LEAST COST SHIPPING OF TEXAS COTTON

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Abstract

This poster evaluates the relationship between Texas cotton gins and warehouses in terms of cotton bale transportation. The cotton industry has shifted from a domestic market to an exporter market; this shift has affected which warehouse a gin will supply. Warehouses and exporting ports are competing for cotton to supply the export market. This competition has the potential to affect transportation costs and flows for the gin. To look at the relationship between the gin and warehouse, a phone survey of all the gins in Texas was conducted. A total of 266 gins were called and 186 gins or 70% responded to the survey. The gin manager was asked 18 questions that included 1) which warehouse the gin ships to, 2) the transportation rate for shipping bales to the warehouse, and 3) whether the gin was receiving any kind of reimbursement for transportation costs. The results of the survey concluded that the average bale rate per mile for Texas gins was $0.13 and the average distance to the warehouse was 59 miles. After plotting the gin and the corresponding warehouse, we noticed that many gins bypassed closer warehouses and transported their bales to locations that were further in distance. The gins that sourced cotton to the nearest warehouse used a least cost approach for transporting bales, while gins that bypassed closer warehouses did so because they received a subsidy for the extra distance or the gin had some other contractual agreement. The subsidies also help explain why some gins transported bales to export destinations such as Arizona and New Mexico. The survey concluded not all gins use the least cost approach to transport cotton bales.