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A Spatial Analysis of the Food Wholesale and Retail Trade Sectors in Mississippi

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This study is a follow-up to "A Spatial Inventory of Mississippi's Agribusiness Sector" (Parrish et al.). The wholesale and retail trade accounted for 74 percent of the 12,944 records in the 1999 Mississippi Agribusiness Inventory database in the above mentioned Spatial Inventory study (Parrish et al.). The thrust of this new study will be to provide a closer examination of the wholesale, manufacturing, and food-related sectors of Mississippi's agribusiness firms.

Data will be placed on street level for the analysis. Categories are based on The Standard Industrial Classification (SIC) codes. Only the SIC codes that are agriculturally related in Group 51—Wholesale Trade-Nondurable Goods—are considered for street level analysis. More specifically, this group was selected from the 514—Groceries and Related Products; 5154—Livestock Buyers; 5193—Flowers, Nursery Stock, and Florists' Supplies.

The food manufacturing sector data will also be presented at street level. This sector includes approximately 200 firms in 19 different SIC codes. These data will be broken down into 10 or less categories.

In addition to the street verification, GIS layers for railroads and interstate highways will be included. The sales volumes of the respected operations will be represented on color maps. Also, a graphic analysis of the number of employees and sales data for the categories of wholesale groceries; farm product raw materials wholesale; flowers, nursery stock, and florists supplies will be included.

A separate state map with street-level verification for all that can be matched (streets and addresses) and zip-code verification for all others will be produced for each of the wholesale SIC codes. Additionally, data on sales and number of employees will be graphically presented for each category. This data set has just over 500 firms for Mississippi. An example of the manner in which the data will be presented is shown on the figure labeled Wholesale Food Trade and Figures 18, 19, and 20 from "A Spatial Inventory of Mississippi's Agribusiness Sector" (Parrish, et. al.).

Retail outlets and other firms in the food distribution network will be classified and placed in

GIS layers by zip code or county depending on the method that allows for the best visual presentation. Data will be on an interactive CD that will allow one to zoom in to street level. At this time, the detailed category breakdowns have not yet been determined. There will be categories for food stores; however, convenience stores, grocery stores, and supermarkets will be grouped as one SIC code. Another factor that has not been resolved is how or whether to handle input firms in the food sector or whether they should be included at all.

Data Problems

Several problems have presented themselves while working with GIS data. One of the major problems has been the availability of street addresses. Many firms have a post office box or a rural route address. Where possible, 911 addresses are used. Some firms do not know their 911 address, and in some counties, the process of determining 911 addresses is incomplete.

Another problem encountered has been that the street addresses and data bank addresses did not match. In Mississippi and probably in other states, this problem will exist until all areas have 911 addresses. For this case, the database is 1998. The 911 changes showed up where changes have occurred on the street address package purchased from Geographic Data Technology (GDT).

Another technical problem in presentation is the display of data at street level in congested areas. It is envisioned that the publication will be in the form of an interactive CD or on the web in such a manner that the reader will be allowed to "Zoom In" on any state map with street-level data.

In summary, this publication will provide a visual representation of the manufacturing, wholesale, and retail distribution of Mississippi's food sector. These data should provide the various segments of the food industry baseline data on the location and size of firms in the food sector. This data will provide estimates of the economic impact and the impact on the labor force of the various segments of agribusiness associated with food.

Wholesale Food Trade

Hinds County and a Sub-County View

LEGEND

- Over \$10 Million
- \$1 Million to \$10 Million
- Under \$1 Million
- Railroads
- Streets
- Interstate

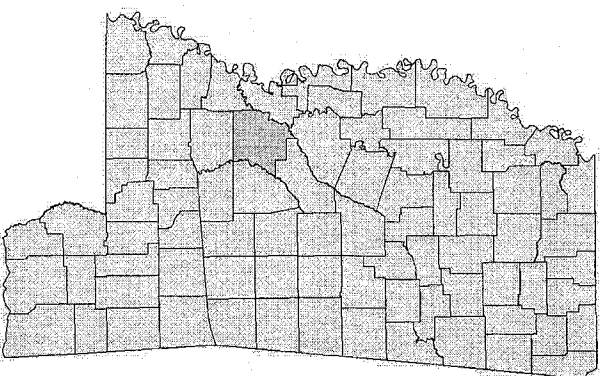
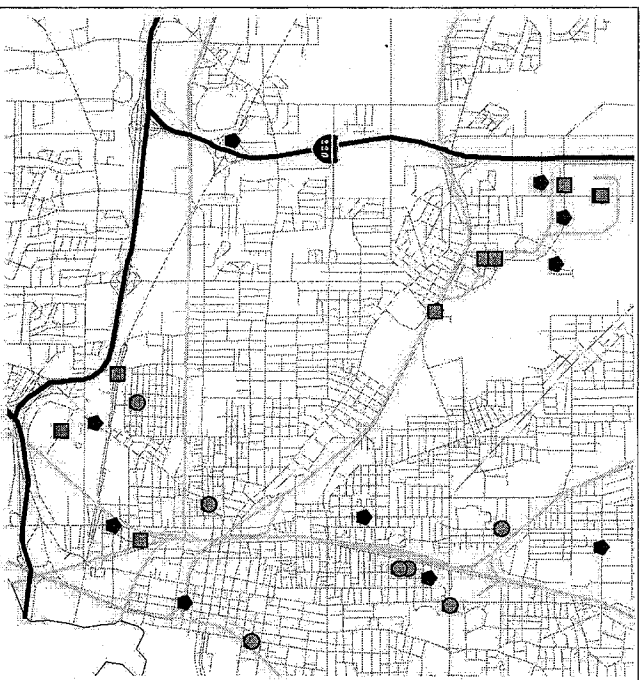
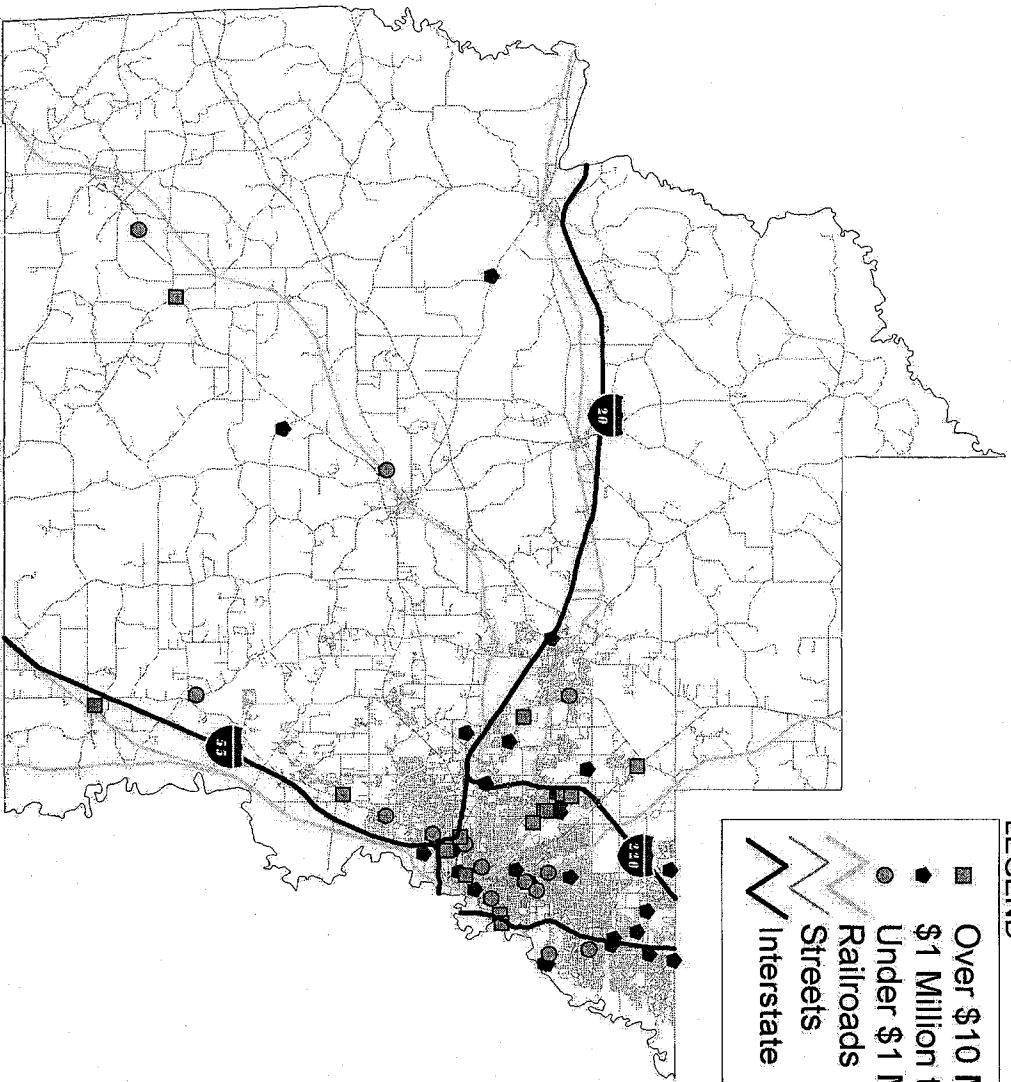


Figure 18. Visual Representation of Mississippi's Food Wholesale and Retail Trade Infrastructure (1 dot = 1 organization)

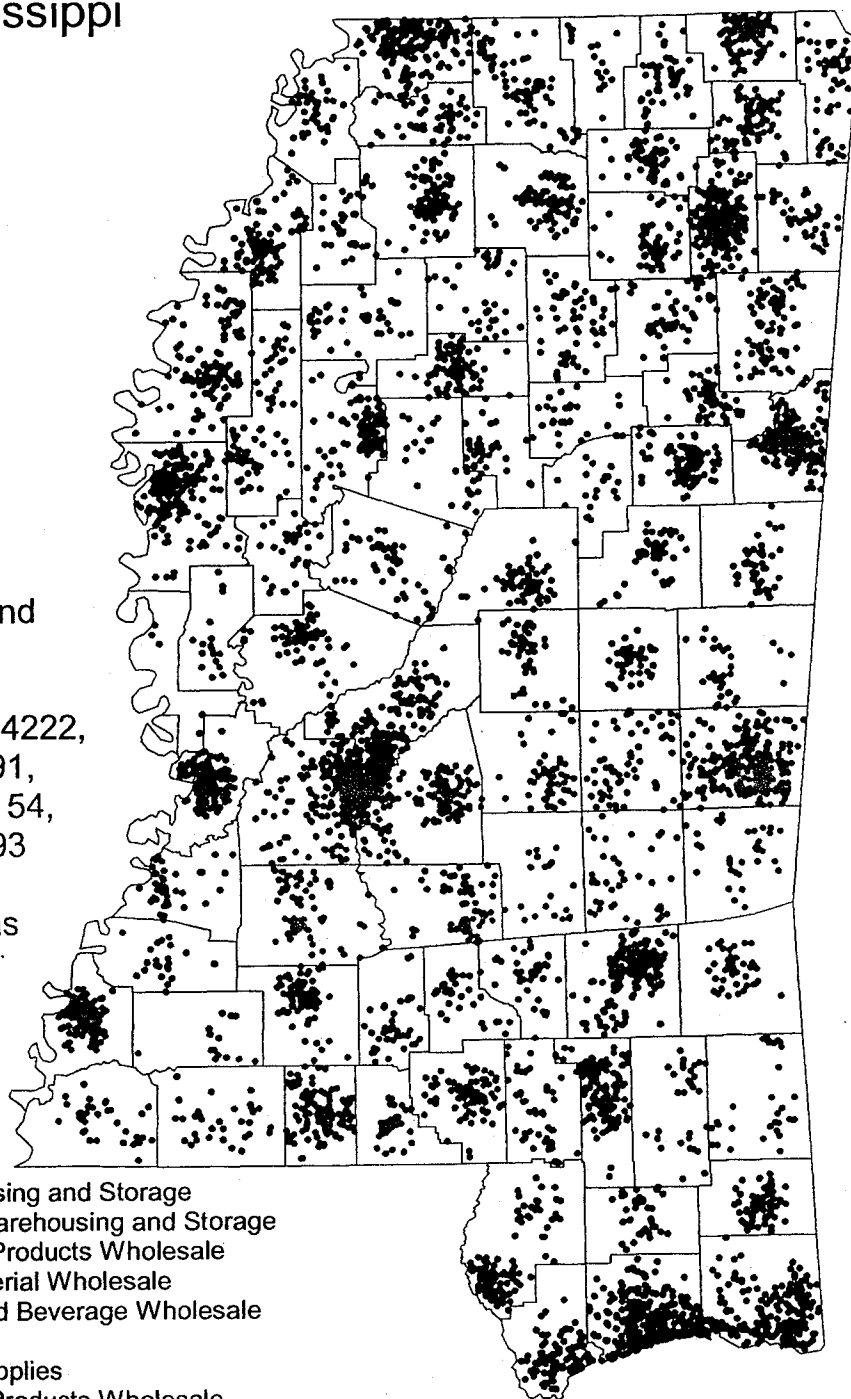
Agribusiness Infrastructure State of Mississippi



Food Wholesale and
Retail Trade

SIC Codes: 4221, 4222,
514, 515, 518, 5191,
5193, 5194, 5261, 54,
58, 592, 5992, 5993

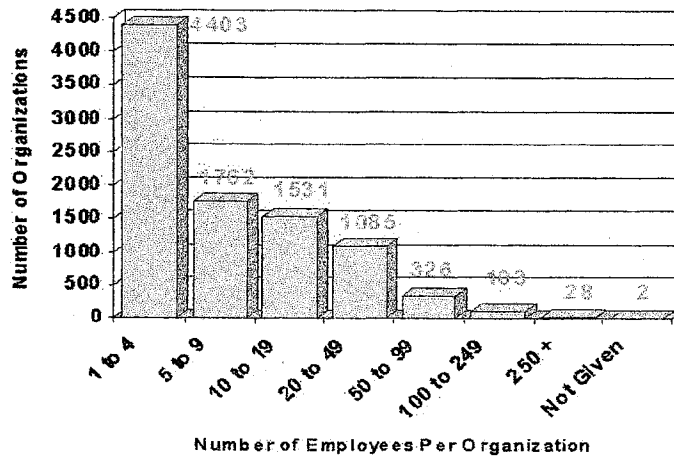
9240 Organizations



Farm Product Warehousing and Storage
Refrigerated Product Warehousing and Storage
Groceries and Related Products Wholesale
Farm-Product Raw Material Wholesale
Beer, Wine, and Distilled Beverage Wholesale
Farm Supplies
Flowers and Florists Supplies
Tobacco and Tobacco Products Wholesale
Retail Nurseries and Garden Stores
Food Stores
Eating and Drinking Places
Liquor Stores

Sources: 1998 State Business Directory -
Mississippi by American Business Directories, Inc.
1999 Mississippi Manufacturers / Cross-match
Directory by Mississippi Department
of Economic and Community Development

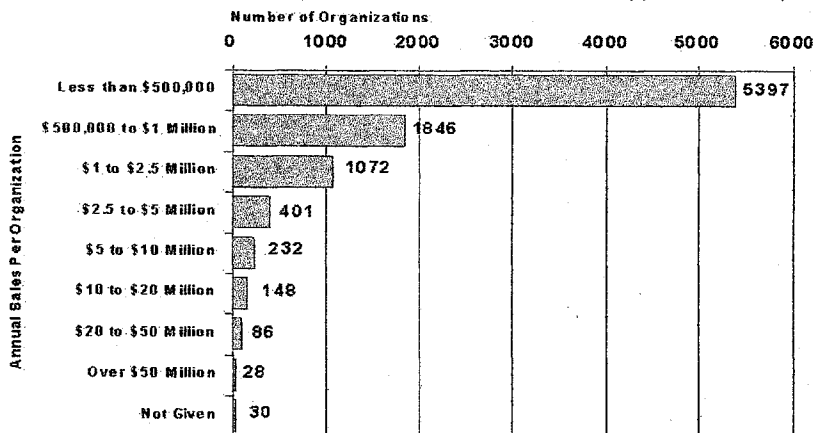
Figure 19
**Number of Organizations Per Employee Range
 for Mississippi's Agribusiness Infrastructure**
 (Food Wholesale and Retail Trade / 9240 Mississippi Businesses)



Sources: 1998 State Business Directory-Mississippi by American Business Directories, Inc.
 1999 Mississippi Manufacturers / Cross-match Directory by Mississippi Department of Economic and Community Development



Figure 20
**Number of Organizations Per Annual Sales Range
 for Mississippi's Agribusiness Infrastructure**
 (Food Wholesale and Retail Trade / 9240 Mississippi Businesses)



Sources: 1998 State Business Directory-Mississippi by American Business Directories, Inc.
 1999 Mississippi Manufacturers / Cross-match Directory by Mississippi Department of Economic and Community Development



References

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