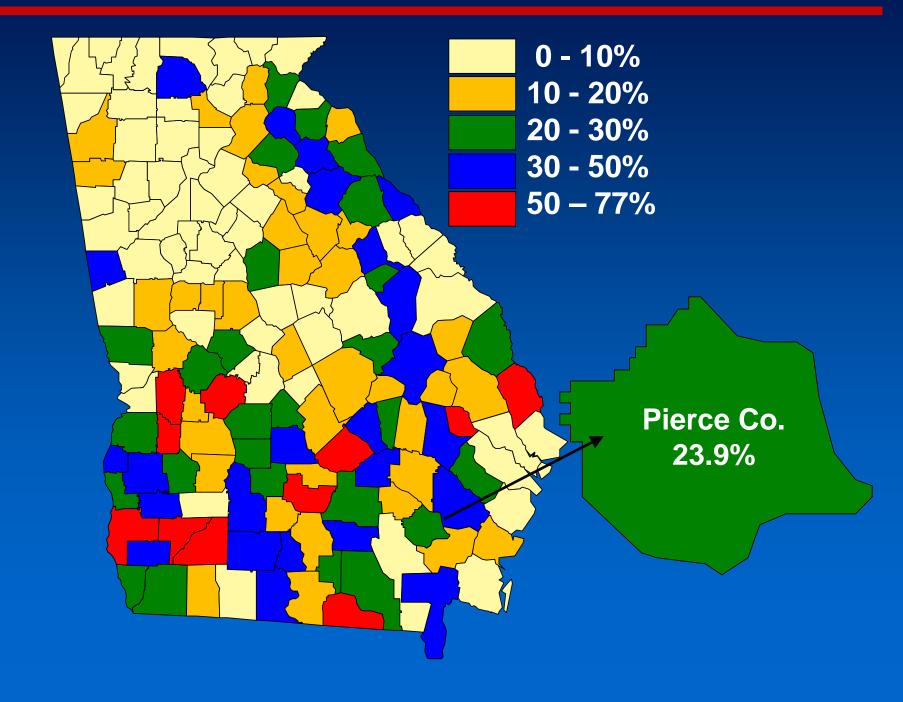
	Output in \$ Millions	Percent	
Agriculture + Direct	127.194	23.9	
Construction	52.607	9.9	
Manufacturing	43.358	8.2	
Trans-Utilities-Info	62.113	11.7	
Trade	75.553	14.2	
Finance-Ins-RE	31.022	5.8	
Services	66.125	12.4	
Government	73.544	13.8	

Total County Economic Output = \$531.5 million

An Economic Snapshot of Pierce County

- How much of Pierce County's total economic output comes from food and fiber production?
- AG value alone of \$55 million consisting of Farm Gate Value and landscape services comprises 10.4% of the county's economy.
- AG <u>plus</u> directly related businesses (ex. logging, sawmills, animal slaughtering, etc.) comprise 23.9% of the county's economy.

Food and Fiber Production and Directly Related Manufacturing as % of Total Output



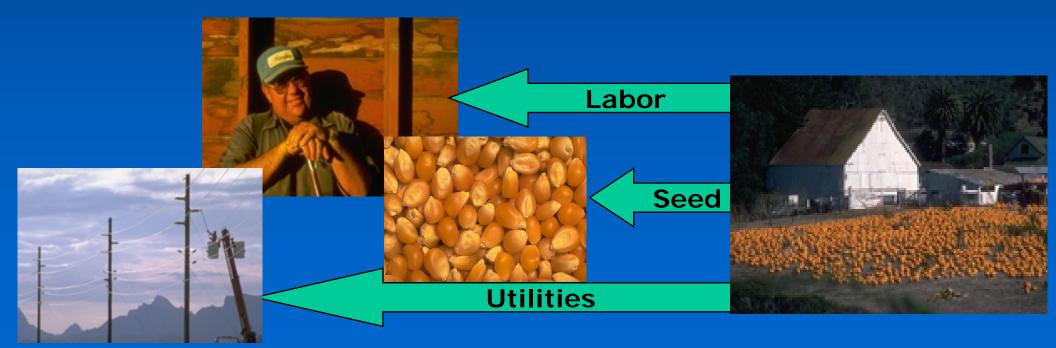
What is the Impact?

What is the total (direct and indirect) impact of food and fiber production and directly related industries?

This scenario illustrates how other industries are affected by the presence of food and fiber in the county. The indirect impacts measure output created due to food and fiber production and processing in the county.

What Impact Means: A Brief Explanation

The *impact* numbers capture the ripple effects that food and fiber create in the county's economy. Many other sectors rely in part on the existence of food and fiber for sales.



Pierce County Agriculture *IMPACT*

	Direct \$ Millions	Indirect \$ Millions
Agriculture	55.061	0
Construction	0	.167
Manufacturing	0	.187
Trans-Utilities-Info	0	1.237
Trade	0	3.484
Finance-Ins-RE	0	1.395
Services	0	2.847
Government	0	2.479
Total	55.061	11.797

Total Impact of Production AG = \$66.9 million–12.6% of total economy

Pierce County

Production Agriculture + Directly Related Businesses IMPACT

	Direct \$ Millions	Indirect \$ Millions	
Agriculture + Direct	87.971	0	
Construction	0	.281	
Manufacturing	39.223	3.011	
Trans-Utilities-Info	0	3.478	
Trade	0	8.232	
Finance-Ins-RE	0	2.861	
Services	0	6.155	
Government	0	4.323	
Total	127.194	28.341	

Total Impact of AG+Directly Related=\$155.5 million—29.3% of Total Economy

Pierce County

Production Agriculture + Directly Related Industries

Employment *IMPACT*

	Direct	Indirect	
Agriculture + Direct	928	0	
Construction	0	3	
Manufacturing	0	13	
Trans-Utilities-Info	0	31	
Trade	0	103	
Finance-Ins-RE	0	21	
Services	0	125	
Government	0	4	
Total Impact of AG + Directly Related Employment = 1,227 Jobs			

What These Numbers Mean: A Brief Explanation

- Direct impact is \$127.2 million. This includes food and fiber production, processing and directly related manufacturing.
- Indirect impact from the Trade sector is \$8.2 million. This captures the effects of farmers (direct source) buying supplies (seed, fertilizer, work boots) from local stores. These stores must increase their output to meet farmer demand.

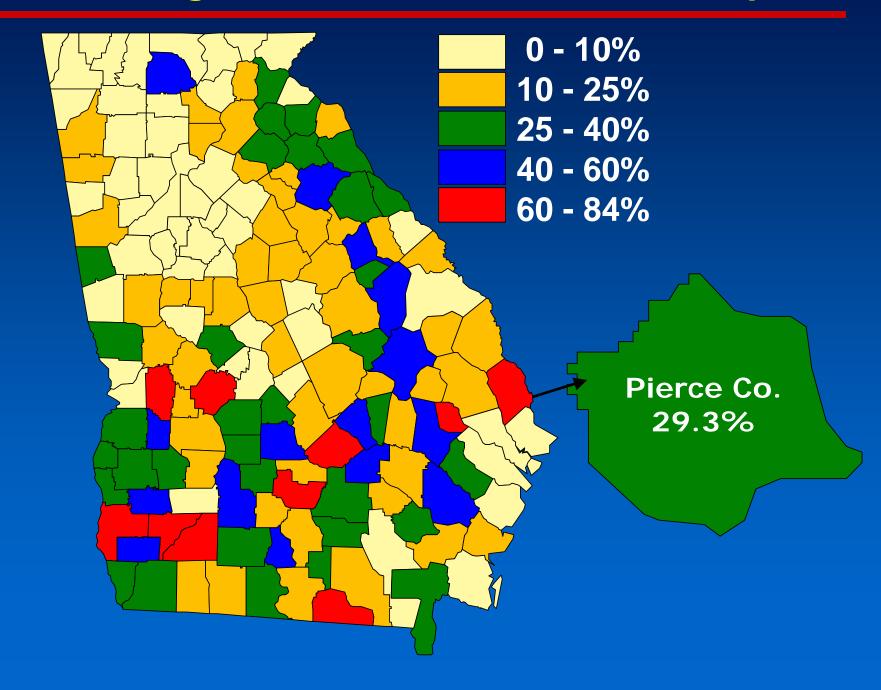
What These Numbers Mean: A Brief Explanation (continued)

- As local stores increase their output, they may demand more stock from local wholesalers (also in the Trade sector). Local wholesalers demand more from local manufacturers, thus increasing activity in the Manufacturing sector.
- Local stores also hire employees to assist farmers. They take home wages and buy groceries at the local store which increases demand there.

Pierce County Food and Fiber Impact Conclusions

- The total *impact* of food and fiber production, processing and direct manufacturing is \$155.5 million.
- The total output is \$531.5 million.
- Thus, food and fiber (directly and indirectly) account for 29.3% of the total output.

Food and Fiber Production and Directly Related Manufacturing *IMPACT* as % of Total Output



Contact Information

Prepared by: Sue Boatright and Archie Flanders Center for Agribusiness & Economic Development

> "Adding Value to Georgia's Agricultural Economy Through Research and Extension"

To learn more about your county, go to: http://www.caed.uga.edu/ ...click on "Georgia Statistics System"

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