FUNCTIONAL CHANGES IN SOUTH CENTRAL OKLAHOMA SMALL TOWNS

By

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FUNCTIONAL CHANGES IN SOUTH

CENTRAL OKLAHOMA

SMALL TOWNS

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TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	1
	Problem Statement	2
	Justification of Research	3
	Scope of Study	5
	Data Collection	9
	Proposed Variables	13
	Methodology	15
	Stage One	15
	Stage Two	16
	Stage Three	18
	Final Stage	19
	Remaining Thesis Organization	21
II.	LITERATURE REVIEW	23
	Introduction	23
	Central Place Studies	24
	Relationship Between Retail Trade and Distance from Urban Areas	26
	Relationship Between Retail Trade and the Social Structure	27
	Relationship Between Retail Trade and Transportation	28
	Relationship Between Retail Trade and the Economy	30
	Relationship Between Retail Trade and Demographics	31
	Relationship Between the Built Environment and the Economic and Demographic Structure of Rural Areas	33
	Conclusion	37
III.	HISTORICAL SETTLEMENT PATTERNS FROM 1830-1929	39
	Introduction	39
	Indian Occupation and Development of Agriculture 1830-1869	40
	Town Development and the First Railroad 1870-1899	49
	Town Development from 1900 to 1910	56
	Town Development from 1911 to 1929	66
	Conclusion	73

Chapter Page

IV. CHANGES IN THE NUMBER OF FUNCTIONS OFFERED BY SIXTEEN RURAL OKLAHOMA TRADE CENTERS 75

Introduction 75
Changes in the Number of Functions 77
Relationship Between Population Size and Changes in the Number of Functions 85
Relationship Between Population Change and Changes in the Number of Functions 93
Relationship Between Distance from Urban Places and Functional Change 99
Conclusion 110

V. CHANGES IN TYPES OF FUNCTIONS 111

Introduction 111
Changes in Farm Structure and Land Utilization 113
Changes in the Transportation Structure 123
Changes in the Types of Functions Offered by the Sixteen Rural Trade Centers 1930-1990 . 131
Conclusion 146

VI. THE COMMERCIAL LANDSCAPE OF FOUR OKLAHOMA SMALL TOWNS 147

Introduction 147
Types of Functions Offered in 1920 Verses 1990 149
Distribution of Functions 159
The Changing Commercial District of Wapanucka 158
The Changing Commercial District of Caddo 168
The Changing Commercial District of Calera 173
The Changing Commercial District of Bromide 178
Relationship between Construction Materials and the Types of Functions 182
Relationship Between Building Height and the Types of Functions 187
Conclusion 189

VII. SUMMARY AND CONCLUSIONS 192

BIBLIOGRAPHY 200

APPENDIX: OPERATIONAL DEFINITIONS 211

LIST OF TABLES

Table		Page
I.	Town Development Between 1830 and 1929	43
II.	Number of Functions Offered in the Sixteen Study Towns for 1930, 1960, and 1990.....	78
III.	Population Size of the Study Area for 1930, 1960 and 1990	86
IV.	Relationship Between Population Size and the Number of Functions	91
V.	Relationship Between Population Change and Change in the Number of Functions 1930-1960 and 1960-1990	95
VI.	Relationship Between Distance from Urban Places and the Number of Functions	102
VII.	Relationship Between Change in Distance from Urban Places and Change in the Number of Functions from 1930 to 1960 to 1990	106
VIII.	Types of Functions Offered by at Least One Town in Either 1930, 1960, or 1990	114
IX.	Change in the Structure of Farms in the Study Area	116
X.	Changes in Agricultural Land Utilization in the Study Area	119
XI.	Changes in Transportation in the Study Area from 1930 to 1960 and 1960 to 1990	125
XII.	Change in the Number of Farm Trucks and Cars Registered Per County	129
XIII.	Types of Functions Offered in 1930 in the Sixteen Rural Trade Centers	136
XIV.	Types of Functions Offered in 1960 and Percent Change in the 1930 Functions	139

Table Page

XV. Types of Functions Offered in 1990 and Percent Change in the 1960 Functions 143

XVI. Number of Field Towns Offering Each Function in 1920 150

XVII. Total Number of Each Function in the Four Field Towns in 1920 151

XVIII. Number of Field Towns Offering Each Function in 1990 154

XIX. Total Number of Each Function in the Four Field Towns in 1990 155

XX. Distribution of Functions in Wapanucka 1920 ... 161

XXI. Distribution of Functions in Wapanucka 1990 ... 165

XXII. Distribution of Functions in Caddo 1920 169

XXIII. Distribution of Functions in Caddo 1990 172

XXIV. Distribution of Functions in Calera 1920 174

XXV. Distribution of Functions in Calera 1990 176

XXVI. Distribution of Functions in Bromide 1920 179

XXVII. Distribution of Functions in Bromide 1990 180

XXVIII. Construction Materials Common with Different Types of Functions 1920 183

XXIX. Construction Materials Common with Different Types of Functions 1990 186

XXX. Functions Common in Either One, Two, or Three Story Buildings 1920 188

XXXI. Functions Common in Either One, Two, or Three Story Buildings 1990 190

LIST OF FIGURES

Figure		Page
1.	Counties In the Study Area	6
2.	Sixteen Study Towns	8
3.	Town Development Between 1830 and 1869	47
4.	Types of Towns in 1870	50
5.	Town Development Between 1870 and 1899	51
6.	Towns at the End of 1899	57
7.	Types of Towns in 1900	58
8.	Town Development Between 1900 and 1910	61
9.	Towns at the End of 1910	63
10.	Types of Towns in 1911	65
11.	Town Development Between 1911 and 1929	67
12.	Towns at the End of 1929	68
13.	Types of Towns in 1930	74
14.	Sixteen Study Towns	76
15.	Number of Functions Offered Per Town in 1930	79
16.	Number of Functions Offered Per Town in 1960	80
17.	Change in the Number of Functions 1930-1960	81
18.	Number of Functions Offered Per Town in 1990	83
19.	Change in the Number of Functions 1960-1990	84
20.	Population Size of Towns 1930	87
21.	Population Size of Towns 1960	88
22.	Population Size of Towns 1990	89

Figure Page

23. Population Change in the Small Towns 1930-1960 96

24. Population Change in the Small Towns 1960-1990 98

25. Small Town Distance from Urban Centers 1930 101

26. Small Town Distance from Urban Centers 1960 104

27. Small Town Distance from Urban Centers 1990 105

28. Road Conditions in 1930 124

29. Road Conditions in 1960 127

30. Road Conditions in 1990 130

31. Railroads in 1930 132

32. Railroads in 1960 133

33. Railroads in 1990 134

34. The Commercial Landscape Study Area 148

35. Commercial Landscape of Wapanucka 1920 162

36. Commercial Landscape of Wapanucka 1920 163

37. Commercial Landscape of Wapanucka 1990 166

38. Commercial Landscape of Wapanucka 1990 167

CHAPTER I

INTRODUCTION

The rural trade center is a particular type of small town which has the primary purpose of providing goods and services to its hinterland. However, over the past several decades of these rural trade centers have lost a number of their former establishments and functions due to changes in demographics, land utilization, economic structure of the surrounding hinterland, and changing transportation networks. Due to these changes, the rural trade centers have shifted from their primary function of supplying goods and services to becoming both suppliers and social centers for the agricultural hinterland (McGranahan 1980). Social functions have always been important but, in recent decades, they have become even more important because the trade center has lost some of its primary functions and the population of the trade center has become older.

Better transportation and the chance to obtain most goods and services in one centralized location has caused a drastic change in the types of functions offered by most small towns. For instance, the abandonment of the railroad and the increase in automobile usage changed the functional basis of many small towns because they lost their railroad depot and their blacksmith shop while they gained filling

stations and auto garages. Businesses also became more dispersed because roadways often bypassed villages which meant that it was more profitable for new businesses to locate next to the highway. This caused many functions to be abandoned on main street because they were unable to compete with the new businesses located on the highway. Furthermore, as mobility increased, the demand for many functions decreased and the specialized businesses moved to larger towns (Jakle 1982).

The built environment, or the building types, building construction materials, and building height, of these rural service centers has also changed through time as the types or distribution of businesses have changed. For example, as the economy of Washington, Oklahoma changed from cotton marketing to grain farming its built environment reflected this change as cotton gins were replaced by huge grain elevators (Olson, 1951). In addition, smaller sized towns often have more one story, wooden-frame buildings which are spaced farther apart compared to larger towns where many of the buildings are of brick or stone construction, closely spaced, and are two stories tall (Bailey 1982).

Problem Statement

Rural trade centers have experienced a significant change in the number, kind, and distribution of functions over time because of changes in the economy, especially agricultural and land utilization practices, as well as

changes in the demographics, transportation, and social structure.

This study examines sixteen trade centers, in four counties of south-central Oklahoma, and places particular emphasis on change in the number and kinds of retail and service functions between 1930 and 1990. In addition, the study analyzes how the structure, function, and role of these settlements has changed over time and identifies the variables responsible. Changes in the distribution of functions and in the built environment are also considered in four representative rural service centers.

Justification of Research

The scholarly literature on changes in the functional basis of rural settlements concentrates on how demographics affects the number of functions in these settlements (Thomas 1960, Stafford 1963, Berry and Garrison 1958, Johansen and Fuguitt 1973). Some studies also discuss how changes in the transportation network (railroads and highways) and distance from the nearest largest city affect the number of functions in a settlement (Hudson 1985, Hart and Salisbury 1968, and Hassinger 1957b). Research has also been devoted to studies on the social functions of small towns (McGranahan 1980, Stafford 1963, Kolb 1959, and Young and Larson 1970).

Very little research, however, has been done in geography relating to how changes in the agricultural sector of the economy affect the functions of rural settlements.

Olson (1951), Chittick (1955), Jakle (1982), and Wallach (1987, 1988) have made reference to changing farm structure, farm consolidation, land utilization practices, and farm prices as factors affecting the viability of the functions or establishments of rural villages but little mention was made on how the number, types, and distribution of functions have changed due to the above factors.

This study compliments the research by Olson (1951) who examined the functional basis of Washington, Oklahoma and how it changed due to three main variables: changes in land utilization, farm structure, and the changing transportation system of the area. This study expands on Olson's study and involves sixteen small towns under 2500 population and located in an agricultural area that at one time focused on cotton production. One goal of the study is to determine whether the change from cotton to other types of land utilization has affected the types of functions offered by these small towns. Changes in the transportation network of the subject counties, farm size, number of farms, farm consolidation, and farm tenure, are also considered. The study compliments Johansen and Fuguitt (1973) who examined how changes in demographics affected the number of functions in Wisconsin villages, and Bailey (1982) who examined how the commercial landscape, or the types of functions, distribution of functions, and the built environment, has changed in towns of Northeast Oregon.

This research contributes to the literature by showing

how changes in rural America, especially changes in agriculture, transportation, and demographics, affect the viability and distribution of functions in rural settlements. This study also provides a basis for comparison with other agricultural regions in the United States to see if changes in the above variables affect all small towns in the same manner as they affected Oklahoma small towns. Moreover, very little research has been done on Oklahoma trade centers. Most of the research has been completed on Midwestern trade centers, therefore, this study serves as one of the first that concentrates on more than one trade center in Oklahoma.

Scope of Study

The study area includes Atoka, Bryan, Coal, and Johnston counties, located in south-central Oklahoma (Figure 1). These counties were chosen because they experienced a significant change in agricultural land utilization from cotton to other types of crops and because this area was affected very little by oil production or has very few establishments oriented to mineral or oil production (1930, 1954, and 1987 Census of Manufacturing). In 1930, the four counties contained nineteen incorporated rural trade centers in which most of the functions were centered around

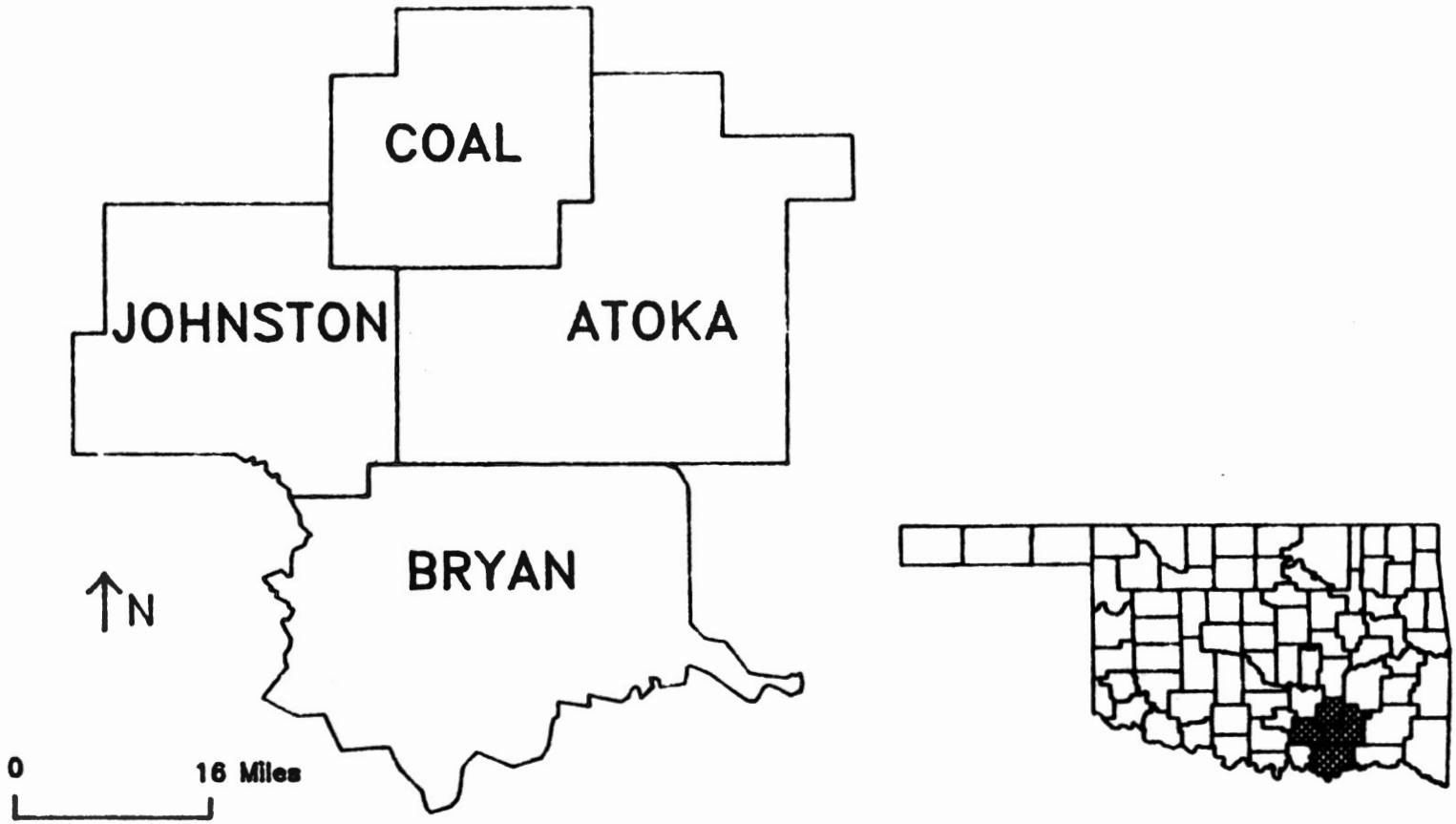

Figure 1. Counties In the Study Area

agriculture and the supply goods and services to the surrounding hinterland. Therefore, changes in hinterland composition and land utilization should result in changes in the functional basis of the rural trade center. However, this study is limited to only sixteen service centers (Figure 2) as Kenefick, Kemp, and Philipps were eliminated because of a lack of data for these trade centers from the 1930 issue of Bradstreet's Book of Commercial Ratings.

The time period encompasses a 60-year period from 1930 to 1990. The year 1930 was chosen as the starting point for my study because it falls after the major boom period of the 1920s when coal production declined in Coal County along with oil production just to the north of the study area. Consequently, coal is a major factor contributing to the economic base of these small towns. Additionally, during the post 1920s era, cotton and corn production fell substantially between 1930 and 1960 and other types of crops such as wheat, pasture, and hay crops increased in production. The peak year for cotton production was 1925, which was followed by a general decrease in the production of cotton and an increase in other types of agriculture. Cotton is virtually nonexistent in these counties today as they have switched to other types of agriculture.

A major shift in population also occurred during this time period when the population of towns and cities plummeted all over Oklahoma because of both changes in

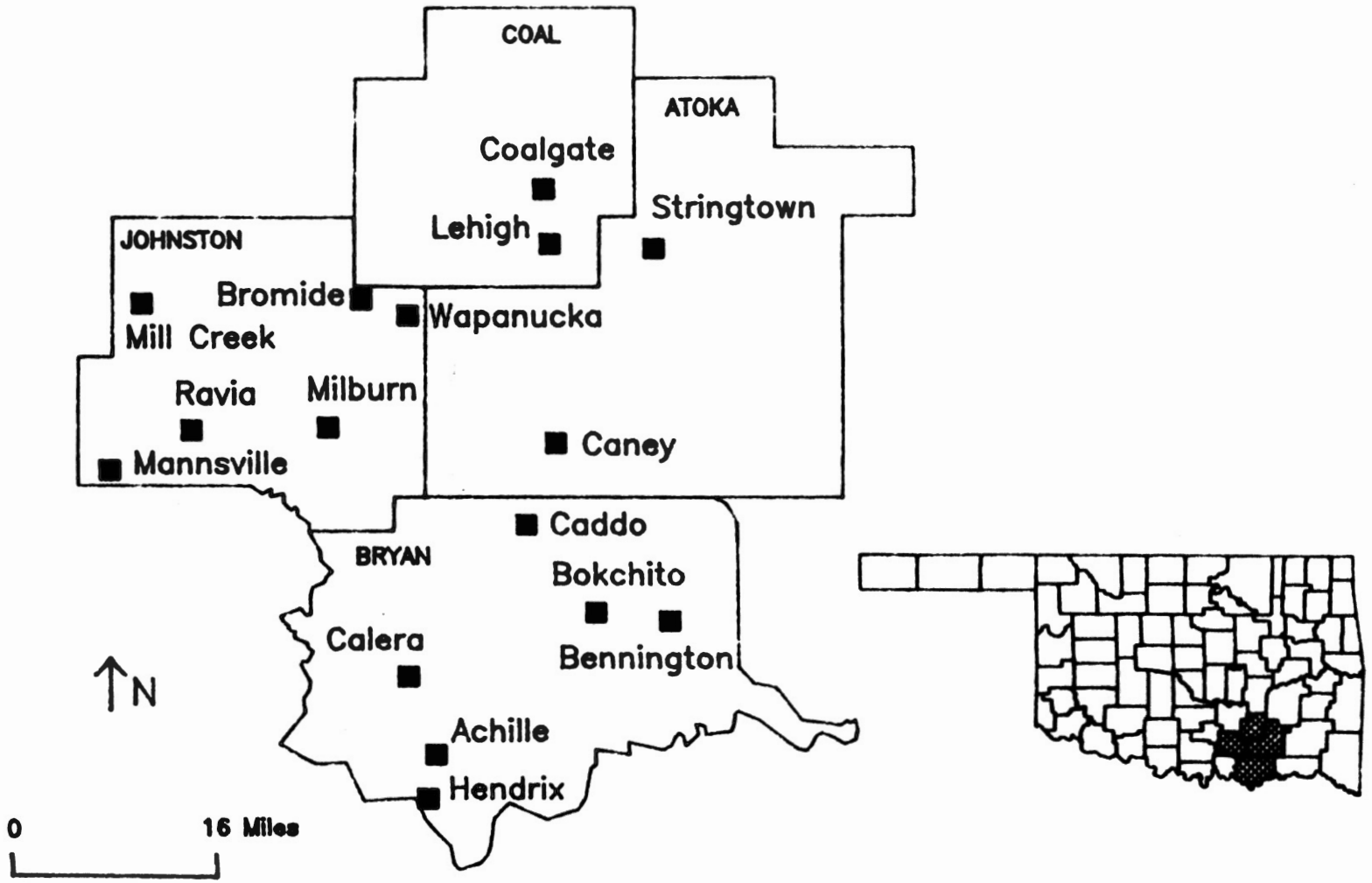

Figure 2. Sixteen Study Towns

agriculture and the depletion of oil and coal reserves in many areas of the state. The 1920 census shows a peak in population for many towns in Oklahoma with a decrease in population for many of them until 1960 when a general increase occurred again. Transportation changes were also a major factor in changing these areas because of improvements in road construction, accessibility to highways, and the increasing number of automobiles.

The year 1960 was chosen for data collection because it marked a new trend in population and economic opportunities. Thereafter, population increased in most of the towns in the study area and agriculture changed from crop production to ranching which created larger farms that were owned by full-time farmers instead of tenants. Transportation also changed with the first four-lane highways being built after 1960. Therefore, the opportunity exists to examine how changes in farm structure and transportation have affected the functional basis of these trade centers. Finally, 1990 was chosen as a terminus year to allow the incorporation of fieldwork into the study and the exploration of these small towns to evaluate first hand how the functional basis of these small towns has changed. Fieldwork also shows what the purpose of these towns is today, how the citizens are dealing with the changes in their town, and how the changes have affected small town life.

Data Collection

The functional basis of these communities are examined by collecting data on the number and types of retail and service functions these rural settlements offered in 1930, 1960, and 1990. This provides a good idea of how the number of functions have changed over time, and helps determine which economic, demographic, and technological variables are responsible for this change.

The Bradstreets Book of Commercial Ratings (1930), the Dun and Bradstreets Book of Commercial Ratings for 1960 and 1990, and the 1990 Southwestern Bell Telephone Books were used to compile a list of functions and how many of each function were in the sixteen villages of the study area. Dun and Bradstreet list each business by its owner's name and what function or functions the business includes. Therefore, it is easy to compile a list of functions that were offered by at least one business establishment in 1930, 1960, and 1990. The 1990 telephone books were used because the 1990 Dun and Bradstreet issue did not list every business. These businesses were considered unviable as firms, banks, credit agencies, and insurance agencies were not concerned about a credit transaction or the credit rating of these particular businesses (Johansen and Fuguitt 1984). Therefore, telephone books had to be used to obtain an accurate listing of the businesses and functions in these small towns. The 1960 telephone books were not used because when their listings were compared to the Dun and Bradstreet

listings, Dun and Bradstreet had similar business listings.

A total of sixty-eight functions were compiled from these listings and are included in the study. These functions include retail, service, light-industrial, and agricultural processing functions which may relate to changes in the rural economy and transportation systems of the study area. Some functions were deleted because they were not listed by Dun and Bradstreet such as railroad depots, barber shops, beauty shops, insurance agencies, and realty agencies. Other functions were included with a more common counterpart.

After data on the number and types of functions were gathered, the next stage in the data collection process was to sample four trade centers from specific size categories (50-249, 250-499, 500-999, and 1,000 to 2,500 as defined by the 1980 United States Census of Population). These towns include Bromide, Wapanucka, Caddo, and Calera (Figure 2). The four trade centers were field checked by using 1920 Sanborn Fire Insurance Maps, one of the best methods of determining how the distribution of businesses, the types of businesses, and the built environment have changed over time. Selection of these towns was based on the following criteria: all were incorporated in both 1920 and 1990, a 500 person difference existed in their populations, and Sanborn Fire Insurance Maps were available for all four towns for either 1920 or as close to that date as possible (Calera and Wapanucka 1918, Bromide 1919, and Caddo 1920). The Sanborn

Maps were used because detailed maps showing the distribution of the functions and construction styles of the buildings were not available for any of the trade centers after 1920. In addition, the maps provided historical information on the distribution of businesses and allowed an easy comparison with the present day distribution of businesses.

Data on the current distribution of functions and types of functions were gathered by observation and personal interviews. Observation involved walking through the business streets and recording or mapping the number of buildings currently operating as businesses, their functions , which buildings are abandoned, what type of functions they once supported, and how the town is currently laid out in terms of distribution of functions and street patterns. The built environment is also examined to see what building construction materials or building heights are common in the trade centers at the present time. This data on the present distribution of functions and the built environment were compared with the 1920 Sanborn maps to evaluate how the distribution of functions and the built environment have changed over time. Personal interviews were conducted with merchants, residents, and government officials to gather such information as how long the current functions have been operating, how long abandoned businesses have been abandoned, information about the churches, schools, and other social functions of the town, and how

they view the changes in rural America and the effects these changes have had on the particular small town.

Data for the historic chapter on the historical settlement patterns of the area and the appearance and disappearance of towns were collected from George Shirk's Oklahoma Place Names (1974), which lists all the post offices and historic towns ever founded in Oklahoma and what years they appeared and disappeared. Data on the railroads, the overland mail route, and famous cattle trails were gathered from county histories, Bray's (1923) thesis on railroads, and Railroads in Oklahoma published by the Oklahoma Department of Transportation (1978) which reveals mileage of railroads and the particular stations they were developed through.

Proposed Variables

A variety of variables may have had an effect on the number of functions as well as the built environment. Among these are **agricultural-related variables,** including changes in agricultural land utilization of the surrounding area (measured by changes in acreage and production such as bales of cotton, bushels of wheat), changes in the number of farms per county, average farm acreage, farm tenancy, and changes in livestock production. **Demographic variables** include percent change in the population of the settlements, population size of the community, and changes in the farm population by county. Since the farm population, listed by

the Census of Population, is incomparable for 1930, 1960, and 1990, due to different ways of defining the data, the farm population will be figured by subtracting the population of all the incorporated places from the county population to get the "population outside of incorporated places," which was found to be more accurate than using the farm population as reported by the Census. **Technological variables** include access to and changing patterns of highways and railroads (measured in actual railroad and highway mileage), and changes in the number of automobiles, tractors, and trucks. **Location variables** include the road distance from cities of over 2,500 in population, and proximity to other centers of similar or greater size. All these variables should have a positive relationship with the number of functions in the rural trade centers, except average farm size which would be expected to have a negative relationship. Data on the demographic variables were gathered from the 1930, 1960, and 1980 Census of Population and data on the agricultural variables were gathered from the 1930 Census of population and the 1959 and 1987 Census of Agriculture. Information on the changing transportation networks (roads and railroads), distance from urban centers, and the number of motor vehicles by county were gathered from the 1930, 1960, and 1989 Department of Transportation road maps, from the 1930, 1960, and 1987 Reports of the Highway Department, from the 1960 and 1989 Reports the Oklahoma Tax Commission, from "Oklahoma Railroads" published

by the Department of Transportation (1978), and from Hofsommer's (1977) book on Oklahoma Railroads.

Methodology

The examination of change in the settlement structure, the functional basis, and the built environment of the rural trade centers consists of four stages.

Stage One

The first stage involves a broad analysis of how the number of settlements, types of functions, economy, and transportation system have changed between 1830 and 1929. This portrays which towns appeared, which disappeared, and what types of towns they were, such as railroad towns, inland towns, incorporated towns, or unincorporated towns. This also reveals, in great detail, the evolution of the settlement system and how the number of towns and types of functions have developed until 1930 due to the changing economy and transportation systems.

Trade centers are mapped as railroad towns or inland towns along with the transportation systems for four time periods (1830-1869, 1870-1899, 1900-1910, and 1911-1929) which correspond to the period of Indian settlement and to the different periods of railroad development. Between 1830 and 1869 the Five Civilized Tribes were moved to Oklahoma and trade centers were developed to supply them with goods and services. The distribution of incorporated and

unincorporated railroad or inland towns were also mapped for 1870, 1900, 1911, and 1930 to discern which type of town has survived due to changes in transportation and agriculture. Changes in agriculture, gathered from county histories, old history books, the 1910 and 1920 Census of Population, and the 1925 Census of Agriculture, ascertain how changes in agriculture have affected the number of trade centers and types of functions in the study area. The rural free delivery mail system is also discussed to determine how it affected the viability of the different types of towns.

Stage Two

The second stage of the project analyzes how the number of functions in sixteen incorporated rural trade centers of the study area have changed between 1930, 1960, and 1990 due to changes in population and population size of the sixteen towns and their distance from urban centers. The data on the number of functions are mapped to obtain a spatial overview of how the number of functions have changed in the trade centers over time. The site of each settlement is placed on a base map of the study area and each settlement is represented by a graduated circle which depicts either a decrease or an increase in the number of functions. Two maps illustrate changes in the total number of functions from 1930 to 1960 and from 1960 to 1990 and three maps show the number of functions per trade center in 1930, 1960, and 1990. Tables serve as a key to the maps and portray the

actual number of functions and percent change in the number of functions.

The number of functions and change in the number of functions are compared to the population size of these sixteen centers, changes in actual population of these trade centers, and their distance from urban places to see if the results found by Johansen and Fuguitt (1973) apply to Oklahoma and to determine which of these variables have a positive or negative relationship with the number of functions in these small towns. However, the strength of the relationship could not be determined using correlation because there were not enough observations to make the correlation statistically significant. Therefore, maps and tables are used to compare the relationships between the number of functions and the following variables.

Population size of the sixteen trade centers are mapped for 1930, 1960, and 1980 and percent change in the population of each trade center is mapped from 1930 to 1960 and 1960 to 1990. Maps also depict how the road or railroad distance from each trade center to the nearest urban center has changed over time. Tables display the actual population of each town, percent change in the population of each town, and how the actual distance has changed by showing percent change in the road mileage between each trade center and the nearest urban center. However, in 1930 all sixteen trade centers were not connected by a mapped road to an urban center, therefore, the distance is

determined by measuring the railroad distance from the trade center to the nearest urban center.

Stage Three

The third stage analyzes how the types of functions have changed due to changes in the farm structure, land utilization patterns, mileage of paved highways or interstates, and the number of motor vehicles registered by county. However, the strength of a positive or negative relationship between the types of functions and the above variables could not be tested using correlation because the independent variables were reported only by county instead of by trade center and because there were not enough observations to do a correlation analysis. Therefore, no statistical techniques are used; rather a descriptive technique is used to analyze the relationship between these variables.

The types of functions are listed in tables by the total number of each function in the sixteen trade centers for 1930, 1960, and 1990. New functions that appeared over each time period are listed with a "NF" symbol in the charts. Disappearing functions are represented by a 100 percent decrease in their total number over each time period. Percent change in the number of each function is calculated from 1930 to 1960 and from 1960 to 1990 to demonstrate how each function has changed over time. Percent change in the farm structure, land-utilization

patterns, mileage of highways, and number of motor vehicles are also calculated to depict which functions appeared or disappeared as the farm structure, land utilization, and transportation systems changed over time. The calculations for percent change in the above variables and the actual raw numbers are given in tables by county. They are not mapped because accurate categories could not be found to display a meaningful distribution to make the maps comparable. However, maps of the transportation networks exhibit a spatial image of how the railroads and types of roads have changed between 1930 and 1960 or 1960 and 1990, and which trade centers were affected by these changes.

The Final Stage

The final stage of the study focuses on how the types of functions, the distribution of functions, and the built environment of four of these trade centers has changed between 1920 and 1990 by comparing 1920 Sanborn Fire Insurance Maps with 1990 field data. The distribution of functions in each town is described by using three different categorizations including main street functions, side street functions, and railroad functions. Main street functions are defined as any function within one block of the main intersection of the primary roads in each trade center. The primary roads usually include the two streets with the most business development along them. Main street functions are located on either side of these primary streets and within

one block of the intersection of them. Side street functions are located on streets outside of the one-block radius or were functions located on the main street blocks but not along the primary roads. Railroad functions are located directly on either side of the railroad or within half a block of the railroad. The railroad is located on the edge of all four towns and is more than a block away from the main street businesses. Consequently, no main street businesses qualify as railroad businesses. The types of functions in each of the four trade centers were classified into one of these categories and changes in the distribution of these types are analyzed for 1920 and 1990 and are compared to the changing population size of the trade centers, the changing transportation structure, and the changing economy to establish which variables may have affected the distribution of functions in these four towns.

The construction materials of the buildings in these four trade centers are also studied to discern which functions were located in brick, stone, frame, or tin constructed buildings and in one, two, or three story buildings. This reveals which functions were more popular, which functions were primary activities, and which were considered secondary activities by the surrounding population because primary activities are usually located in brick two-story buildings. It will also explain how population size and the distribution of functions relate to the types of functions. Often, larger towns have more two-

story brick buildings distributed on main street while smaller towns have a mixture of constructions styles distributed on main street. This suggests that primary functions are on main street in larger towns. and a mixture of primary and secondary functions are located on main street in smaller towns. Therefore, the construction materials of the buildings, and where these functions are located, usually determines if they are a primary or secondary activity (Bailey 1982).

As a case study, and to show a representative view of how the four trade centers have changed over time, Wapanucka is mapped to show how the distribution of functions, the construction styles of the buildings, and the height of the buildings have changed over time. Wapanucka was chosen because the distribution of businesses in Calera and Bromide changed too dramatically and because neither town has its original commercial district. The commercial district in Caddo changed very little because most of the functions were still located in the brick buildings downtown, but Wapanucka changed moderately because it still retains most of its original commercial district or side street district. However, most of the original buildings were abandoned and new buildings were constructed containing different types of functions and a new purpose that characterized all four of these rural trade centers.

Remaining Thesis Organization

A review of all relevant literature on change in the functional base and structure of any type of settlement is included in Chapter II. Chapter III is a discussion of the settlement history of the study area before 1930. Chapter IV describes how the number of functions in the sixteen rural trade centers of the study area have changed from 1930 to 1960 and from 1960 to 1990. It also analyzes the relationship between functional change and percent change in the population, change in population size, and changes in distance from urban places (Johansen and Fuguitt 1973). Chapter V describes how the types of functions in the sixteen trade centers have changed between 1930 and 1960 or 1960 and 1990 in relationship to changes in land utilization, farm structure, changing patterns of highways and railroads, and changing number of registered automobiles as analyzed by Olson (1951). Chapter VI discusses the field work and includes an inept look at how four rural trade centers, each in different population categories, have changed over time in their commercial landscape, which includes the distribution of functions and their built environment. Chapter VII is a summary and comparison of the previous four chapters, discusses proposals made in the first chapter, and compares functional changes in Oklahoma small towns with other studies to see how functional development varies across the nation and what variables have caused these changes in the functional basis of small towns.

CHAPTER II

LITERATURE REVIEW

Introduction

Researchers have examined a multiplicity of subjects relating to the American small town. Jakle (1982) provided a good overview of the kinds of topics that have been studied. He emphasized population change, the cultural landscape, the social structure of the small town, and how the functional basis of small towns has changed over time.

Hudson (1985) wrote about the development of two different types of towns on the Great Plains. His research examined inland towns and railroad towns, town building, town functions, town merchants, and social relations within those towns. He also covered what type of towns survived and those that did not because of railroad building and the economy. Johansen and Fuguitt (1984) conducted a study of very small towns or villages on a national scale in an effort to reveal patterns and processes among places throughout the country and to examine the structural changes that occurred during the post-1950 period.

Bailey (1982) wrote about the four stages of main street development and how towns are categorized based on the number, structure, spacing, and types of functions along

their main streets. This study incorporates two of Jakle's four themes including changes in the functional basis of small towns and changes in the cultural landscape, or, more specifically, the commercial landscape which includes the distribution of businesses and the built environment.

Most of the studies related to change in the functional basis of small towns can be classified into seven different subject areas: categorization of places into the central place hierarchy based on their number of functions; how distance from larger cities affects the functions of small places; how change in retail and commercial functions relate to change in the social structure of the community; how changes in the transportation network have affected the number of functions and establishments in a community; how changes in land use and farm economics affect functions of small towns; the problem of changing functional patterns over time in places under 2,500 in population as related to demographics; and the final group focuses on how the built environment has changed due to changes in the economy and demographic structure of the rural trade center.

Central Place Studies

Central place theory has been a common method used by many authors to categorize cities into various levels based on their population and on how many functions or establishments are in each settlement. Walter Christaller (1933) was the originator of central place theory, which he

formulated in a study on places in southern Germany. The study concluded that places with more functions and larger populations were spaced farther apart then places with a small number of functions and smaller populations. Also, there were many small service centers which supplied goods and services to their agricultural hinterlands. As the towns became larger, or progressed up the central place hierarchy, they had more functions and served a larger hinterland. The regional center was classified as the largest center and had every function the lower order places offered. It also served as the capital of the region and offered many governmental functions not found in smaller centers. There was only one of these centers in the region with more centers being classified in each category as the central place hierarchy continued (Christaller 1933 or Baskin 1966).

Many authors have applied these findings to areas in the United States to evaluate if central place theory applies to other regions. Odell (1937) used central place theory to categorize villages in the Cornbelt where he gained a perspective as to the functional roles and patterns of central places in an area similar to southern Germany. In a similar study, Hassinger (1957a) attempted to make a classification of rural trade centers in Minnesota according to complexity of types of retail services. Studies have also concentrated on smaller regions (counties) such as Berry and Garrison's (1958) study on Snohomish County,

Washington, where they classified towns into categories based on the number of functions and the population of those centers. Some studies focused on classifying towns into hamlets, villages, towns, cities, and regional capitals based on their number of functions and population (Brush 1953). Fuguitt (1985) used Brush's study to analyze the relationship between the size of towns and their structure and growth from 1900 to 1980. Other studies on functional categorization of places include Ullman (1941), Harris (1943), Brush and Bracey (1955), Nelson (1955), Stafford (1963), Thomson and Yeates (1966), Fuguitt and Deeley (1966), Gibson, Lay and Keeves (1974), and Berry and Parr (1988).

Relationship Between Retail Trade and Distance from Urban Areas

The relationship between the number of functions in a town and the distance to the nearest largest city or nearest competing city has been completed by Hassinger (1957b) who studied the relationship between the number of functions in places below 2,000 in population in southern Minnesota, the population size of each community, and the distance from centers of larger population. In a similar study, Riffe (1967) analyzed the interrelationships between trade structure characteristics, population, and distance from large centers of Illinois villages. Other authors such as Hart and Salisbury (1968) completed studies on dying

villages and how distance from urban centers plays a role in the viability of those centers, which relates to a study completed by Lewis (1972) on how a town lost many of its functions due to its location next to a college town. Finally, Wallach (1987) wrote about Tribune, Kansas, and how it developed into the focus of the county because other small towns could not compete with it once it became the county seat and dominant railroad center.

Relationship between Retail Trade and the Social Structure

Many researchers have also completed studies on how a decrease in retail and commercial activities in small towns results in an increase in the importance of social functions in those communities. McGranahan (1980) examined towns between 200 and 7,500 in Wisconsin and discovered that smaller towns had an increase in social functions including churches and taverns as the number of retail functions decreased. Allen (1968) examined places between 5,000 and 10,000 and how the number of cultural functions, such as theaters and recreational activities, has changed in these centers due to the decrease of them in smaller centers. Stafford (1963) also observed that churches and taverns were common in small Illinois villages and an absence of many common retail and commercial functions existed. Finally, Jakle (1982) commented that schools and churches have become the most important functions of many communities and that

they employ the most people in the community.

Relationship between Retail Trade and Transportation

Researchers have written about how the functions and population are affected by changes in the transportation networks of an area because changes in transportation, mass communication, and education have lowered the barriers between many small towns and the rest of the world (Stephenson 1968). Several studies have been completed on railroads because communities were once dependent on the railroad for movement of farm products, people, mail, or other goods from place to place. Communities bypassed by the railroad were abandoned because access to a railroad was important, especially at the turn of the century when automobiles were not in use (Hudson 1985). Community functions such as railroad depots, grocery stores, blacksmith shops, banks, post offices, feed mills, creameries, and cotton gins were in every town at this time to allow for easy access by the farmer who did not have easy methods of transporting his products to market (Hudson 1985). Grant (1982) wrote about Iowa's communities and town site promotion along the Chicago Western Railway. He focused mainly on how towns were developed and platted along the railway and how other towns decreased in importance because the railroad bypassed them. Hofsommer (1974) focused on town site development along Oklahoma's Beaver,

Meade, and Englewood Railroad and Harvey (1983) focused on town development along various railroads in the Red River Valley of Minnesota.

Between 1920 and 1950 transportation changed drastically with the advent of the automobile, paved highways, and an increase in the number of tractors to haul grain to market. As larger towns became more accessible to the rural farmer many functions became obsolete in the rural trade center because the larger places offered more functions at a central location (Jakle 1982). Morris (1965) studied Pearson, Oklahoma, and the effect of state highway number 18 on its economy and function. Stephenson (1968) claimed that better roads and more cars have made possible such new patterns as commuting to work, frequent changes of residence, school consolidation, more frequent visiting among members of different communities and areas, larger and more frequent deliveries of products to local grocers, and more use of services outside the community. Railroads were abandoned because it was easier to truck products to market. Villages also lost their post office due to the advent of rural free delivery which delivered mail to much of the rural population (Jakle 1982). Gas stations and auto-repair shops replaced the railroad depot and blacksmith shop in many communities as changes in the transportation network took place (Olson 1951, Lewis 1973, Johansen and Fuguitt 1973, Francaviglia 1975, Jakle 1982, Wallach 1987, and Wallach 1988).

Relationship between Retail Trade and the Economy

Changes in land use and farm structure have also been documented by some authors because changes in the agricultural sector of the economy has an effect on the functions of the rural trade center. For instance, the change from cotton to other types of crops made cotton gins and cotton mills obsolete, but brought in such functions as peanut sheds and grain elevators to many towns in Oklahoma, Texas and the Southeast (Olson 1951, and Prunty and Aiken 1972).

The depression of the 1930s hit the agricultural sector hard and caused farm prices to change drastically which forced many banks to close. In the 1940s and 1950s technological advances caused farms to consolidate which meant less people were needed to tend the land. This caused a decrease in the number of businesses in town because the town was unable to support more than two grocery stores, banks, or any other business; the demand for many goods and services decreased as the rural population decreased. (Olson 1951, Thomas 1960, Hudson 1985, and Wallach 1987).

Towns have also changed their role as the agricultural economy has changed. For instance, Davidson (1990) concluded that many rural service centers in Texas were changing from their dominant role as agricultural communities to recreation or retirement communities. Hunt

(1974) also recognized the same trend taking place in Garvin County, Oklahoma, as towns such as Wallville and Antioch shifted their functional basis from a structure mainly oriented towards agriculture to a more social oriented structure because of the decline in agriculture and the increase in migration of the older generation to the small towns of the area. Sauer (1962) wrote about homesteads and communities on the Middle Border or in the central United States and how their role or function has changed. He also compared their role to village roles in New England and the United Kingdom and finds remarkable differences.

The mineral and oil industries have also had a effect on small towns. For instance, Morris (1965) examined how Earlsboro, Oklahoma, went from a boom town to a complete bust as a result of the oil economy and Coling (1966) investigated how Coalgate, Oklahoma, developed around its coal mining industry and how it was affected by the coal mining bust of the 1920s.

Relationship between Retail Trade and Demographics

Many studies have been completed on the relationship between functional patterns, population size of the community, and population change in an historical context in places under 2,500 in population. Landis (1933, 1938) completed two studies on trade centers in South Dakota and Washington and how changes in the population have affected

the number of establishments in a sample of rural trade centers. Chittick (1955) extended Landis's study on South Dakota trade centers by two more decades and found that population was again a big factor in changing the number of functions offered by rural settlements.

Some other studies concentrated on the functional basis of small towns including Thomas (1960) who studied change in the number of establishments, functions, and functional units of a sample of rural trade centers in Iowa to see if population change in, and population size of, those communities affected these three indices. Stafford (1963) applied the same study to a sample of Illinois villages and concluded that population change and population size of a rural settlement was significantly related to the change in the functional basis of those trade centers which were the same results as what Thomas found in Iowa.

Johansen and Fuguitt (1973) examined how the number of functions has changed in a sample of Wisconsin villages from 1939 to 1954 to 1970 and correlated the changes with population size of the community, population change, and distance from places of either less than, or more than, 25,000 in population. They verified that the closer communities had the same number of functions as a town of similar size and more distant from the larger city.

Jenkins (1940) wrote about the growth and decline of agricultural villages and how population size of the community, the age structure, and the decline of one

particular crop (cotton) has effected the number of retail establishments and the population in these rural towns. Other studies on the functional basis of small towns included Zimmerman (1930), Smith (1933), Hoffer (1951), Olson (1951), Anderson and Miller (1953), Barcley (1962), Hodge (1966), Riffe (1967), Folse and Riffe (1969), and Johansen (1981).

Relationship between the Built Environment and the Economic and Demographic Structure of Rural Areas

Finally, how changes in the economy and demographic structure affect the built environment has been studied especially by Lewis, Jackson, Francaviglia, and Bailey.

Lewis (1972) wrote about Bellefonte, Pennsylvania, and the different stages in the development of its built environment. He claimed that by looking at a town's architecture one could spot times of crisis and times of prosperity. Changes in the town's economy and demographic structure resulted in changes in the style and function of the buildings. Lewis followed the development of Bellefonte through three main periods, which were characterized by different economies and different styles of architecture adorning main street.

These periods were the agricultural period consisting of Georgian architectural styles, the industrial period

consisting of Gothic or Victorian types of architecture, and the modern period where the Georgian and Gothic architecture was changed by the addition of false fronts and smaller buildings of shoddy construction. Two periods of economic downfall affected Bellefonte including the loss of its iron industry to a better market (Pittsburgh) and the development of an university just to the north of Bellefonte at State College.

Lewis claimed that Bellefonte never lost its importance as an agricultural center but through the years other types of economy changed the agrarian look of Bellefonte. Then, as these downfalls happened, Bellefonte's built environment changed from the rich Victorian-like architecture to the shoddy architecture of modern day small towns. This is how the built environment represents times of prosperity and times of crisis.

Jackson (1952) wrote about the "Almost Perfect Town" and how its built environment evolved around the central courthouse square. This courthouse square hindered the development of Optimo City's main street because it was divided into four separate districts each leading a different direction from the court house square. This caused retail services and chain store to locate their business on the outskirts of town where real estate values were lower and where parking was not a problem.

Jackson found that main street businesses were located on either side of the residential areas and that no real

main street had developed. Therefore, Optimo City was platted completely different from many other small towns because it had four different commercial districts. In other small towns the business district is together on either one main street or two main streets running in different directions. This arrangement does not hinder people from accessing main street businesses because people are not forced to go around a central square. Besides the arrangement of the commercial and residential districts, the built environment was the same as other towns the same size as Optimo City. Many of the buildings had two stories, were of brick or stone construction, and were spaced close together on their blocks. Francaviglia (1975) presented an historical overview of a town called Iota and how the cultural landscape, or built environment, changed over time due to alterations in the economy and transportation. A similar study by Wallach (1988) described the town of Wannette, Oklahoma, and how changing land use patterns and access to transportation have changed the built environment and retail structure of this small southern town.

Morris (1961) studied how the physical environment and the economy of the High Plains influenced the cultural landscape and built environment of Texhoma, Oklahoma. Rees (1969) studied railroad development in Saskatchewan and how the cultural landscape of many small towns was modified by the advent of the railroad. Coling (1967) manifested how house types indicated several factors regarding the cultural

landscape and rural settlement patterns in the vicinity of Coalgate, Oklahoma.

Finally, Bailey (1982) integrated all the above factors into a study of a region and its towns in northeastern Oregon. She studied the main streets of several towns and how they have changed through time due to changing economic and technological factors. First, she identified two different types of towns: pioneer towns and hinterland towns.

Pioneer towns were founded to satisfy one of two principal needs, either to service travelers or to supply local residents earning a living from the area's exploitable resources. The first type of pioneer town was platted along a main road and was slow to grow but the second type of town supported a dense population, had a certain function (mining) and was often unplatted.

Hinterland towns developed later than pioneer towns with the primary purpose of serving the rural population surrounding them. These were established in remote parts of the countryside on roads that carried only local traffic and their plats were smaller with local businesses such as the general store, blacksmith shop, feed mill, and post office. The railroad played a big role in both pioneer and hinterland towns, but was often short-lived in the hinterland towns because they were founded in areas with too few people and an undeveloped economy. Consequently, 21 out of 27 hinterland towns failed to prosper compared to 9 out

of 24 pioneer towns because they did not have the resources needed to compete with the more prosperous pioneer towns. The pioneer towns were developed earlier by more successful railroad companies and were also developed around mining operations or more prosperous agricultural areas.

Bailey also discussed about the growth of towns and how their main streets or types of functions, distribution of functions, and the built environment progress through four stages of development. The stages of development depended on what type of construction the buildings were, how many stories the buildings were, how many buildings there were per block, and what type of functions these establishments served. For example, stage one main streets were made up of widely separated one story frame buildings compared to stage four main streets which included numerous two story brick buildings that completely filled their lots. Therefore, by using Sanborn maps, Bailey categorized each main street in her study area (towns under 5,000 population) and used current plat maps to see how these towns developed their main streets through time as well as how the types of businesses have changed through time.

Conclusion

Of the sources reviewed, this study follows the methods of Olson (1951) and Johansen and Fuguitt (1973). It examines how changes in the number and types of functions in sixteen rural trade centers are related to changes in

agricultural land use, changing farm structure, changes in population of those settlements, population size of the settlements, transportation, and the economy. The study also incorporates the ideas of Bailey (1982) to see how the commercial landscape, or the distribution of functions, the building construction materials, and building heights, of four rural trade centers (in different size categories) have changed through time.

CHAPTER III

HISTORICAL SETTLEMENT PATTERNS FROM 1830-1929

Introduction

This chapter explains the historical development of the settlement system of Johnston, Atoka, Coal, and Bryan counties between 1830 and 1929. Two different types of settlements are examined including railroad towns and the inland towns. The railroad towns were the main market communities from which the commodities of the surrounding hinterland were shipped to larger markets (Hudson 1985). Goods and supplies were also shipped to these market towns and were transported by local suppliers to the surrounding inland towns (Green 1977).

The inland towns were smaller market centers developed away from the railroad. They were primarily providers of goods and services to the surrounding population and had very little market importance (Hudson 1985). These two different types of towns developed during four different time periods. Each time period had different factors that played a role in determining the viability of these two different types of towns.

The time periods include Indian occupation and the

development of agriculture, the development of the first railroad, extension of the railroad system, and the development of the first roads along with the first automobiles. Each period is considered separately with descriptions of the development of towns in the study area between 1830 and 1930 and what factors played a role in their viability. The development of incorporated and unincorporated towns is also discussed to see how changes in transportation and the economy have affected their distribution and viability through each time period.

Indian Occupation and Development of Agriculture: 1830-1869

The Quapaw Indians were the first known inhabitants of what is now Atoka, Bryan, Coal, and Johnston counties. The Quapaw's ceded all their land between the Red and Canadian rivers to the United States in 1818. In 1820, the Choctaw Indians claimed the former Quapaw lands through the treaty of Doak's Stand (Harlow 1949), but they were not forced to move to Oklahoma until the United States government passed the Indian Removal Acts of 1830 which created the Indian Territory and forced the Five Civilized Tribes to move to Oklahoma (Thoburn 1914).

In 1830, the first official Indian removal treaty was made at Dancing Rabbit Creek, Mississippi, between the Choctaws and the United States giving the Choctaws the land ceded to them in 1820 (McReynolds 1964). In 1834, the

Chickasaws signed the Treaty of Pontotoc Creek when they agreed to move to Indian Territory. However, the Chickasaws did not find suitable lands in this new territory and, therefore, were reluctant to resettle in these foreign lands. In 1837, the Treaty of Doaksville was signed between the Chickasaws and the Choctaws. This agreement gave the Chickasaws the western half of the Choctaw Nation, but the Chickasaws had to live under Choctaw laws and had to become Choctaw citizens (McReynolds 1964). Finally, in 1855 the Chickasaws gained independence from the Choctaws and the Chickasaw Nation was formed including present day Johnston County and southwestern Bryan County. In 1855, the Chickasaw Nation was divided into four counties including Panola, Pickens, Tishomingo, and Pontotoc with Tishomingo as the Chickasaw capital. The Choctaw Nation included Atoka County, Coal County, and central and eastern Bryan County. In 1860, the Choctaw Nation was divided into three districts and 17 counties with the capital at Armstrong Academy, located in present day Bryan County (Underwood 1931).

The Choctaws and Chickasaws were avid agriculturalists raising wheat, corn, and livestock in the north and cotton in the south. One chief of the Chickasaws reportedly produced one hundred bales of cotton in 1840 (Harlow 1949). The Indians leased some of their land to white settlers for cultivation while they turned from agricultural pursuits to herding. In 1862, cattle driving became one of the frontier's major industries. Between 1867 and 1875 the

great northern drives took place passing through Bryan, Johnston, Coal, and Atoka counties (Rice 1932).

The Indians quickly developed market centers to trade their crops of cotton and corn for supplies and groceries. The most active trade centers were Fort Washita, Boggy Depot, Armstrong Academy, Pontotoc, Colbert, Tishomingo, and Atoka (Table I or Figure 3). All these towns developed as inland towns which meant they did not have access to any major means of transportation, such as the railroad. Colbert, however, had its foothold on the Red River which was the primary artery for transporting cotton to markets in North Texas (Rice 1932). The four main centers of this time period were Fort Washita, Boggy Depot, Colbert, Tishomingo, and Atoka.

Fort Washita was established in 1844 to protect the Chickasaw Indians from western tribes and soon it became the first post office and a major market center for the distribution of goods to the settlers (Bryan County History 1983). Boggy Depot was established by Captain G.P. Kinsbury in 1838 as the headquarters for the Chickasaw Indians and as a distribution point for goods for both the Chickasaw and Choctaw Nations. In 1849, the town became an official post office and the Chickasaw Council House was built there. By the mid-1850s there were some thirty major stores and residences in Boggy Depot including the first newspaper office in Indian Territory, a hotel, four stores,

TABLE I

TOWN DEVELOPMENT BETWEEN 1830 and 1929

Town	Year Developed Inland P.O.	Year Developed RR P.O.	Year Became RR P.O.	Year Post Office was Closed	County
Ft. Washita	1844			1880	Bryan
Boggy Depot	1849			1969	Atoka
Armstrong Acad.	1850			1869	Bryan
Colbert	1853		1872		Bryan
Tishomingo	1859		1902		Johnston
Pontotoc	1858				Johnston
Atoka	1868		1872		Atoka
Carriage Point	1869			1871	Bryan
Gearys Station	1858			1861	Atoka
Waddells Stat.	1858			1861	Atoka
Nails Crossing	1858			1861	Bryan
Caddo		1872			Bryan
Colbert Stat.	1873			1881	Bryan
Bennington	1873		1902		Bryan
Blue	1874		1902		Bryan
Stringtown		1874			Atoka
Limestone Gap		1875		1922	Atoka
Mill Creek	1879		1901		Johnston
Ittitatah	1881			1883	Bryan
Durant		1882			Bryan
Lehigh		1882			Coal
Annette	1882			1889	Coal
Armstrong	1882			1883	Bryan
Yarnaby	1883			1957	Bryan
Wapanucka	1883		1901		Johnston
Emet	1884			1917	Johnston
Etna	1884			1897	Atoka
Gertrude	1886			1887	Atoka
Caney		1888			Atoka
Mannsville	1888		1902		Johnston
Kenefick	1888		1902		Bryan
Bee	1889			1918	Johnston
Byrne	1889			1906	Coal
Coalgate		1889			Coal
Calera		1889			Bryan
Viola	1890			1910	Johnston
Kemp	1890				Bryan
Wade	1890			1971	Bryan
Thomas	1890			1891	Johnston
Chickie Chockie	1891			1905	Atoka
Centrahoma	1892		1902		Coal
Tuklo	1892			1895	Bryan
Philipps		1892		1927	Coal
Earl	1893			1908	Johnston

TABLE I (continued)

Town	Year Developed Inland P.O.	Year Developed RR P.O.	Year Became RR P.O.	Year Post Office was Closed	County
Silo	1893			1946	Bryan
Reagan	1894			1931	Johnston
Utica	1894				Bryan
Jackson	1894			1920	Bryan
Roberta	1894			1930	Bryan
Ravia	1894		1901		Johnston
Mead	1894		1902		Bryan
Norton	1894			1912	Johnston
Tupelo	1894		1902		Coal
Albany	1894				Bryan
Bokchito	1894		1902		Bryan
Russett	1894		1902	1924	Johnston
Coleman	1895		1902		Johnston
Red Lake	1895			1897	Bryan
Reynolds	1895		1902	1909	Atoka
Sylvan	1895			1905	Johnston
Folsom	1895		1902	1955	Johnston
Belton	1895			1915	Johnston
Nida	1895			1915	Johnston
Armstrong	1896		1902	1920	Bryan
Nixon	1896		1902	1911	Coal
Alahambra	1896			1904	Johnston
Legal	1896			1918	Coal
Hunton (Kite)	1896			1912	Coal
Globe	1896			1912	Coal
Robbersroost	1897			1909	Bryan
Connersville	1897				Johnston
Troy	1897		1901	1954	Johnston
Pauncaunla	1897			1910	Bryan
Oberlin	1897			1937	Bryan
Oconee	1897			1907	Coal
Academy	1898			1920	Bryan
Platter	1898		1902		Bryan
Yuba	1898			1932	Bryan
Lester	1899			1910	Johnston
Milburn		1900			Johnston
Pine	1900			1912	Coal
Cope	1900			1913	Johnston
Greenwood	1901			1906	Johnston
Allison		1901		1921	Bryan
Calloway	1901			1911	Atoka
Truax	1901			1908	Johnston
Matoy	1901			1921	Bryan
Banty	1901			1949	Bryan
Adams	1901			1910	Bryan
Olney		1901			Coal

TABLE I (continued)

Town	Year Developed Inland P.O.	Year Developed RR P.O.	Year Became RR P.O.	Year Post Office Disappered	County
Randolph		1901		1919	Johnston
Clarita		1902			Coal
Midway	1902			1911	Coal
Allepo	1902			1903	Bryan
Wardville		1902			Atoka
Adelia	1902			1909	Coal
Fillmore		1902		1965	Johnston
Cairo		1902		1939	Coal
Farris	1902				Atoka
Lane	1902				Atoka
Burse	1902			1912	Bryan
Cade	1903			1915	Bryan
Coatsworth	1903			1907	Johnston
Tushka		1903			Atoka
Bentley	1903			1963	Atoka
Redden	1903			1954	Atoka
Wesley	1903			1955	Atoka
Roena	1903			1907	Coal
Pirtle		1904		1915	Bryan
Copeland	1904			1912	Atoka
Barwick	1904			1911	Bryan
Kiersey		1904		1920	Bryan
Egypt	1904			1916	Johnston
Townsley	1905			1907	Johnston
Bromide		1905			Johnston
Daisy	1906				Atoka
Voca	1906			1913	Atoka
Unchuka	1907			1910	Coal
Burrow	1908			1926	Coal
Hendrix		1909			Bryan
Diamond	1910			1912	Bryan
Achille		1910			Bryan
Rich (Chockie)		1910		1934	Atoka
Bruno	1910			1925	Atoka
Cottonwood		1914		1914	Coal
Hardwood		1914		1923	Coal
Crystal	1911			1955	Atoka
Brown	1913			1927	Bryan
Parker	1913			1946	Coal
StandingRock	1914			1914	Atoka
Romia	1915			1934	Bryan
Bub	1921			1922	Atoka
Joburn	1922			1925	Atoka
Potapo	1922			1934	Atoka

TABLE I (continued)

Town	Year Developed Inland P.O.	Year Developed RR P.O.	Year Became RR P.O.	Year Post Office Disappered	County
Karma	1929			1950	Bryan
Cartwright	1940				Bryan

Source: Shirk, George (1974) Oklahoma Placenames.
P.O. = Post Office RR = Railroad

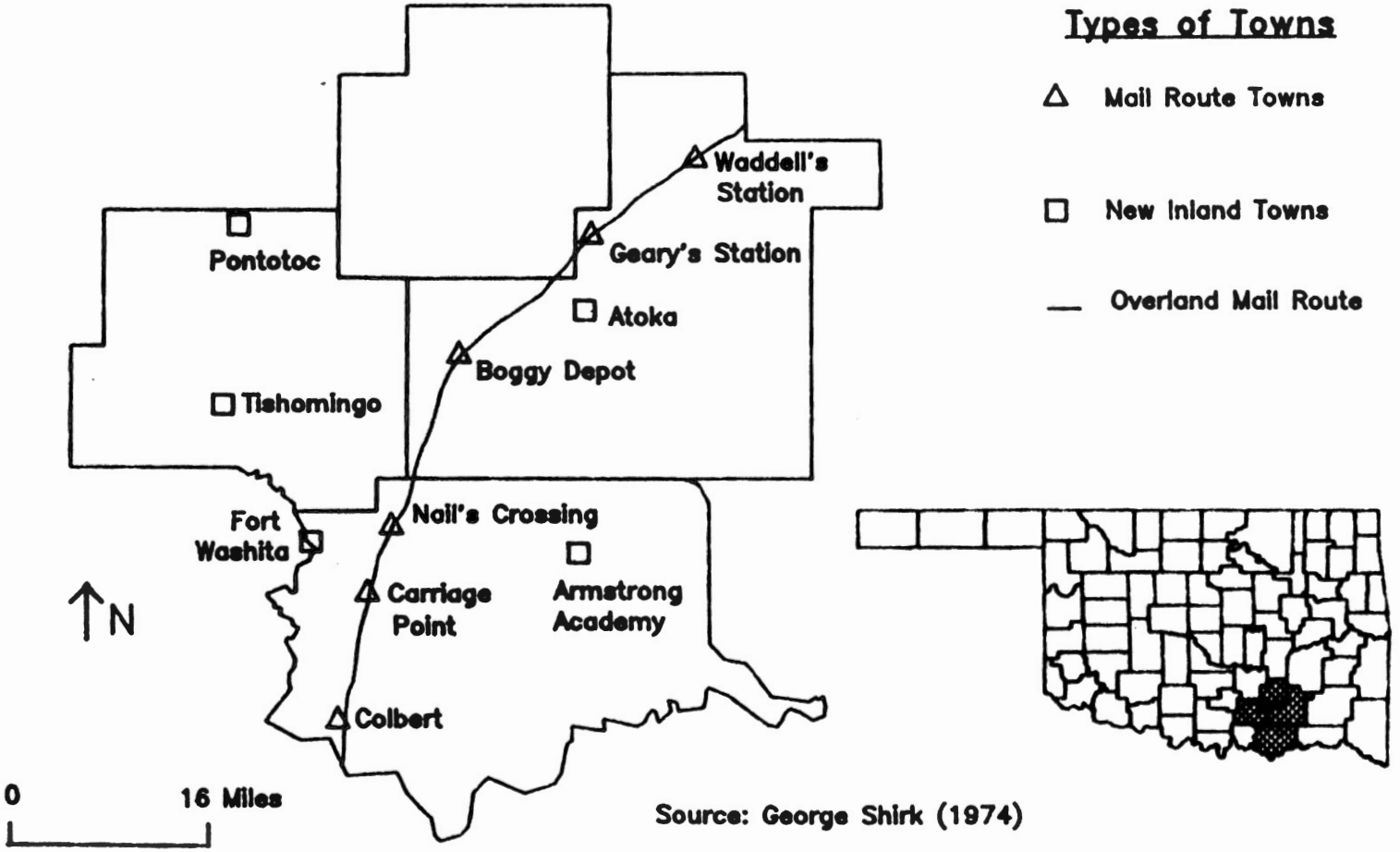

Figure 3. Town Development Between 1830 and 1869

two blacksmiths, a wood shop, a cobbler, and a livery stable. The town also had two doctors and a Presbyterian church established in 1840. In 1858, Boggy Depot was made the capital of the Choctaw Nation and became the most prosperous town in Indian Territory (Atoka County History 1983).

Colbert was established in 1853 by Benjamin Colbert as a ferry station on the Red River. Ben Colbert operated a sawmill, grist mill, and cotton gin in Colbert and ferried his products across the Red River to Denison and Sherman, Texas. Colbert soon became the largest cotton market in Indian Territory and is also the oldest town that currently exists in the four county area (Ruth 1977).

Jackson Frazier, an Indian, built a home and settled in Tishomingo in 1850 along Good Springs. Soon two stores opened and the Chickasaw Manual Labor School was founded in 1851, a few miles to the southeast of Tishomingo (Ruth 1977). Tishomingo became the Chickasaw capital and recording town in 1855 and a post office was built in 1857. In 1858, the Butterfield Overland Mail Route was established which created stations at Waddell's Crossing, Geary's Station, Nails Crossing, and Carriage Point (Figure 3). The route also ran through Boggy Depot and Colbert, making these six points the main distribution points for the United States mail (Atoka County Historical Society 1983). Atoka was the last town established before 1870, founded in 1867 by Rev. J.S. Murrow as a Baptist mission. Murrow founded

the Atoka Baptist Academy in Atoka in 1867 and started a post office in 1868 (Ruth 1977).

Town Development and the First Railroad: 1870-1899

In 1870, there were five unincorporated inland towns and six unincorporated mail towns, which were located along the Butterfield Overland Mail Route (Figure 4). However, town development was given a big boost and was most affected by the "iron horse," as the railroad was sometimes called. First, the railroad created towns, and later when several routes were developed towns disappeared because they were not located on or near the tracks (Table I). The Missouri, Kansas, and Texas Railway was the first to cross the four counties in the early 1870s. This railroad was originally destined for Boggy Depot but instead it headed straight southwest from Kiowa and created stations at Limestone Gap, Stringtown, Atoka, Caney, Caddo, Durant, Calera, and Colbert (Figure 5). Therefore, Boggy Depot declined rapidly as Atoka and Caddo took over as the major markets (Atoka County History 1983).

In 1882, the Missouri, Kansas, and Texas Railroad extended its line to Lehigh to tap into the rich coal fields there and in 1889 the line was extended to Philipps and Coalgate. Coal was mined in Lehigh as early as 1880 and in Coalgate in 1882. The Missouri, Kansas, and Texas Railroad was responsible for opening up the mines, bringing thousands

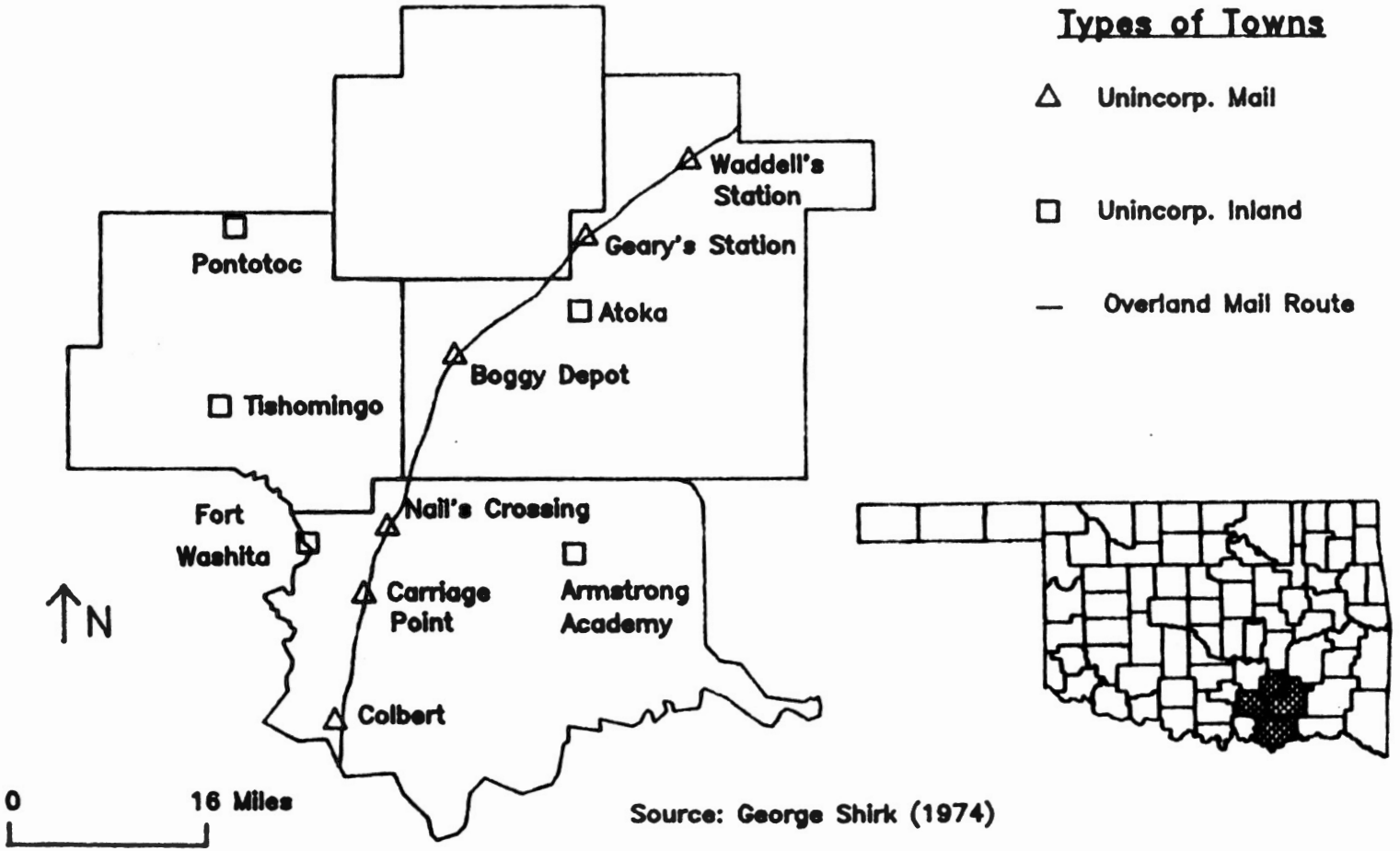

Figure 4. Types of Towns in 1870

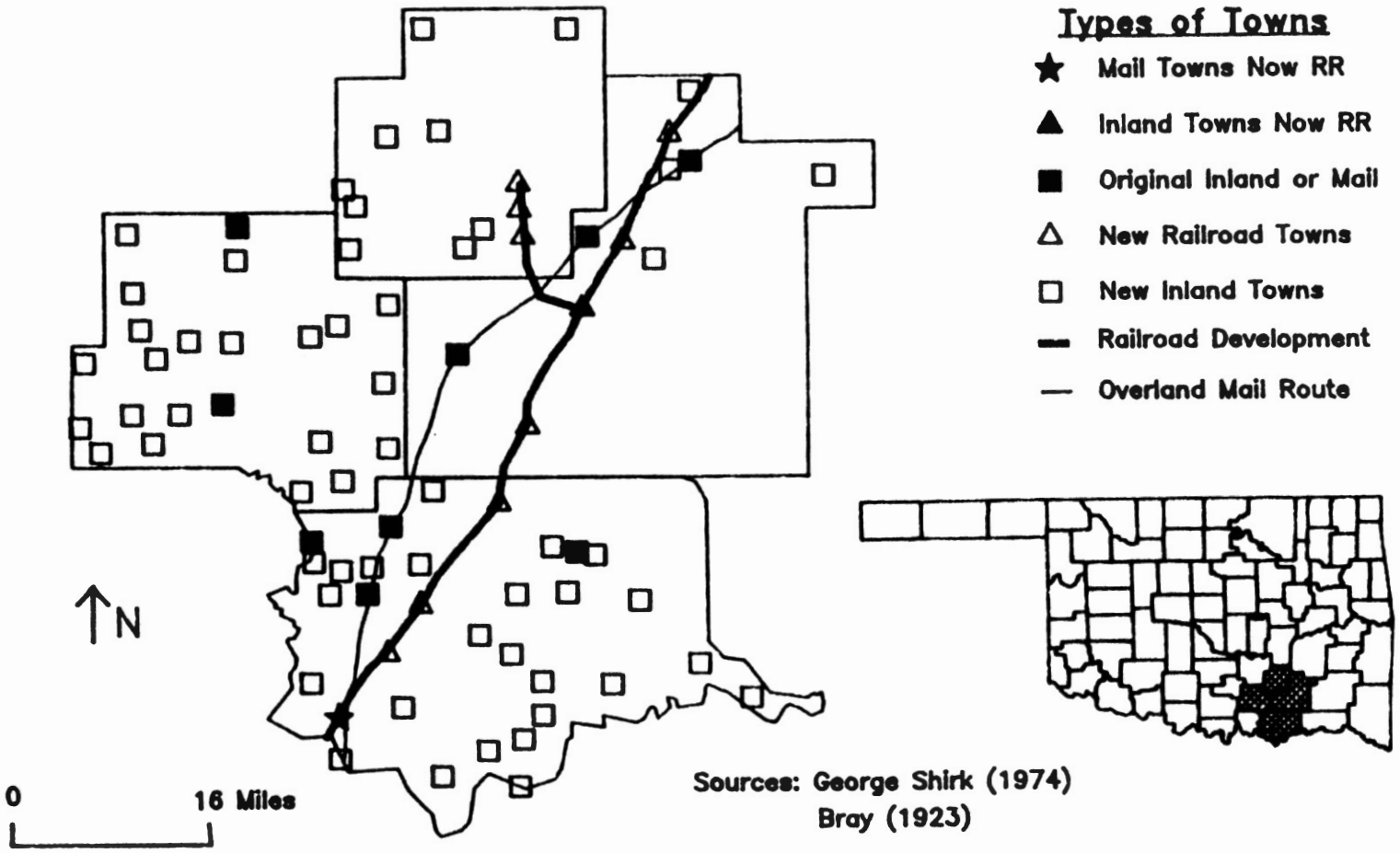

Figure 5. Town Development Between 1870 and 1899

of people into these mines, and platting the commercial districts of Lehigh and Coalgate. By 1897, both Coalgate and Lehigh contained approximately 1,500 people in their town limits with more than 50 percent of the new immigrants being black or foreign born. Coal mining was responsible for forming these two towns but they were also known for their cotton and ranching economies (Coal County History 1986). By 1899, Coalgate offered twelve general stores, four grocery stores, two furniture stores, two cotton gins, two bakeries, one lawyer, and several other services. Nearly all the retail and service establishments were in frame buildings because titles to the property could not be obtained from the Choctaw government. Therefore, no brick or stone buildings could be erected because the Indians considered them as permanent structures (Coling 1966).

Between 1870 and 1899, Atoka was the only inland town to become a railroad town, Colbert was the only mail town to become a railroad town, and the railroad companies developed nine new towns which became major market centers (Table I or Figure 5).

In 1870, there were nine original inland towns of which five were located along the Butterfield Overland Mail Route (Figure 5). After the first railroad came through, many inland towns developed. The railroad towns were the main market and distributing points and the inland towns served as smaller post offices and trade centers. Hudson (1985), in his study of North Dakota small towns, found a dramatic

increase in the number of inland towns after the initial railroad was built because of the poor road conditions. People could not travel very far on unimproved roads to obtain their necessities or to gin their cotton in the railroad towns. Therefore, they needed a local market to buy and sell needed goods and services.

Fifty-nine new inland towns developed around post offices between 1870 and 1899 (Figure 5). All these towns developed cotton gins, general stores, blacksmiths, hardware stores, and drug stores to serve the local population (Rice 1932). By 1900, the towns located on the railroad were the most commercially developed with an average of two gins, three general stores, and two blacksmiths per town. The inland towns had many of the functions the railroad towns offered but only offered one of each function. Gins were popular in all types of towns as were general stores, blacksmiths, livery stables, grist mills, drug stores, and confectioneries. These results indicate that people were still patronizing their home towns because of the limited ways to travel (Bradstreet's Book of Commercial Ratings 1900).

Green (1977) claimed that the erection of a gin was very important for communities. At harvest time the streets of most towns would be crowded with wagon loads of cotton ready for the gin.

> Buyers who traveled throughout Indian Territory purchased the bales and sent them to railroad towns where they were transported by railroad to compressing plants in

> McAlester, Ardmore, or Denison, Texas. The compressed cotton was then sent to either American factories in New England or to foreign markets, such as Liverpool, England or Breman, Germany (Green 1977).

Incentives, offered by the railroad and the Indians, brought many white settlers into the area. The Choctaws rented their land for one-third of the grain crop and one-fourth of the cotton produced on their lands. To induce farmers to settle in the regions, the Indians passed a permit law establishing an annual permit fee of 25 cents. Many whites emigrated from adjacent states and cultivated lands under a liberal tenancy. The number of white persons doubled between 1881 and 1890 as thousands of whites secured permits from Indian officials during this period. Forestlands were also cleared as log cabins and rail fences sprang up and rich valleys were put into cultivation (Underwood 1931).

Caddo became the second largest cotton market, after Muskogee, by 1880 and was the largest market by 1890. Caddo had some of the richest farming lands in the state which boasted fine harvests of corn, oats, cotton, and sugar cane. The average farm size in the late 1880's was 80 acres; many farmers used slaves who planted and picked the cotton by hand. Cotton ginning was one of the biggest industries in Caddo in the late 1880s. During this time period there were five gins in Caddo. About 1900, the Choctaw Gin Company built its largest gin ever in Caddo which made it one of the biggest cotton markets in Indian Territory. Ranching also

had its place in the economy. Since there were no fences, cattle strayed from ranch to ranch affording the need for spring roundups and cattle drives from the Caddo and Atoka areas to markets in Kansas (Rice 1932).

Very few roads existed before 1870 in much of Indian Territory except military roads, stagecoach roads, the Butterfield Overland Mail Route, and various cattle trails such as the Chisholm Trail. Roads were not really developed until the railroad came through in the 1870s and these were wagon roads which provided access to the railroad towns. A large system of roads was soon developed with the main purpose of serving the needs of the moment. Most of these roads were unfavorable during bad weather but were sorely needed for the farmer to get to market. The farmer hauled most of his goods from his farm to an inland town where his cotton was ginned and where he could do most of his buying and trading of goods. Therefore, many inland towns also developed with the main purpose of serving these farmers (Proceedings of Second Annual Highway and Street Conference. 1938). In the early 1900's the Dawes Commission surveyed Indian Territory and unimproved roads were laid out along every section line. These roads were four rods (64 feet) wide and were of natural construction (Dale and Wardell 1948). Many of these roads were called farm-to-market roads because they linked inland towns and farms with each other and with the main markets serviced by the railroad.

As a result of this first railroad era, 15 settlements

were eliminated including Fort Washita and four of the settlements along the Butterfield Overland Mail Route (Table I or Figure 6). They were eliminated because the railroad was a more efficient, cheaper, and faster way of transporting mail and goods. Therefore, 11 railroad towns and 53 inland towns were thriving at the end of 1899 (Figure 6).

Town Development from 1900 to 1910

In 1898, the Atoka Agreement and the Curtis Act were passed which abolished Indian governments and reservations, made the Indians American citizens, established tribal rolls, and developed a system whereby the towns were to be platted and or incorporated. In 1900, there were 11 railroad towns and 53 inland towns, of which five railroad towns and eight inland towns were incorporated (Figure 7).

New town development was mostly stimulated by the development of six new railroads in the area including the St. Louis and San Francisco (Frisco) which developed a track from Sapulpa, Creek Territory, to Sherman, Texas, in 1900 and 1901 that crossed Johnston, Marshall, and Bryan Counties. Stations were established at Mill Creek, Troy, Randolph, Ravia, and Platter. The town of Reagan was bypassed and lost most of its businesses and population to the towns of Mill Creek and Troy (Bray 1923).

In 1901, the Arkansas and Choctaw (now Burlington Northern) crossed Bryan County from east to west. Stations

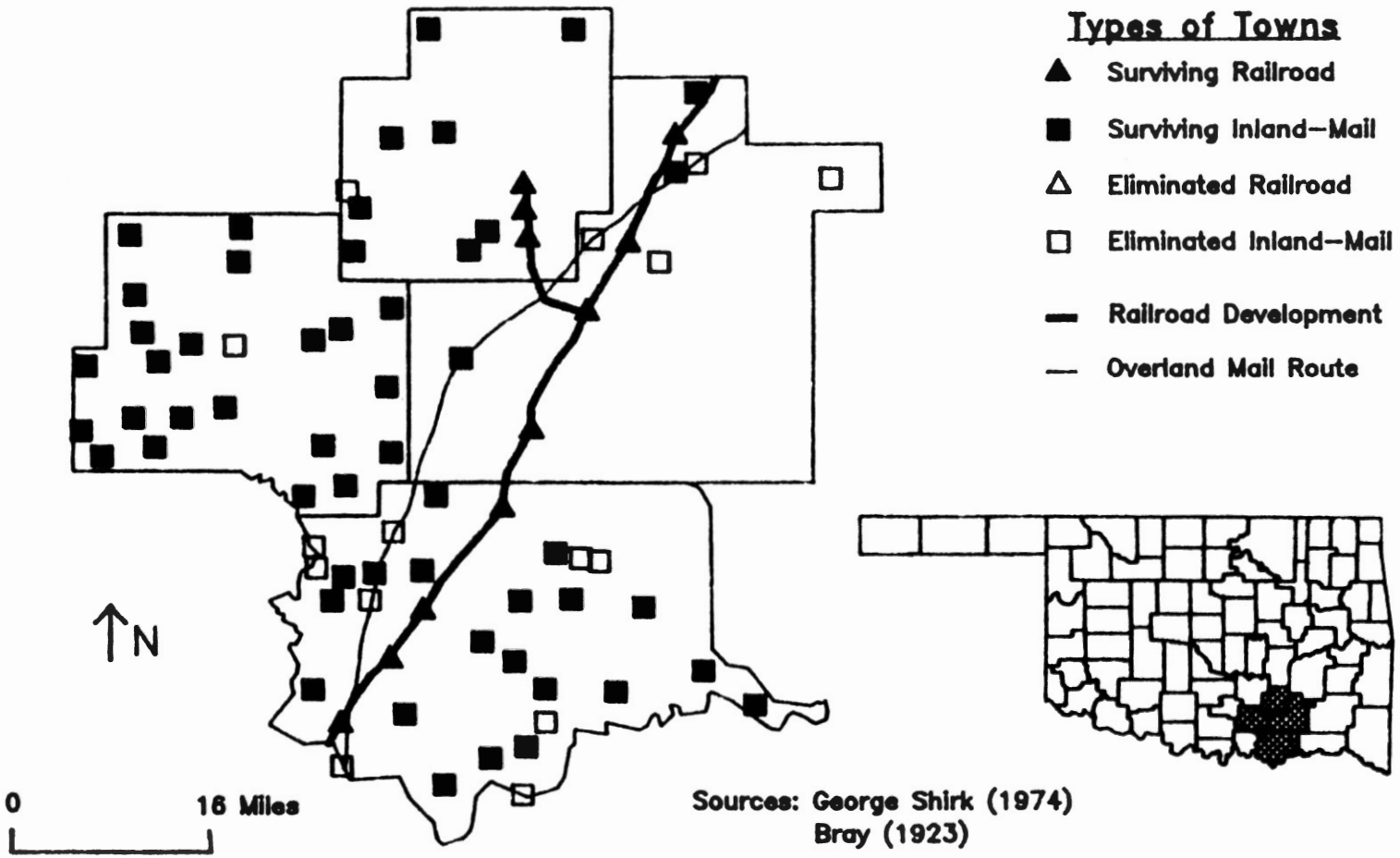

Figure 6. Towns at the End of 1899

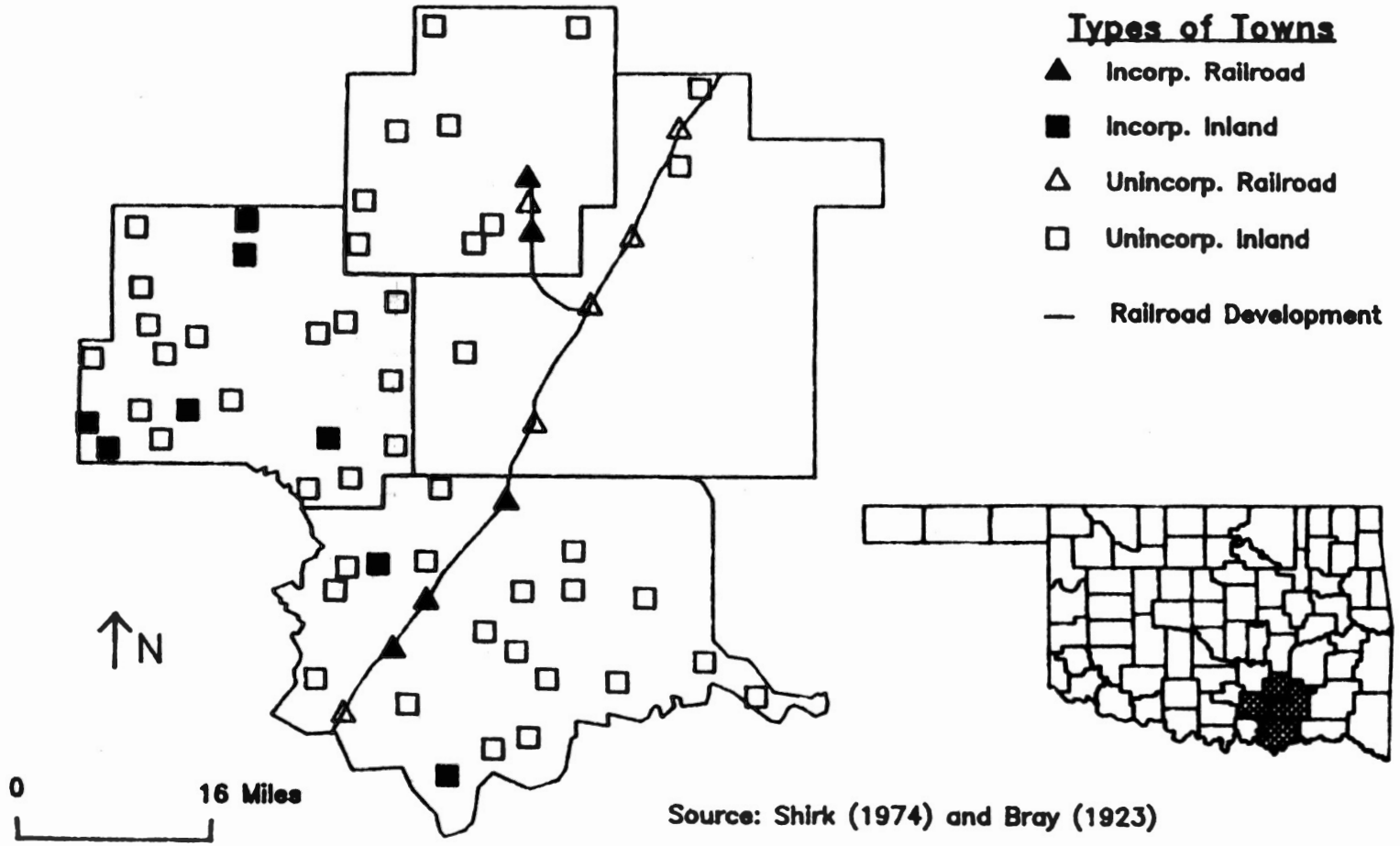

Figure 7. Types of Towns in 1900

were chosen at Bennington, Bokchito, Blue, Pirtle, Durant, Kiersey, and Mead (Table I). Most of these towns had to relocate near the railroad because the railway was built straight east to west from Hugo to Durant, missing the inland towns by two or three miles. The town of Silo was not chosen as a station, and therefore, lost most of its population to the towns of Kiersey and Mead (Rice 1932). Caddo also lost most of its importance after this railroad came through, because Durant won the location of county seat. Durant was considered a major cotton market, commercial center, and political center because it developed two major railroads which dramatically increased its access to larger market centers in Texas and Arkansas (Bryan County History 1983).

The Missouri, Oklahoma and Gulf Railroad was built from Pittsburg, Kansas to Denison, Texas, in 1904, creating stations at Tupelo, Clarita, Bromide, Wapanucka, Coleman, Folsom, Kenefick, Armstrong, Durant, Allison, Achille, and Hendrix in Coal, Johnston, and Bryan counties (Bray 1923). The Chicago, Rock Island and Pacific Railroad crossed Atoka, Coal, and Johnston counties in 1903 creating stations at Reynolds, Wardville, Cairo, Coalgate, Olney, Wapanucka, Fillmore, Milburn, Tishomingo, Ravia, Russett, and Mannsville. These two lines were large cotton railroads with one or two gins at every station. They also brought passengers into such communities as Bromide Springs, an artesian well site, and a very popular tourist attraction

between 1900 and 1920 (Bray 1923).

Two lines were also developed to serve the coal fields, including the Oklahoma City, Ada, and Atoka Railway which was built in 1903 and ran through Coal county creating stations at Tupelo, Centrahoma, and Coalgate where it joined with the M. K. and T. Railroad extending the line to Philipps, Lehigh, and Atoka. The Atchison, Topeka and Santa Fe developed a line called the Oklahoma Central in 1914 through Coal County with stations at Tupelo, Nixon, and Lehigh. Both of these lines ran coal to McAlester, Coalgate, and Ada for processing (Coling 1966).

As a result of new railroad development, 20 of the original 53 inland towns became railroad towns and 15 new railroad towns were formed (Table I or Figure 8). These 35 new railroad towns made the railroads more accessible and closer to the rural population eliminating some inland towns located close to the railway which were not chosen as rail stations. Thirty new inland towns were developed between 1900 and the end of 1910 (Table I or Figure 8). Most of these were located in the rural countryside and away from the railroad to create more markets for the population which was located away from the railroads. During this period, there was an increasing rural population because the Indian Territory was dissolved and many new farmers moved into the area to begin a homestead. Consequently, they created a larger demand for goods or services and the development of new service centers (Atoka County History 1983).

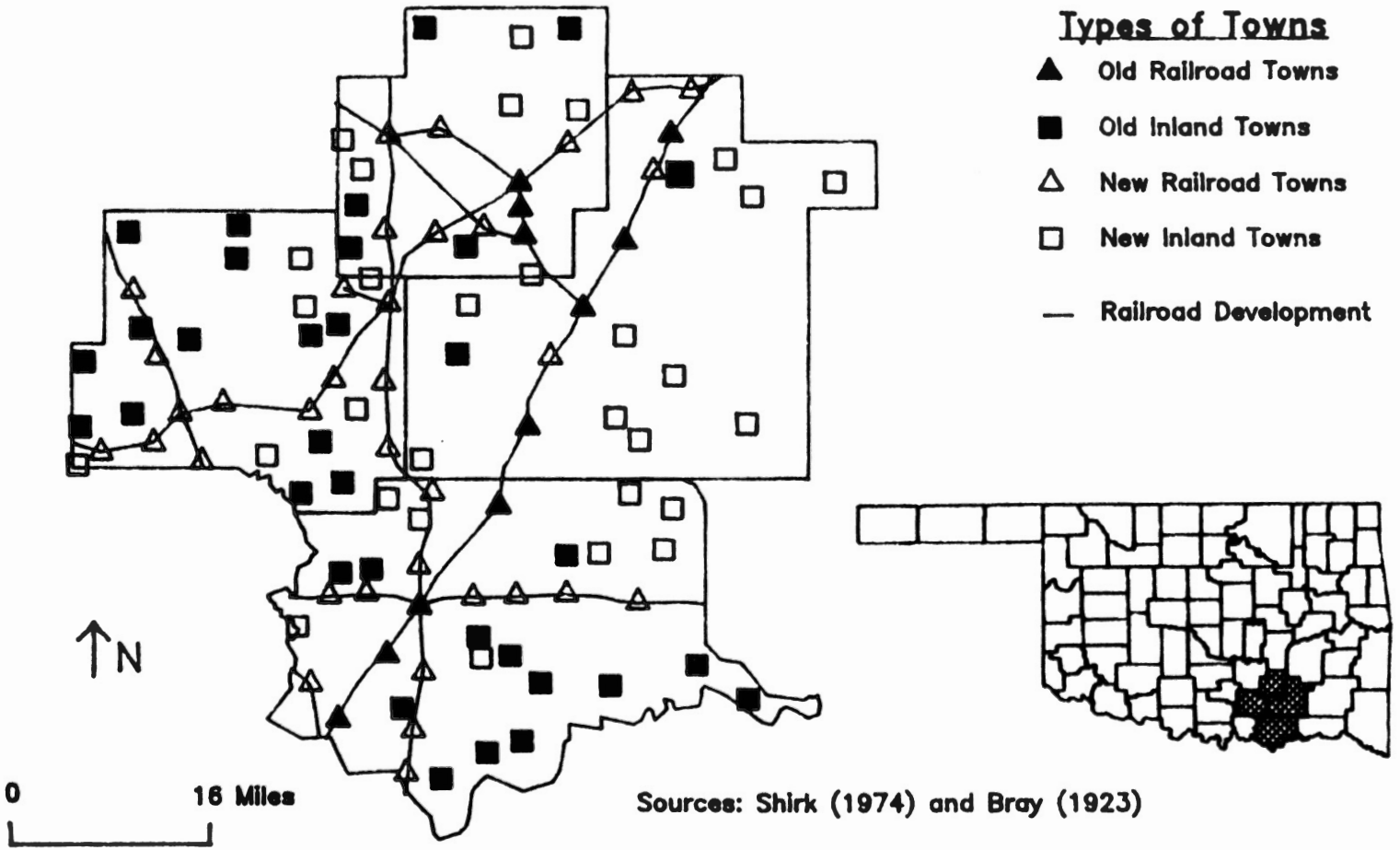

Figure 8. Town Development Between 1900 and 1910

By the end of 1910, 19 inland towns and one railroad town were eliminated in the study area either because they were bypassed by the railroad, too close to railroad towns to which their population and businesses moved, or because of the development of rural free delivery (Table I). Forty-four inland towns survived and were mostly distributed in the rural areas and away from the railroad. Forty-five railroad towns continued to exist and were the main market centers in this agricultural and railroad boom period (Figure 9).

Another factor which could have had an effect on the survival or disappearance of either a railroad town or a inland town was the development of the Rural Free Delivery System. In 1902, Congress passed a bill creating the Rural Free Delivery mail route system by which mail was delivered to the local farmers. Before this was established, rural communities were identifiable by their local post office around which small businesses organized and where farmers picked up their mail while patronizing local businesses. When the routes developed, many rural post offices disappeared along with the identity of the community and maybe even the community itself. For instance, in Reno County, Kansas after rural delivery was developed 16 post offices were eliminated within ten years. Most of these communities lost all their population and commercial activities while others had country stores and a few

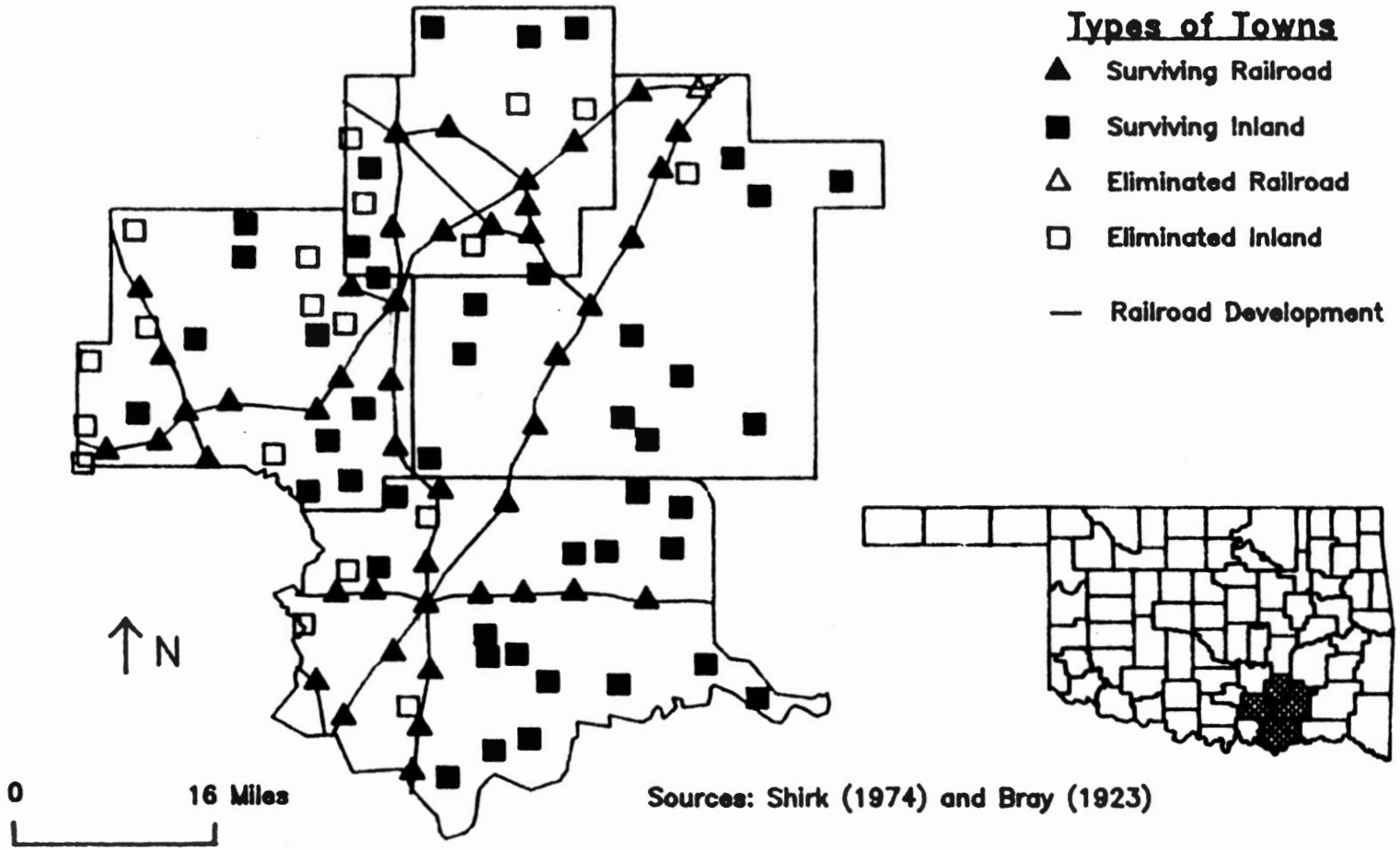

Figure 9. Towns at the End of 1910

residences left but obtained their mail by rural routes (Fuller 1964).

In 1900, the eight incorporated inland towns were Connersville, Earl, Emet, Kemp, Mannsville, Pontotoc, Ravia, and Silo (Figure 7). Between 1900 and 1910 Mannsville and Ravia became incorporated railroad towns, Kemp and Silo remained incorporated inland towns, and Connersville, Emet, Earl, and Pontotoc lost their incorporation status (Figure 10). According to Rice (1932) and the Johnston County Historical Society (1983), these four towns dwindled in size and commercial importance because they were bypassed by the railroad. Emet and Earl lost population dramatically between 1900 and 1907 because Mannsville and Milburn gained the railroad sites located next to these two unfortunate villages.

Therefore, as more railroads came into the area, there was an increase in incorporated towns located on the railroad, a decrease in incorporated towns located away from the railroad, an increase in unincorporated railroad towns, and a slight decrease in unincorporated inland towns. These results strongly suggest that towns that received a railroad definitely had a better chance of survival than their inland counterparts (Figures 7 and 10).

As more railroads developed, people started to travel to the railroad towns because they were more accessible compared to ten years earlier and the railroad towns had a better supply of goods and services. These conclusions are

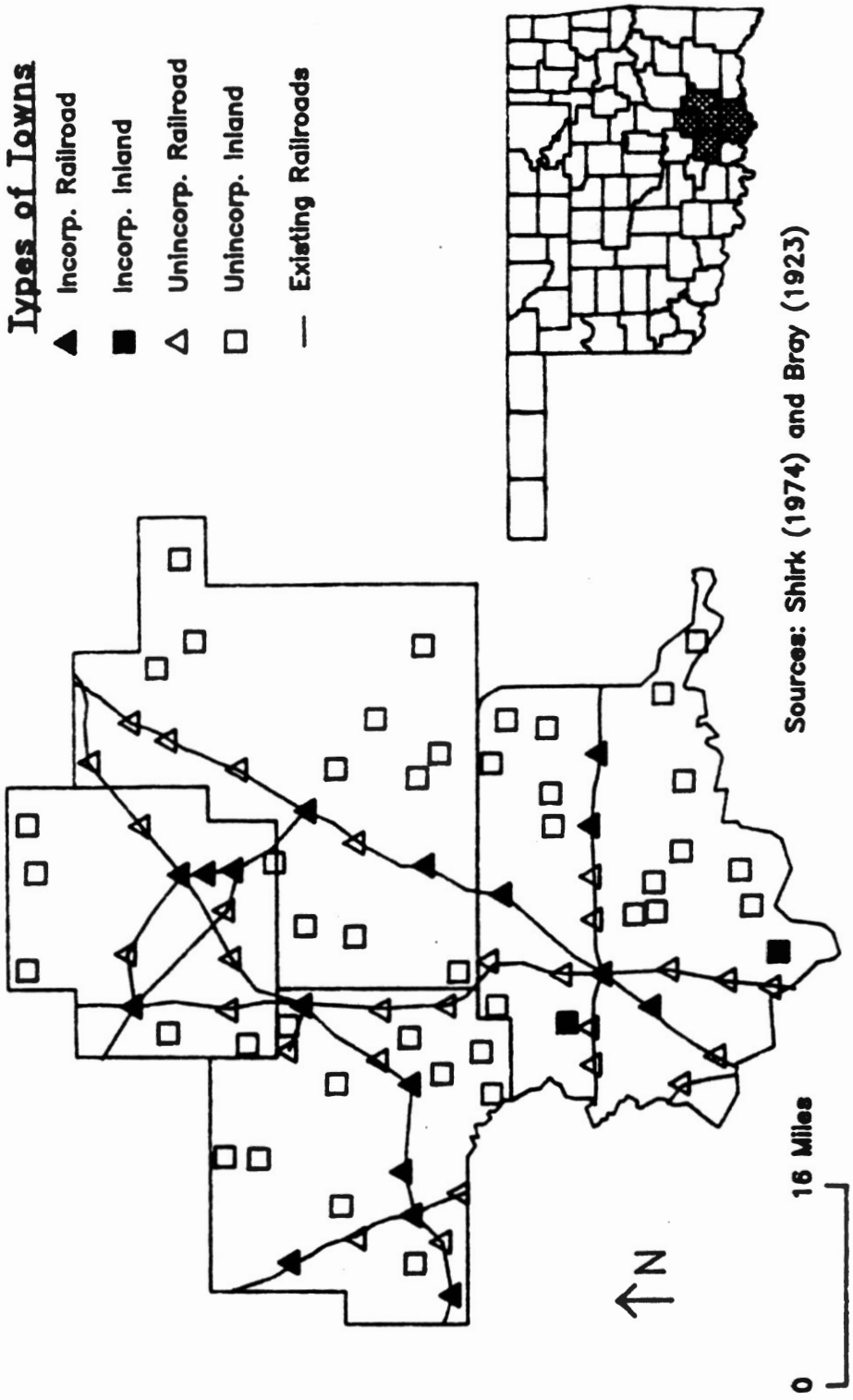

Figure 10. Types of Towns in 1911

consistent with what Hudson (1986) found in his study in North Dakota during the railroad era. Inland towns dwindled in size until they lost their incorporated status because they could not compete with their neighbors who had received railroad sidings. As more railroad towns developed, people bypassed the inland towns and marketed their goods near the railroad.

Town Development from 1911 to 1929

In 1911, there were 45 railroad towns and 44 inland towns of which 19 railroad towns and two inland towns were incorporated (Table I or Figure 10). During this time period 11 new towns developed of which two were railroad towns and nine were inland towns (Figure 11). The two railroad towns were developed in the coal fields and did not last past 1929 because of the sharp decrease in coal production in the area. Nine of the 45 original railroad towns were also eliminated because they could not compete with larger market centers on the railroad which attracted most of the business from the farmer (Figure 12).

Four of the new inland towns and 24 of the original inland towns also did not survive past 1929 (Figure 12) because of the advent of the rural free delivery mail routes which eliminated a number of post offices. They were too close to a larger post office which could easily deliver larger amounts of mail to other areas because of better roads. Improved roads also gave the farmers better access

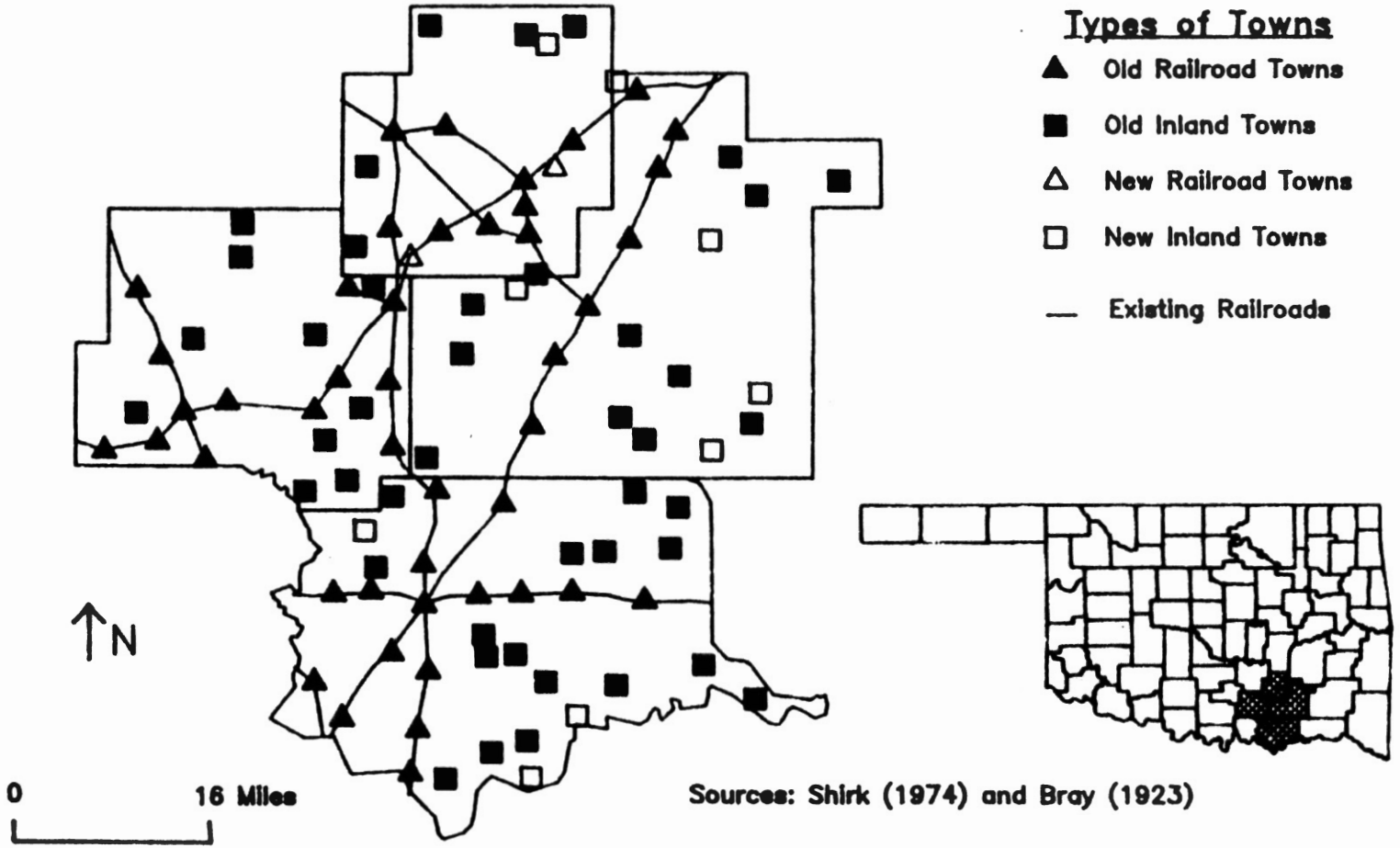

Figure 11. Town Development Between 1911 and 1929

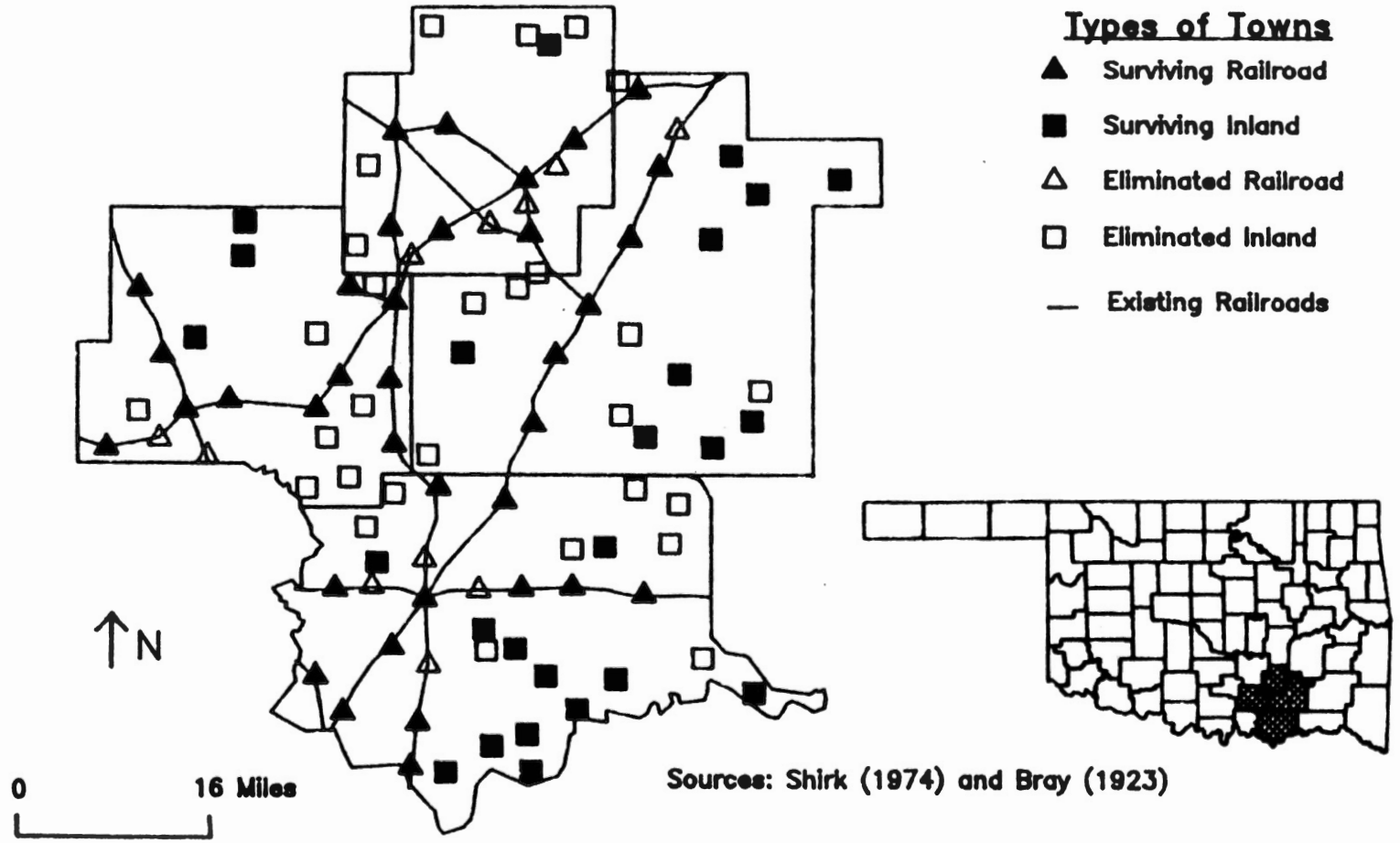

Figure 12. Towns at the End of 1929

to railroad towns. Consequently, farmers started to bypass inland towns to do most of their business in the railroad towns which offered more goods and services.

During this time period the formation or failure of towns were highly dependent on the development of improved roads and the decline in the number of post offices due to rural routes. Agriculture and coal mining also reached their highest production stages during this time period.

In 1907, the state government recognized the need for planned highways and introduced an article in the Oklahoma Constitution that provided for the establishment of the state highway department. In 1911, this dream came true and the Department of Highways was formed, and the first automobile taxes were used for the construction of better roads. In 1915, the Highway Commission was formed and it outlined a tentative system for the development of new state highways, but plans were put on hold because there was a lack of funding (Proceedings of Highway and Street Conference, 1938).

Finally, in 1916 the Federal-Aid Road Act was passed and an appropriation was made by the Oklahoma legislature to match Federal funds to make money available for road construction to start in 1917, 1918, and 1919 (Proceedings of the Highway and Street Conference 1938). Between 1919 and 1924 there was a massive amount of road construction completed in the study area. By September of 1924, 116.5 miles were graded in Atoka County, 347 miles in Bryan

County, 96 miles in Coal County, and 82 miles in Johnston County. A gravel surface had been applied to 26 miles in Atoka County, 43 miles in Bryan County, 21 miles in Coal County, and 20 miles in Johnston County (Report of State Highway Commission, 1919-24).

Between 1925 and 1927 the first asphalt and concrete roads were developed with 15 miles of road being paved around Durant (Report of State Highway Commission, 1925-1926). By the end of 1928, Atoka County had 86 miles of improved roads, Bryan had 78.9 miles, including 31 miles of paved roads, Coal had 52 miles of improved roads, and Johnston had 69 miles of improved roads including 11 miles of paved highway (Report of State Highway Commission 1927-1928).

Coal production between 1911 and 1920 was at its peak as the demand for coal was very high. Much of the coal was used by railroads for fuel, by industry, and for domestic consumption. New railroads also made new markets accessible which intensified production in order to meet the new demands. Coal demand went down twice during this period, however, because of two coal mine strikes but World War I created a huge increase in production which lasted until 1920. After 1920, the coal industry declined rapidly with the number of company employees dropping from 900 to 150 between 1921 and 1924. The Folsom Morris Coal and Mining Company and the Missouri, Kansas and Texas Coal Department Mining Company closed between 1922 and 1923 primarily

because railroads started to use oil as the main fuel instead of coal. Coal yields fell dramatically and caused the abandonment of the Santa Fe Railroad in 1933 and the Rock Island Railroad in 1938 as there was not enough coal mined to make the railroads cost-efficient. Coalgate and Lehigh had a dramatic decrease in population, especially between 1920 and 1930 when hundreds of miners moved to other areas in search of employment (Coling 1966).

During the period between statehood and World War I, farmers enjoyed good prices for their cotton and an increase in production due to increased demand by foreign markets. Between 1908 and 1913, yields rose throughout Oklahoma with prices ranging from 8.36 cents per pound to 11.77 cents per pound by 1913. In 1914, the European markets closed their doors to American cotton and prices plummeted to 6.85 cents per pound. That same season Oklahoma production surpassed all previous harvests creating an overproduction of cotton and a promotion by the government calling local merchants to acquire a bale at ten cents per pound which they would place in storage until prices rose to that level or better. The government also put restrictions on cotton production requiring landlords to demand tenants to reduce acreage. Low prices and government restrictions caused acreage to drop which decreased production (Green 1978).

When the United States entered the war in 1915, inflation and an increased industrial demand for cotton made prices soar to 25 cents per pound by 1918 and 35 cents per

pound by 1919 (Green 1978). Production soared in the four-county area with close to 80,000 bales produced in 1920 (Census of Agriculture 1920). However, the end of the war caused the bottom to fall out and prices dropped to seven cents by 1921 (Green 1978).

In the mid-to-late 1920s production of cotton increased again as farmers launched the region's most productive cotton era. Two-thirds of the region's farmers grew the crop and acreage exceeded 200,000 acres per year during a six-year period. In 1925, production reached an all-time high when close to 300,000 thousand acres of cotton was produced in the four-county area (1925 Census of Agriculture). Between 1923 and 1929 cotton was the major cash crop with prices ranging from 11.31 cents to 28.14 cents (Green 1978) and production peaking at 87 thousand bales in 1925 (1925 Census of Agriculture). Between 1910 and 1925 the number of farms increased by 73 percent in Atoka county, 36 percent in Bryan county, 65 percent in Coal county, and 17 percent in Johnston county indicating an increase in farm production between 1910 and 1925. Corn and oats were also major crops throughout the area with 176,918 acres of corn and 59,860 acres of oats grown in 1925 (1910 and 1925 Census of Agriculture). Farmers interchanged these crops with cotton or often grew them in the same fields to maintain soil fertility and a diversity of crop production (Green 1978). Therefore, by the end of 1929, there were 36 railroad towns and 25 inland towns thriving which were

becoming increasingly linked by highways, a more mobile population, and a stable agricultural economy (Figure Twelve).

Conclusion

Many factors had an impact on the development, survival, and failure of towns between 1830 and 1929. Among these were the construction of railroads, coal production, changes in agriculture, development of the rural route mail system, and the development of improved highways. Each one of these factors had a definite affect on the towns in the study area. For instance, when several railroads were completed, farmers started to bypass the inland towns because there were more railroad towns which offered a better supply of goods and services. Consequently, the inland towns failed and the railroad towns flourished. By 1930, there were 36 railroad towns and 25 inland towns (Figure 13) compared to 45 railroad towns and 44 inland towns in 1911 (Figure 10). Therefore, there was a 20 percent decrease in railroad towns compared to a 43 percent decrease in inland towns showing that railroad towns had a better survival rate than inland towns during the 1911 to 1930 railroad era because they had a stable functional basis and were linked with the regional economy (Hudson 1985). The incorporated trade centers (Figure 13) are used in further analysis to evaluate how the number and types of functions have changed in the rural trade centers between 1930 and 1990.

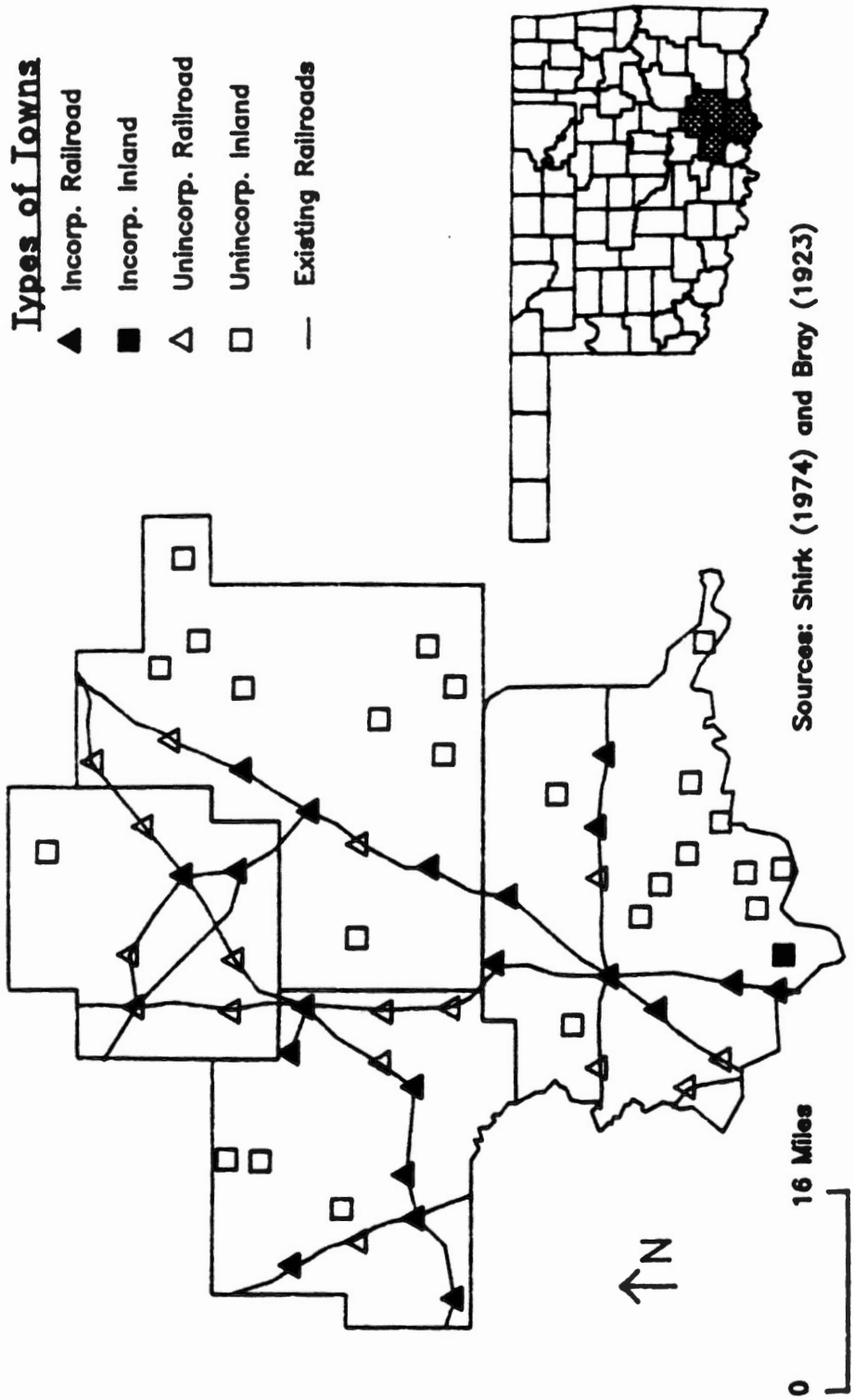

Figure 13. Types of Towns in 1930

CHAPTER IV

CHANGES IN THE NUMBER OF FUNCTIONS OFFERED BY SIXTEEN RURAL OKLAHOMA TRADE CENTERS

Introduction

In the previous chapter the settlement network of the four county study area is discussed, including how towns appeared and disappeared because of the changing transportation structure, economic structure, and population composition of the surrounding hinterland from 1830 to 1929. The focus of the study now concentrates on the functions of those settlements, how the number and types of functions changed from 1930 to the present time, and how changes in population size, general population, or distance from an urban center has affected the vitality of the functions. This study is limited to the incorporated trade centers under 2500 population in 1930 in Atoka, Bryan, Coal, and Johnston counties. Unincorporated towns are not considered because of the lack of population data as well as a lack of functional data for selected communities for 1930 from the Bradstreet Book of Commercial Ratings. Therefore, the study is limited to 16 rural trade centers (Figure 14).

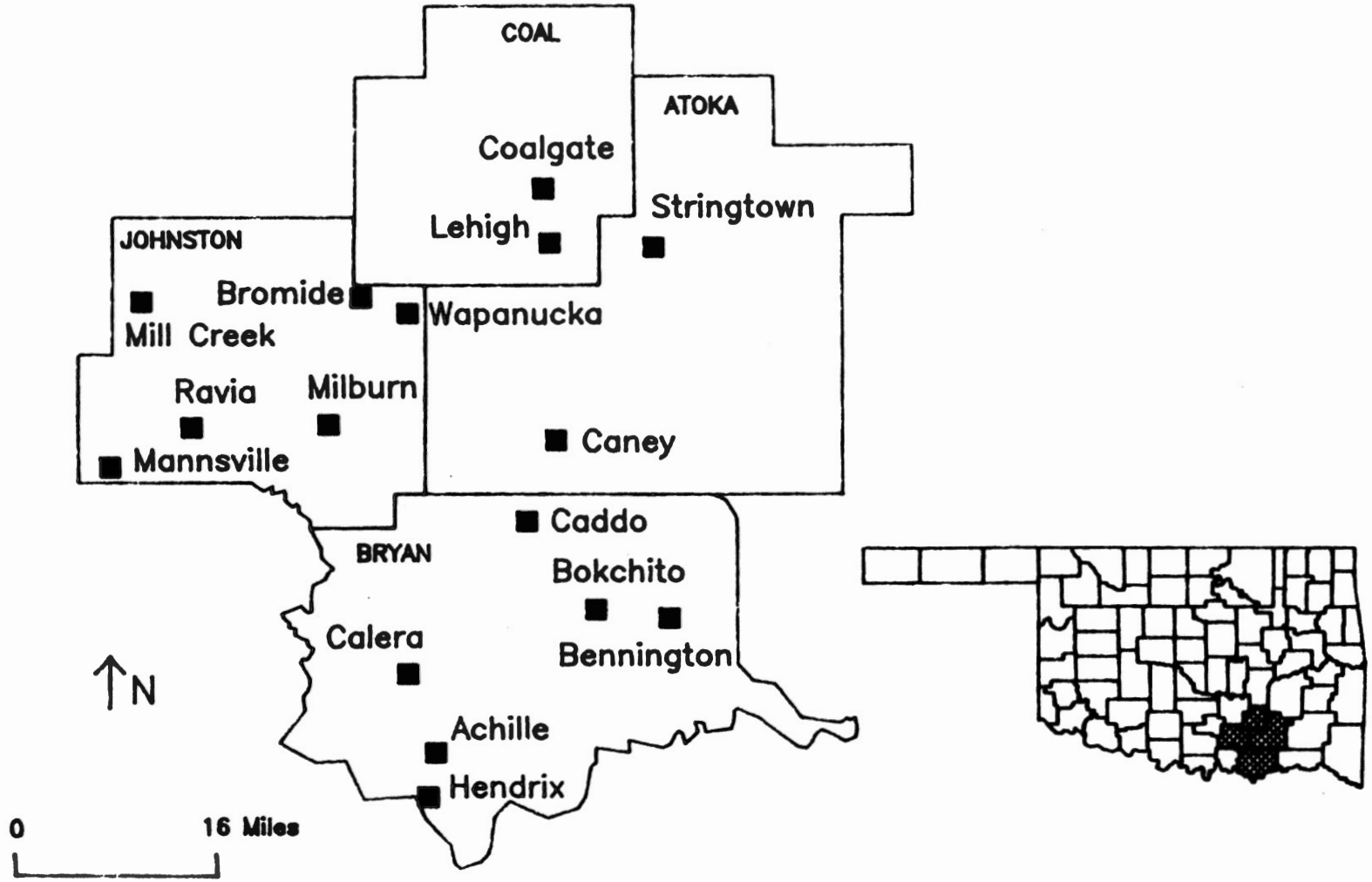

Figure 14. Sixteen Study Towns

Changes in the Number of Functions

This section evaluates how the number of functions has changed in the 16 rural trade centers between 1930, 1960, and 1990 to gain an idea of the pattern of change and what factors were responsible for these changes. In 1930, 13 percent of the 16 trade centers were offering 25 or more functions, 31 percent were offering between 16 and 24 functions, 50 percent of the trade centers were offering between 8 and 15 functions, and 6 percent of the trade centers offered 7 or less functions. Therefore, the mean number of functions offered was 15.9 for the 16 villages in 1930 (Table II and Figure 15).

By 1960, 6 percent of the trade centers contained 25 or more functions, 13 percent offered between 16 and 24 functions, 31 percent comprised between eight and fifteen functions, and 50 percent of the trade centers contained seven or less functions indicating a substantial decrease in the number of functions offered by these trade centers. The mean number of functions also declined from 16 in 1930 to 10 in 1960. (Table II and Figure 16). Table II and Figure 17 show this dramatic decrease between 1930 and 1960 with 44 percent of the towns losing 50 percent or more of their functions, 38 percent of the towns loosing between 0 and 49 percent of their functions, 6 percent of the towns remaining unchanged in the number of functions offered, 6 percent of the towns gaining between 0 and 49 percent, and 6 percent of the towns gaining 100 percent or more functions.

TABLE II

NUMBER OF FUCTIONS OFFERED IN THE SIXTEEN STUDY TOWNS FOR 1930, 1960, AND 1990

TOWNS	1930	1960	PER CHANGE 1930-1960	1990	PER CHANGE 1960-1990
Coalgate	30	32	07	35	09
Caddo	8	21	-25	23	10
Bokchito	22	17	-23	23	35
Bennington	21	9	-57	8	-11
Mill Creek	20	7	-65	6	-14
Milburn	18	7	-61	16	129
Wapanucka	18	11	-39	17	55
Mannsville	14	4	-71	12	200
Stringtown	13	7	-46	14	100
Achille	13	8	-38	13	63
Ravia	13	5	-62	6	20
Bromide	11	3	-73	2	-33
Calera	10	10	00	26	160
Caney	10	8	-20	8	00
Lehigh	10	3	-70	6	01
Hendrix	3	6	100	9	50
Mean Number of Functions	16	10		14	

Sources: 1930 Bradstreets Book of Commercial Ratings
1960 and 1990 Dun and Bradstreets Book of Commercial Ratings
1990 Southwestern Bell Telephone Directories
* Full citations are available in the Bibliography

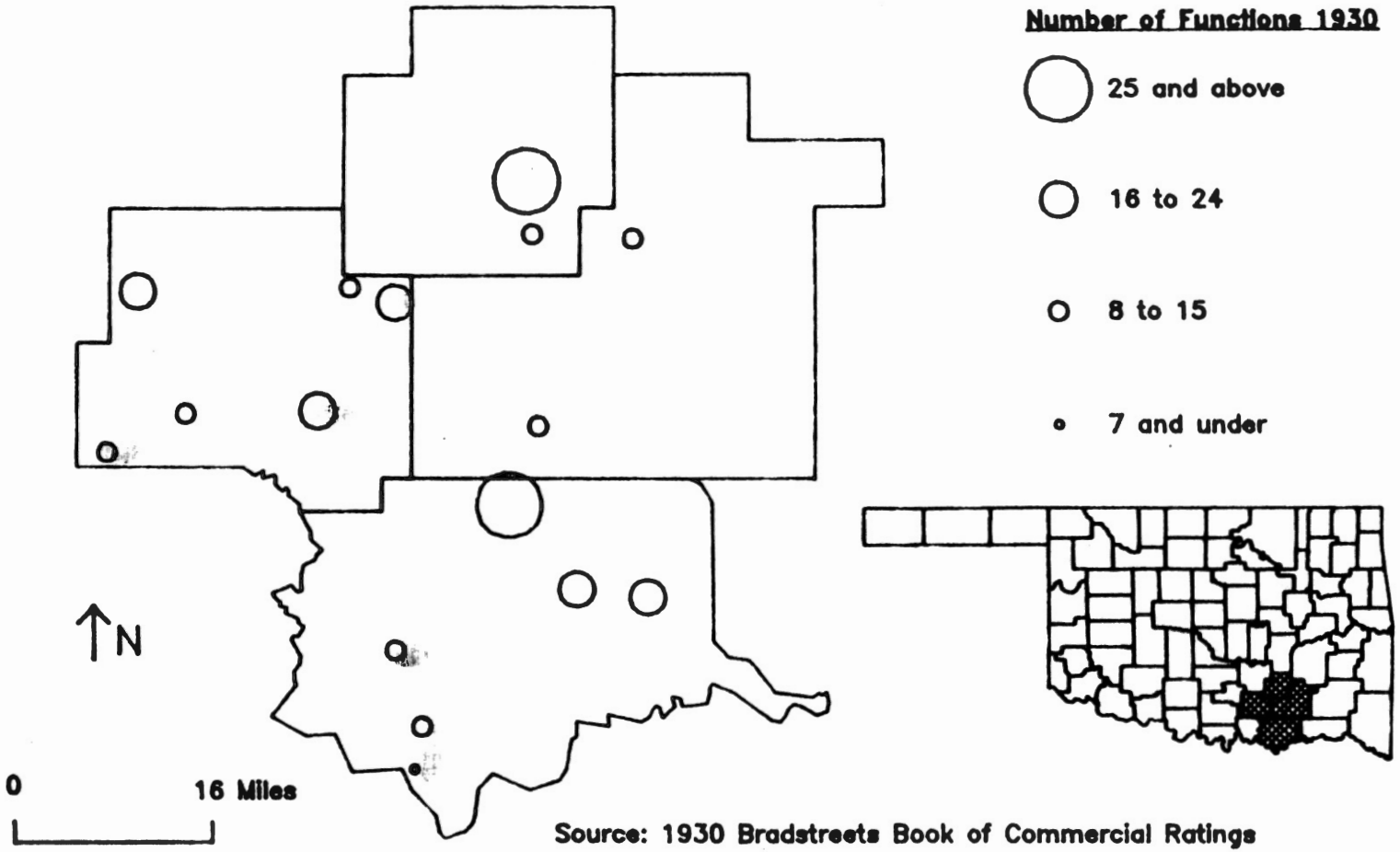

Figure 15. Number of Functions Offered Per Town in 1930

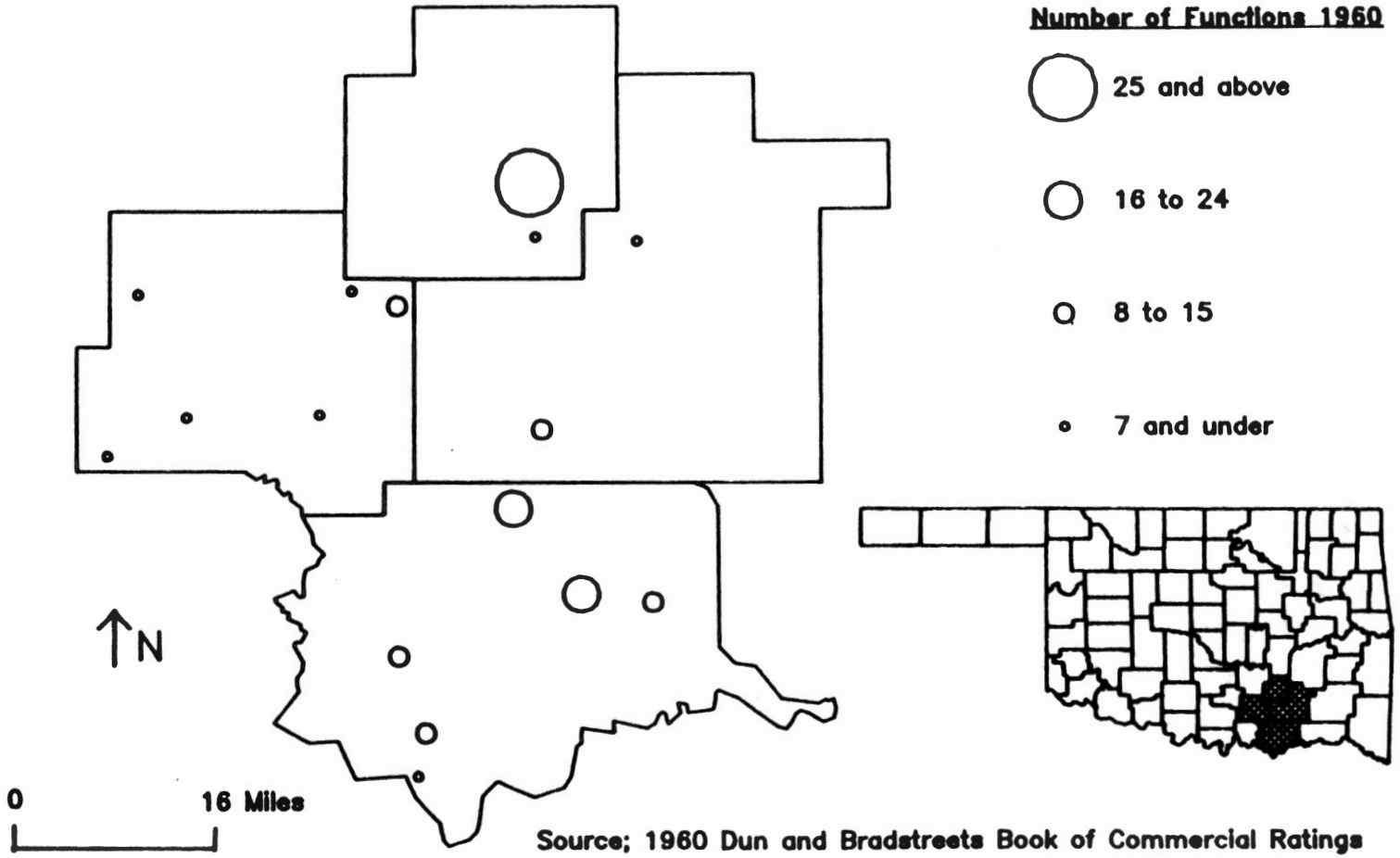

Figure 16. Number of Functions Offered Per Town in 1960

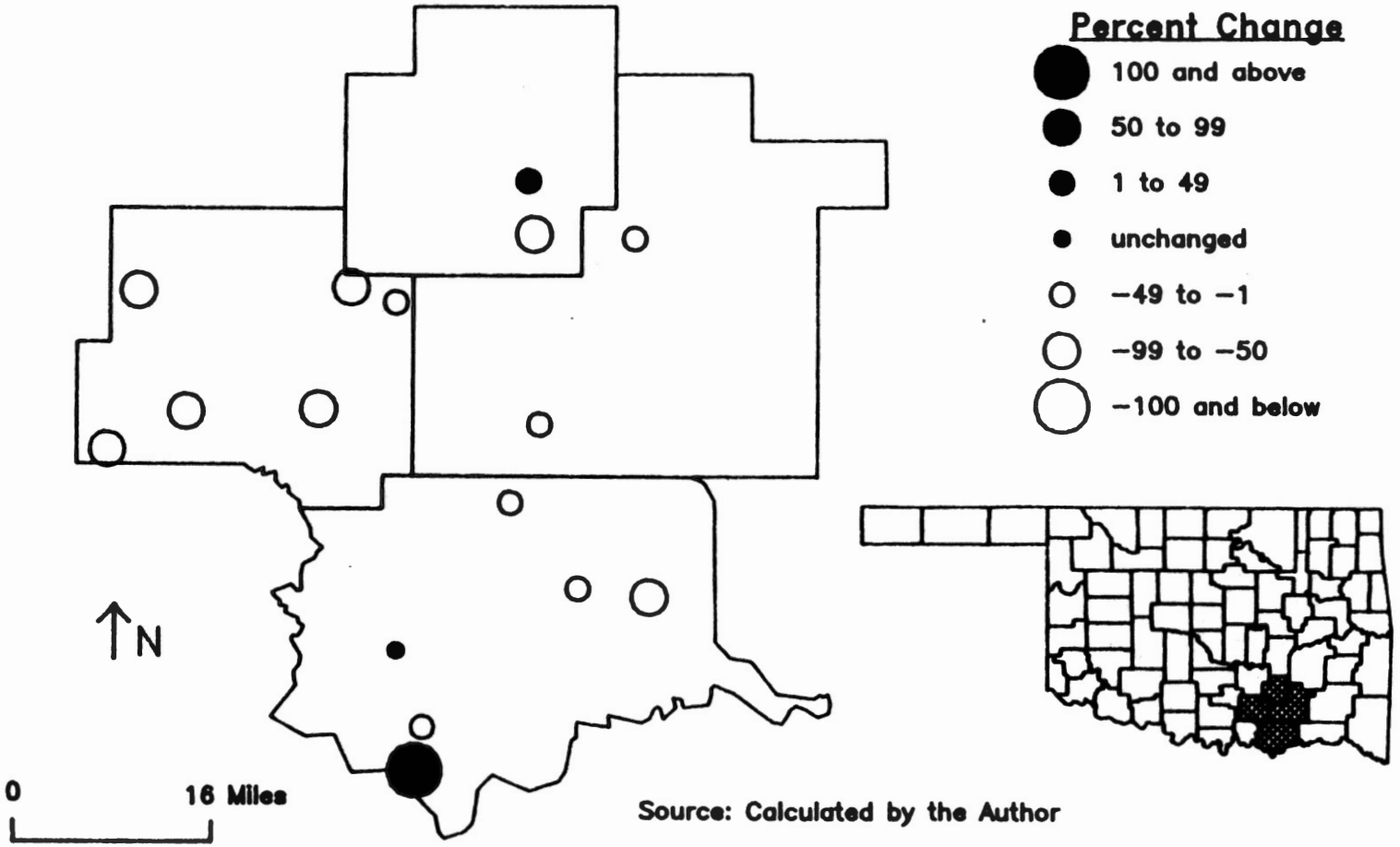

Figure 17. Change in the Number of Functions 1930-1960

In 1990, 13 percent of the trade centers contained more than 25 functions, 25 percent had between 16 and 24 functions, 38 percent offered between 8 and 15 functions, and 25 percent included 7 or less functions indicating an increase in the number of functions available in most of the trade centers between 1960 and 1990. The mean number of functions contained by the 16 trade centers also increased from 10 in 1960 to 14 in 1990 indicating that on average these towns were gaining functions between 1960 and 1990 (Table II and Figure 18).

Table II and Figure 19 show this increase in the number of functions offered by the rural trade centers between 1960 and 1990 with 19 percent of the trade centers decreasing between zero and 49 percent, 6 percent of the trade centers remaining unchanged, 31 percent of the trade centers increasing between zero and 49 percent, 19 percent of the trade centers increasing between 50 and 99 percent, and 25 percent of the trade centers increasing 100 percent or more in the number of functions offered.

Therefore, the number of functions in these 16 rural trade centers decreased between 1930 and 1960 and rebounded again between 1960 and 1990. Johansen and Fuguitt resolved that the number of functions offered by the Wisconsin trade centers also decreased between 1930 and 1954 and then continued to decrease between 1954 and 1970. They attributed these changes to the changing population size of those trade centers, percent change in the population of the

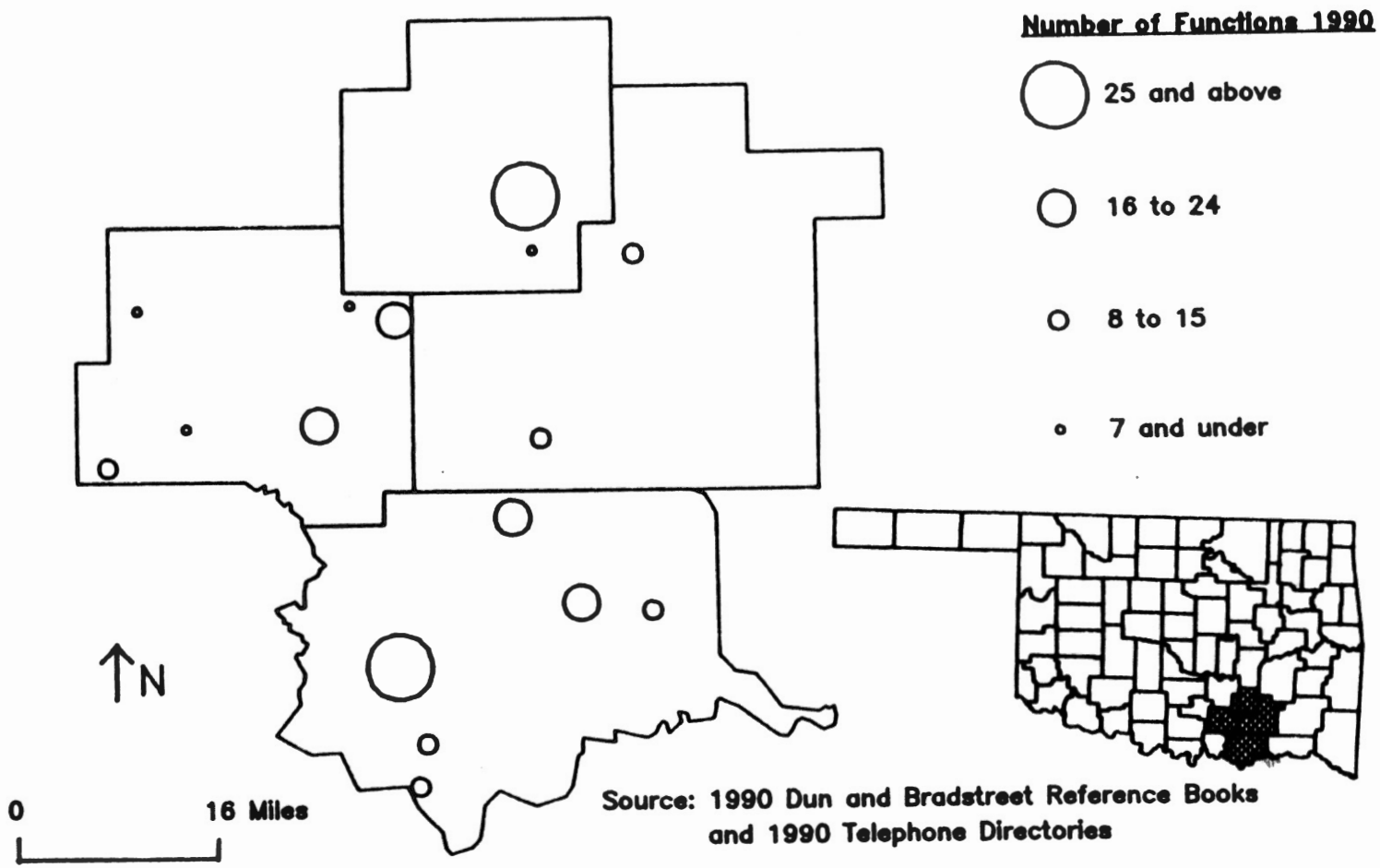

Figure 18. Number of Functions Offered Per Town in 1990

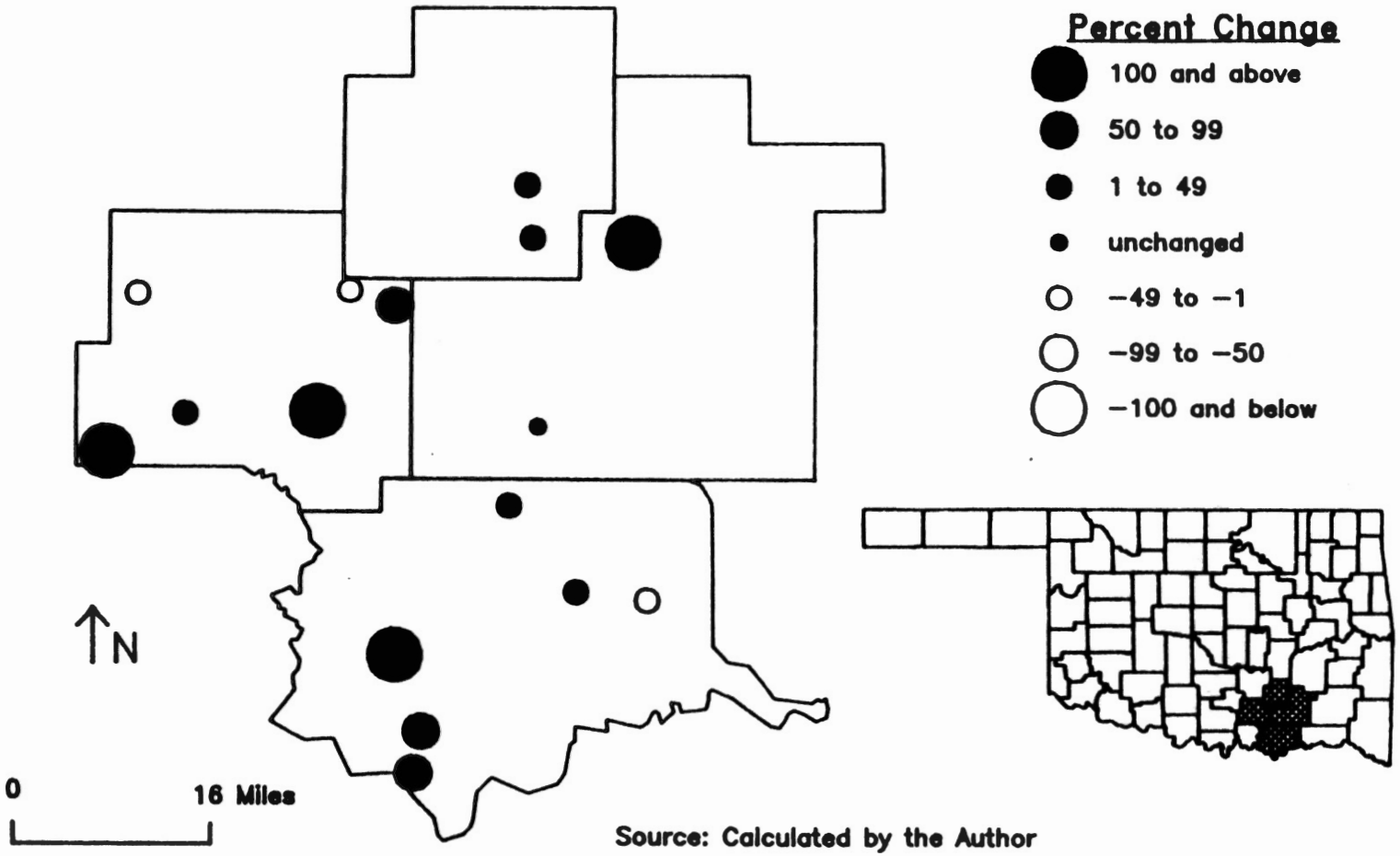

Figure 19. Change in the Number of Functions 1960-1990

trade centers, and their distance from urban places. Olson (1951) concluded that the depression, changing farm size, farm tenancy, farm population, and number of farms also affected the viability of Washington, Oklahoma, by decreasing the number of functions offered because there were less people supporting the rural trade centers between 1930 and 1950. Therefore, the next sections analyze the relationship between the number of functions offered by these towns and each of the variables listed above.

Relationship Between Population Size and Changes in the Number of Functions

This section of the study examines how changes in the population size of the 16 rural trade centers has affected the number of functions offered by these trade centers. Table III and Figures 20-22 portray how the population size of the 16 trade centers has changed over time. Six percent of the trade centers contained 1,000 or more people in 1930, 25 percent consisted between 500 and 999 people, 63 percent included between 250 and 499 people, and 6 percent had from zero to 249 people. In 1960, 6 percent of the trade center consisted of 1,000 or more people, 19 percent comprised between 500 and 999 people, 50 percent had from 250 to 499 people, and 25 percent contained from zero to 249 people. This indicated that the population size of these communities was on the decrease between 1930 and 1960 because the

TABLE III

POPULATION SIZE OF THE SMALL TOWNS IN THE STUDY AREA FOR 1930, 1960, AND 1990

TOWN	POPSZ 1930	TOWN	POPSZ 1960	TOWN	POPSZ 1990
Coalgate	2064	Coalgate	1689	Coalgate	2001
				Calera	1390
				Stringtown	1047
Caddo	933	Caddo	814	Caddo	923
Stringtown	553	Calera	692	Bokchito	628
Wapanucka	558	Bokchito	620	Mannsville	568
Calera	503				
Lehigh	497	Wapanucka	459	Ravia	487
Bennington	492	Stringtown	414	Achille	480
Bokchito	466	Ravia	307	Wapanucka	472
Milburn	429	Mannsville	297	Mill Creek	431
Mill Creek	422	Lehigh	296	Milburn	376
Achille	383	Achille	294	Bennington	302
Mannsville	372	Mill Creek	287	Lehigh	284
Bromide	352	Bromide	264		
Ravia	345				
Caney	275				
Hendrix	82	Milburn	228	Bromide	180
		Bennington	226	Caney	147
		Hendrix	142	Hendrix	106
		Caney	128		

Sources: 1930, 1960, and 1980 Census of Population

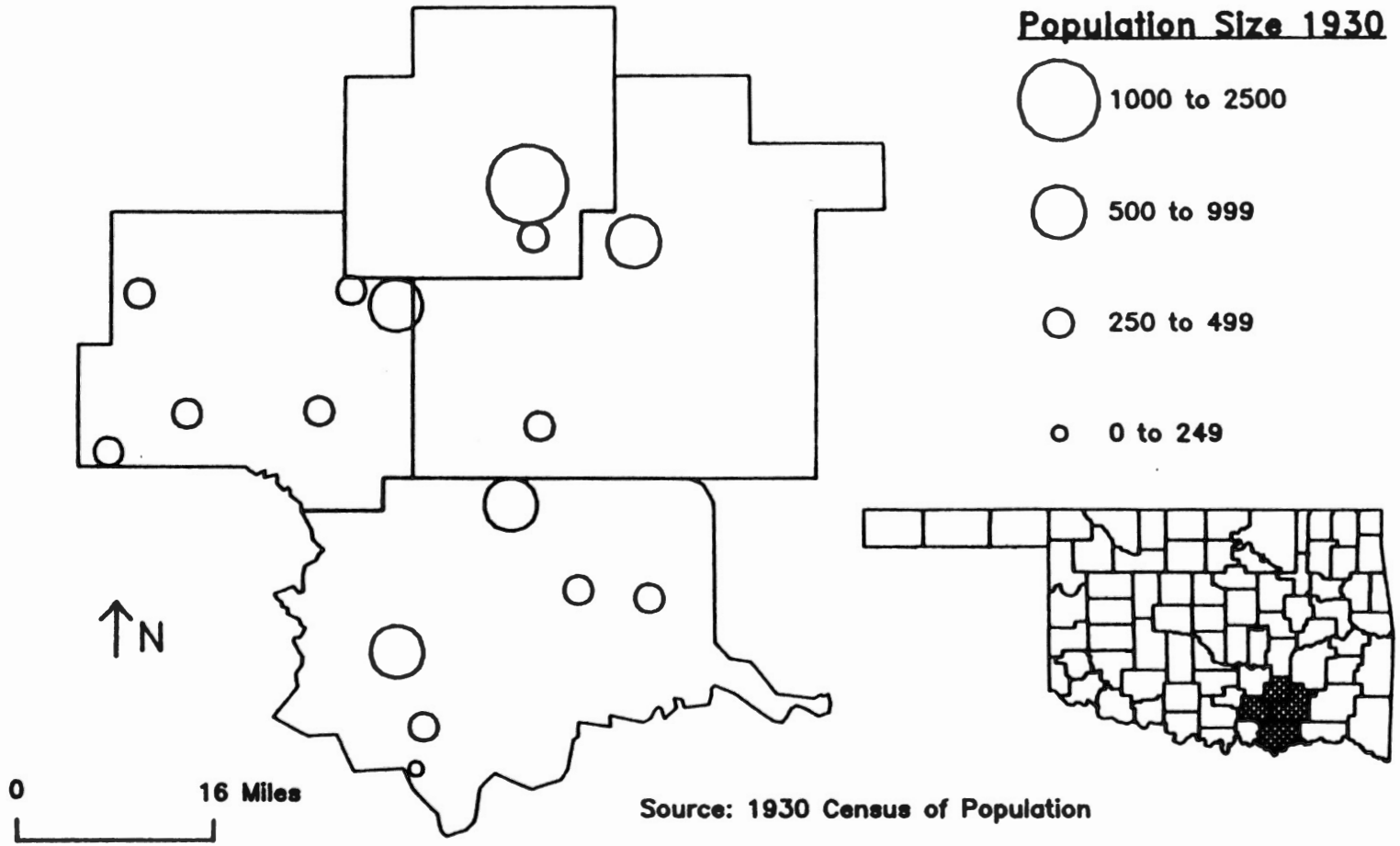

Figure 20. Population Size of Towns 1930

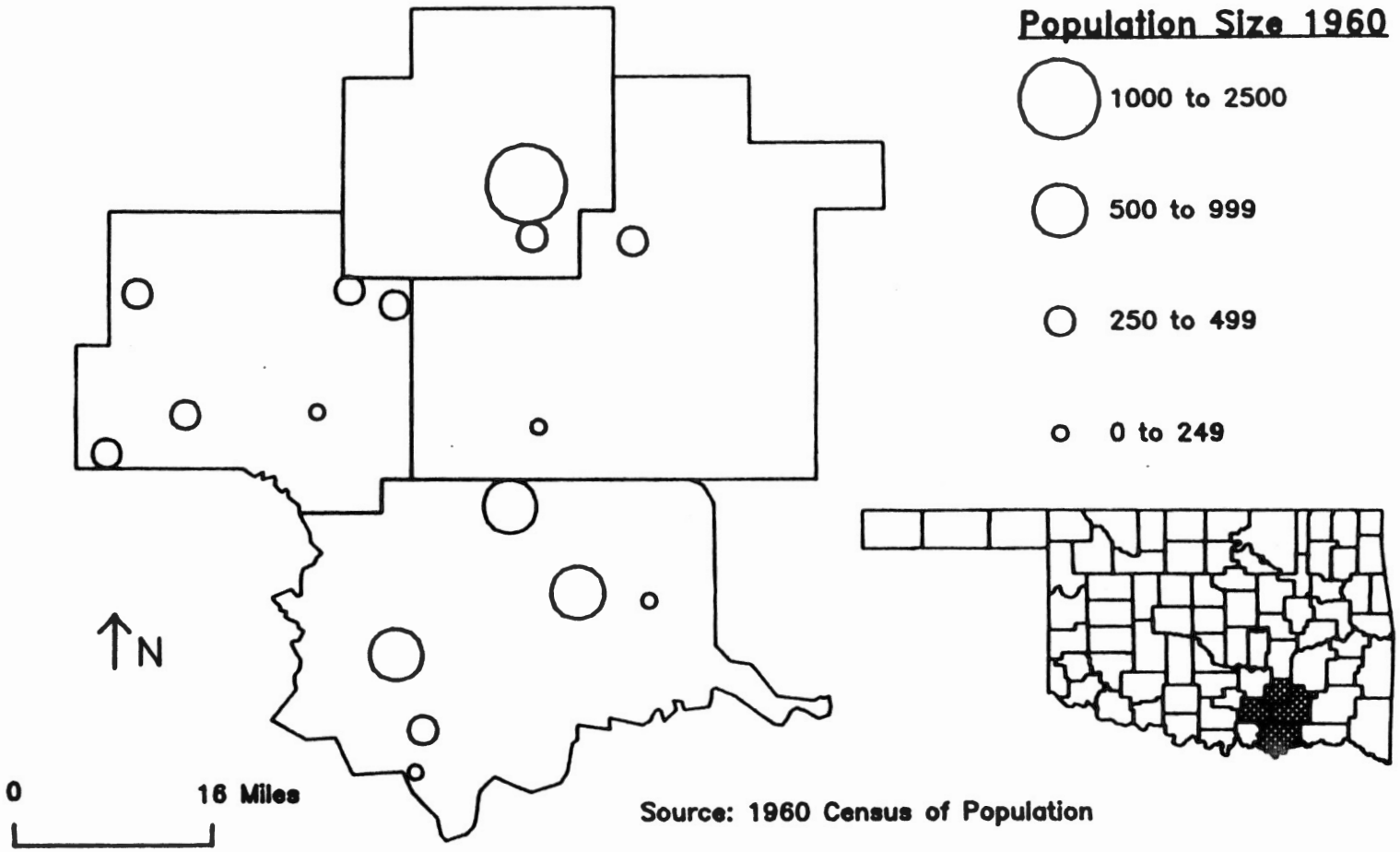

Figure 21. Population Size of Towns 1960

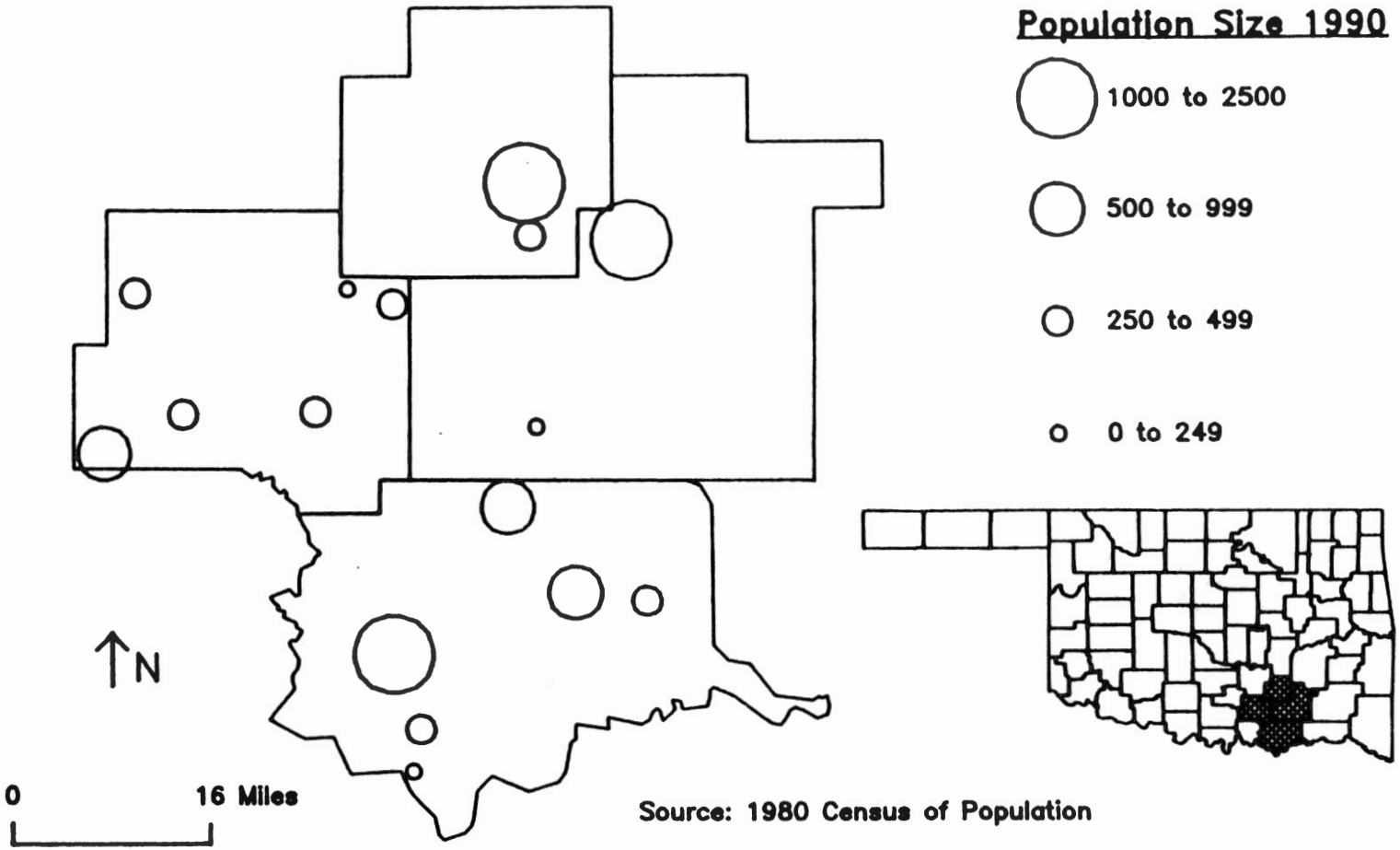

Figure 22. Population Size of Towns 1990

percentage of trade centers increased in the lowest category and decreased in the highest population categories. In 1990, 19 percent of the trade centers 19 between 1,000 and 2,500 people, 19 percent included 500 to 999 people, 44 percent comprised between 250 and 499 people, and 19 percent contained less than 250 people. This indicated that the trade centers were gaining population because the percentage of trade centers in each population size category increased in the larger categories since 1960 but decreased in the smaller population categories. It is germane to ask how these changes in population size relate to changes in the number of functions offered by the 16 trade centers?

Table IV shows the population size and number of functions offered by the 16 trade centers over time. The trade centers are ranked in order of their 1930 population and as time changes the population size of the trade centers change corresponding to a change in the number of functions offered by each trade center. Between 1930 and 1960 75 percent of the trade centers experienced a decrease in population size with a corresponding decrease in the number of functions offered. Coalgate experienced a decrease in population size but an increase in the number of functions offered, Bokchito demonstrated an increase in population size but a decrease in the number of functions offered, Calera exhibited an increase in population and was stable in the number of functions offered, while Hendrix had an increase in population size corresponding to an increase in

TABLE IV

RELATIONSHIP BETWEEN POPULATION SIZE AND THE NUMBER OF FUNCTIONS

TOWN	1930 POP	1930 FUCT	1960 POP	1960 FUCT	1990 POP	1990 FUCT
Coalgate	2064	30	1689	32	2001	35
Caddo	933	28	814	21	923	23
Stringtown	558	13	414	7	1047	14
Wapanucka	553	18	459	11	472	17
Calera	503	10	692	10	1390	26
Lehigh	497	10	296	3	284	6
Bennington	492	21	226	9	302	8
Bokchito	466	22	620	17	628	23
Milburn	429	18	228	7	376	16
Mill Creek	422	20	287	7	431	6
Mannsville	372	14	297	4	568	12
Achille	383	13	294	8	480	13
Bromide	352	11	264	3	180	2
Ravia	345	13	307	5	487	6
Caney	275	10	128	8	147	8
Hendrix	82	3	142	6	106	9

Sources: 1930, 1960, 1980 Census of Population
1930 Bradstreets Book of Commercial Ratings
1960 and 1990 Dun and Bradstreets Book of Commercial Ratings
1990 Southwestern Bell Telephone Directories

the number of functions offered.

These results show that there was mostly a positive relationship between population size and the number of functions because 75 percent of the trade centers experienced a decrease in their population size corresponding to a decrease in the number of functions they supported and 6 percent underwent an increase in population size with increase in number of functions. However, 19 percent of the towns developed a negative relationship between population size and the number of functions. In these towns there was an increase in population size but a decrease in the number of functions offered (Table IV).

The situation changed drastically between 1960 and 1990 as 69 percent of the trade centers experienced an increase in population size corresponding to an increase in the number of functions offered. Bennington and Mill Creek, for example, experienced an increase in population size but a decrease in the number of functions offered, while Lehigh and Hendrix had a decrease in population but an increase in the number of functions offered. Bromide suffered a decrease in both its population size and the number of functions offered. These results show that there was a positive relationship between the number of functions and population size because 69 percent of the trade centers experienced an increase in both population size and the number of functions offered and 6 percent had a decrease in both population size and number of functions. However, 25

percent of the trade centers developed a negative relationship between population size and the number of functions, suggesting that an increase in population size failed to affect the decreasing number of functions or a decrease in population size failed to affect the increase in the number of functions offered (Table IV).

Therefore, between 1930 and 1960 as population size decreased the number of functions also decreased in 75 percent of the trade centers but between 1960 and 1990 population size increased with a corresponding increase in the number of functions in 63 percent of the trade centers. This development showed that the people were moving back into the rural areas and were attracting business development in and around these trade centers unlike the 1930 to 1960 era when people and businesses moved out of Oklahoma small towns because of a failing economy and better economic opportunities in the city (Olson 1951). Therefore, there has been a reversal of trends since 1960 and the number of functional activities in the rural communities is now expanding.

Relationship Between Population Change and Changes in the Number of Functions

Population change may also have an effect on the functional basis of these 16 towns because it would be expected that as a town decreases in population its

functional offering also decreases or as a trade center increases in population it also increases in functional size. Table V shows how the population of these trade centers has changed over time. Between 1930 and 1960, 81 percent of the 16 trade centers decreased in population while 81 percent of the trade centers increased in population between 1960 and 1990. How did this affect the change in the number of functions?

Table V and Figure 23 show that 13 trade centers declined in population between 1930 and 1960 of which 92 percent declined in number of functions and 8 percent increased in number of functions. Also, the towns that declined 50 percent or more in population did not decrease as much in number of functions as some of the towns which declined between zero and 49 percent in population. This is probably related to the fact that these towns offered functions which did not decrease dramatically between 1930 and 1960. Coalgate, for example, declined in population but increased in the number of functions offered in all likelihood because of its influence as a county seat and the attraction of businesses to the area. Three towns increased in population from 1930 to 1960 of which Hendrix increased in number of functions, Calera remained stable, and Bokchito decreased in number of functions.

From 1960 to 1990, three towns decreased in population of which Bromide declined in the number of functions offered while Lehigh and Hendrix increased in number of functions.

TABLE V

RELATIONSHIP BETWEEN POPULATION CHANGE AND CHANGE IN THE NUMBER OF FUNCTIONS 1930-1960 and 1960-1990

	1930-1960 PERCENT			1960-1990 PERCENT	
TOWN	POPCHG	FUCTCHG	TOWN	POPCHG	FUCTCHG
Hendrix	69	100	Stringtown	152	100
Calera	38	00	Calera	101	160
Bokchito	33	-23	Mannsville	91	200
Ravia	-11	-62	Milburn	65	129
Caddo	-13	-25	Achille	63	63
Wapanucka	-17	-39	Ravia	59	20
Coalgate	-18	07	Mill Creek	50	-14
Mannsville	-20	-71	Bennington	34	-11
Achille	-23	-38	Wapanucka	30	55
Bromide	-25	-73	Coalgate	18	09
Stringtown	-26	-46	Caney	15	00
Mill Creek	-38	-65	Caddo	13	10
Lehigh	-40	-70	Bokchito	01	35
Milburn	-47	-61	Lehigh	-04	100
Caney	-53	-20	Hendrix	-25	50
Bennington	-54	-57	Bromide	-32	-33

Source: Calculated by the Author

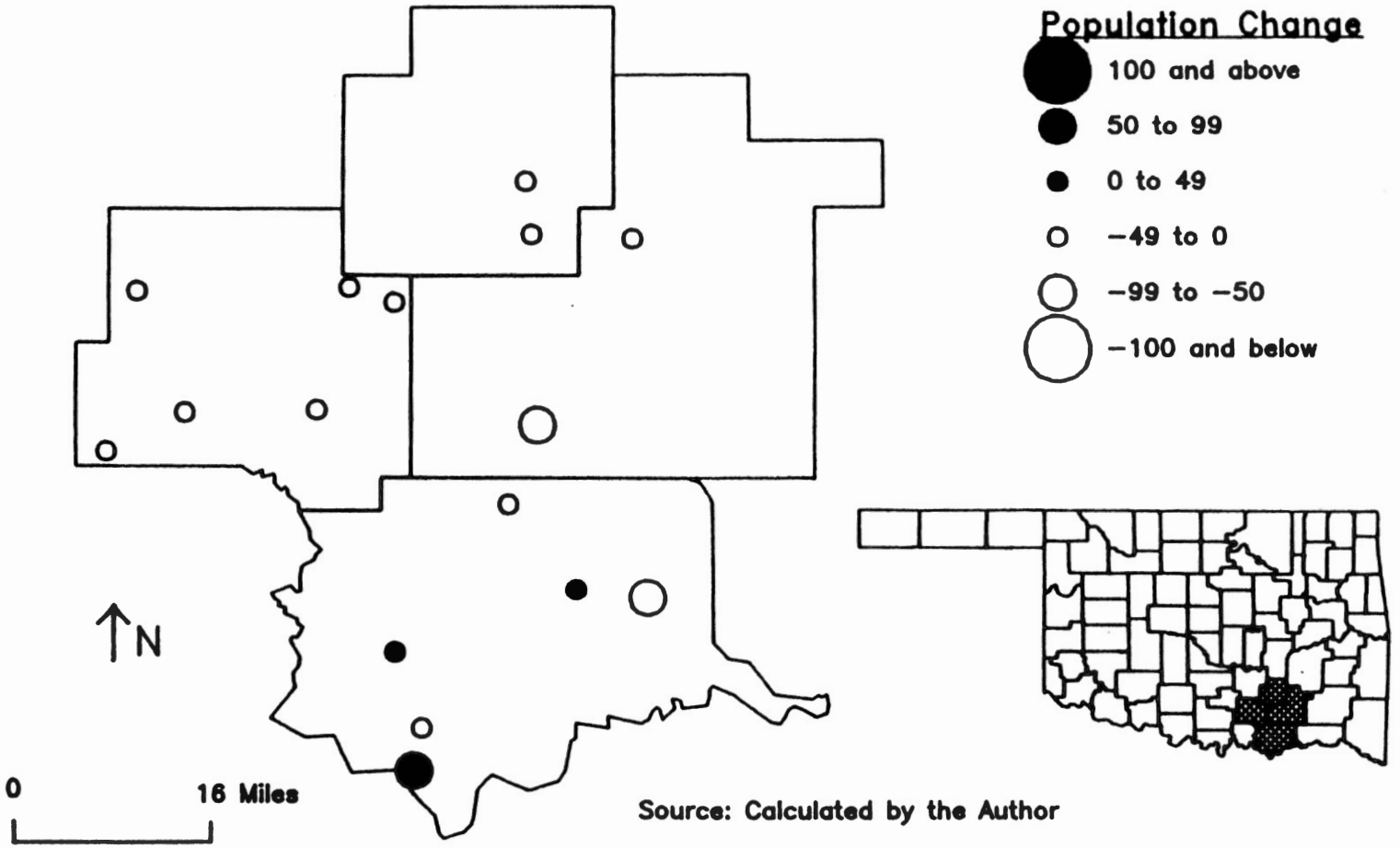

Figure 23. Population Change in the Small Towns 1930-1960

Thirteen towns increased in population of which 75 percent increased in number of functions. Milburn, Mannsville, Ravia, and Coalgate all increased two times more in the number of functions offered than in their population. Achille increased 63 percent in both population and number of functions, while Mill Creek and Bennington increased in population but decreased in the number of functions offered (Figure 24).

The results of the analysis between population change and change in the number of functions shows a positive relationship in 81 percent of the trade centers with 75 percent of those trade centers decreasing in both population and number of functions between 1930 and 1960. Between 1960 and 1990, there was still a positive relationship between the variables in 69 percent of the trade centers, although 63 percent of those towns increased in both population and the number of functions. However, the rural trade centers of south-central Oklahoma went through hard times during the 1930 to 1960 period because of the depression, changes in technology, and changes in the economy of the rural hinterland during this period of time (Olson 1951). Then, between 1960 and 1990 Oklahoma rural trade centers rebounded as their population increased. This attracted more functions into these same towns and brought the number of functions back to about the same level as in 1930.

Johansen and Fuguitt (1973) obtained similar results between 1939 and 1954 as they concluded that a positive

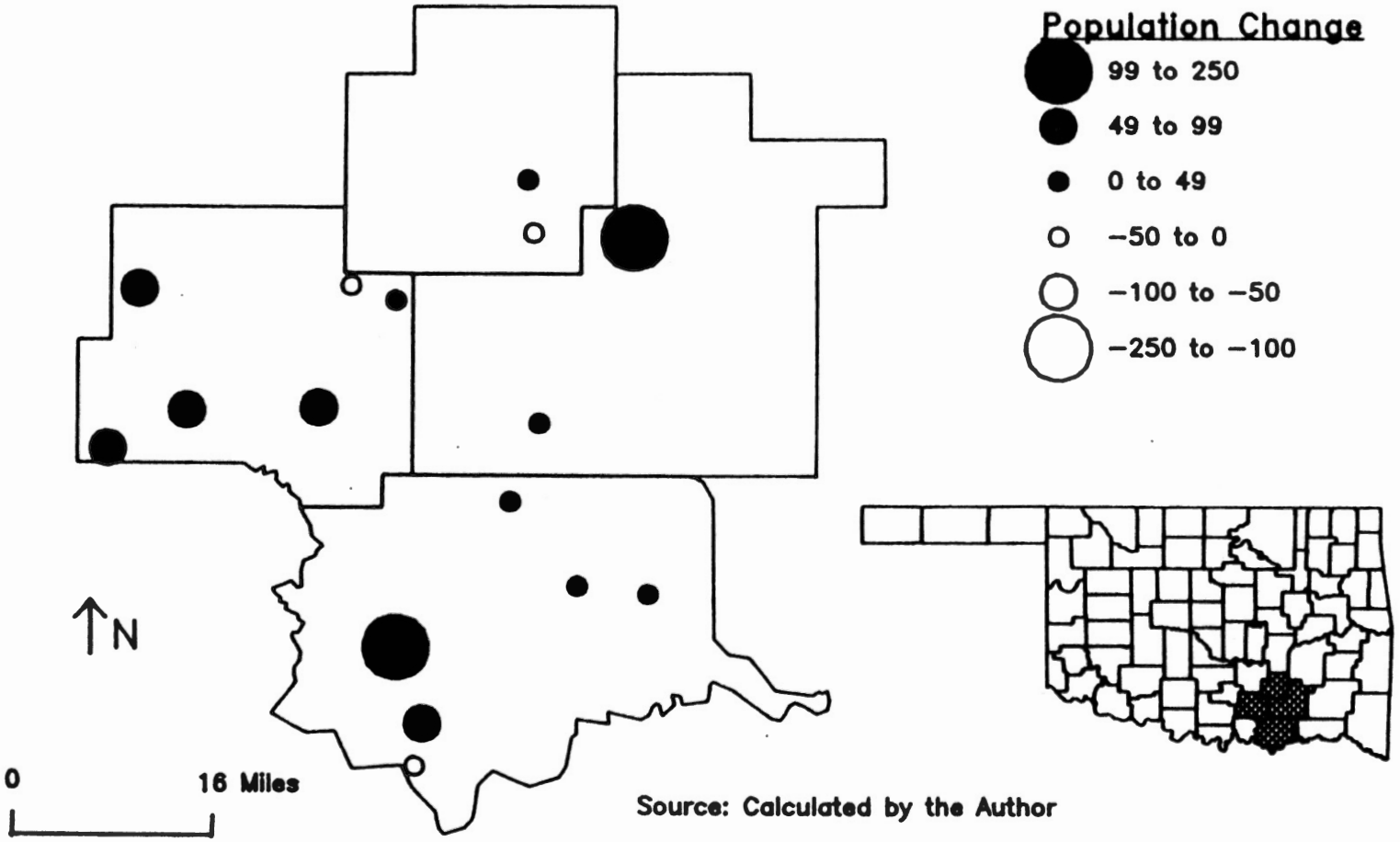

Figure 24. Population Change in the Small Towns 1960-1990

relationship existed between change in the number of functions and population change. They also acquired a positive relationship between 1954 and 1970, but the Wisconsin villages they surveyed declined in both population and functional offerings and did not show any signs of a population reversal as of 1970. However, there is a 20 year difference between their study and the present study and now Wisconsin villages could be growing just as much as the Oklahoma villages depending on the economy and population structure of those Wisconsin communities.

Relationship Between Distance from Urban Places and Functional Change

Distance from urban places also may have an effect on the number of functions a rural trade center offers because if the trade center is located only a few miles from an urban center and has good access to the larger center then it is likely that most of its residents will travel there to patronize businesses that have lower prices and a better selection of goods. Geographers refer to this concept as the idea of threshold and range of goods and services which was first used by Christaller in his study of central places in Germany (Baskin 1966; King 1984). The range is defined as the farthest distance the dispersed population was willing to travel in order to purchase a good offered at a place and threshold is the minimum level of demand needed to

ensure the offering of a good or service will be profitable (Baskin 1966). Therefore, it could be expected that as distance from places above 2,500 in population decreases then the number of functions in the rural trade center would also decrease because the range of several functions would increase which would decrease the threshold of demand for these particular goods and services.

Figure 25 shows that many of the trade centers were isolated from larger centers in 1930. Two factors including population size of three towns which were above 2500 in population in 1960 or 1990 but were below this population size in 1930, and road conditions. In 1930 paved roads were nearly absent and dirt roads to these urban centers were rarely used because of their poor condition.

Table VI shows how far each trade center is from an urban center for 1930, 1960, and 1990 and compares how the number of functions has changed as the distance from these larger centers has changed. In 1930, 25 percent of the towns were 30 miles or more from an urban center, 31 percent of the trade centers were between 20 and 29 miles from an urban center, 31 percent were between 10 and 19 miles from an urban center and 13 percent were between zero and 9 miles from an urban center. By 1960, there were zero trade centers 30 miles or more from an urban center, 13 percent of the trade centers were from 20 to 29 miles from an urban center, 50 percent were from 10 to 19 miles from an urban center, and 37 percent were from zero to 9 miles from an

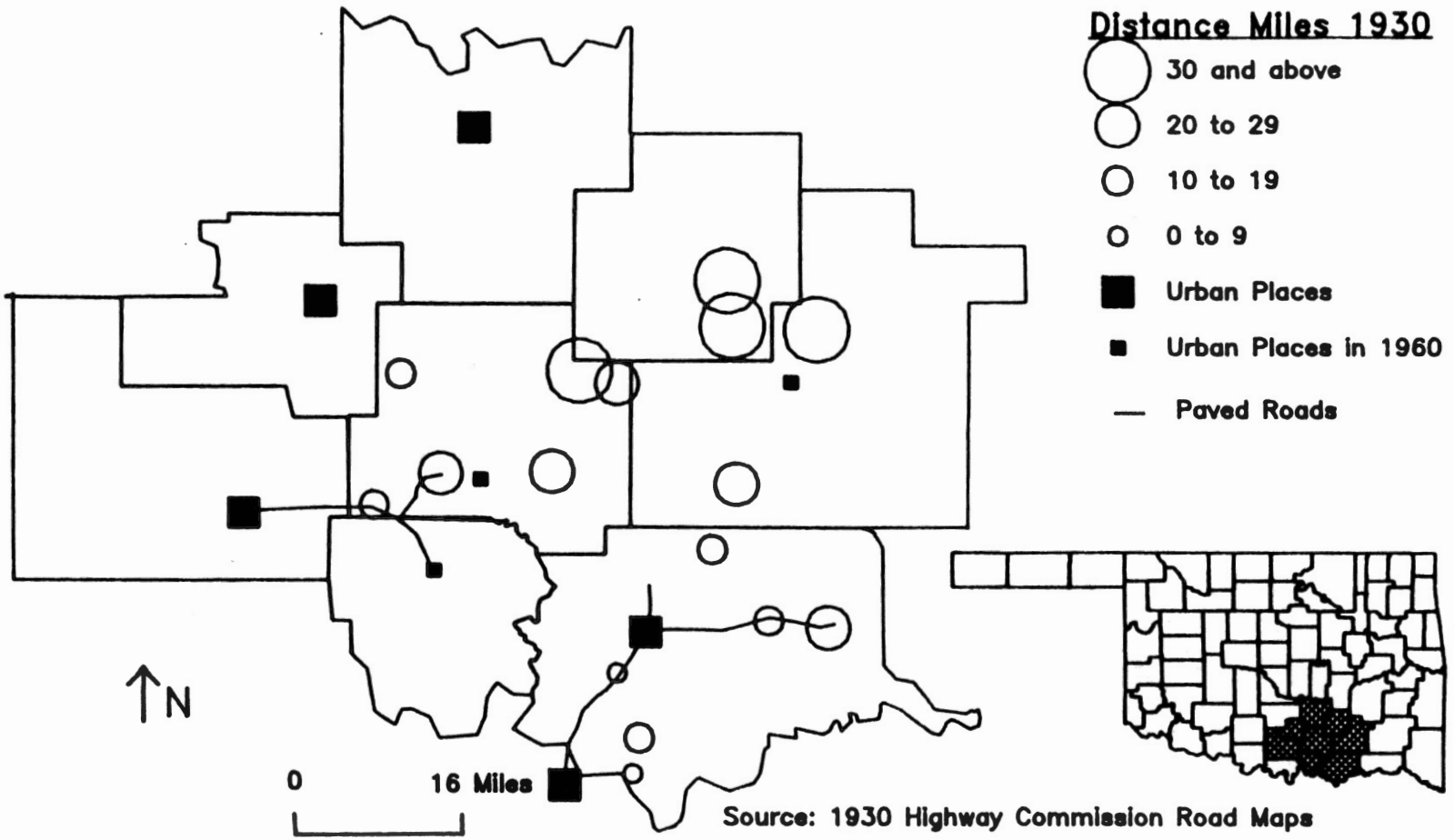

Figure 25. Small Town Distance from Urban Centers 1930

TABLE VI

RELATIONSHIP BETWEEN DISTANCE FROM URBAN PLACES AND THE NUMBER OF FUNCTIONS

TOWN	DIST1930 IN MILES	FUCT 1930	DIST1960 IN MILES	FUCT 1960	DIST1990 IN MILES	FUCT 1990
Stringtown	39	13	7	7	7	14
Lehigh	38	10	8	3	8	6
Bromide	36	11	20	3	22	2
Coalgate	32	30	14	32	14	35
Wapanucka	28	18	17	11	17	17
Milburn	25	18	7	7	8	16
Ravia	25	13	3	5	4	6
Bennington	21	21	21	9	20	8
Caney	20	10	11	8	12	8
Mannsville	17	14	11	4	9	12
Hendrix	8	3	8	6	8	9
Bokchito	14	22	14	17	13	23
Mill Creek	13	20	13	7	13	6
Caddo	13	28	13	21	12	23
Achille	10	13	10	8	10	13
Calera	5	10	5	10	4	26

Sources: 1930, 1960, 1990 Oklahoma Department of Highways Official Road Maps
1930 Bradsteets Book of Commercial Ratings
1960 and 1990 Dun and Bradstreets Book of Commercial Ratings
1990 Southwestern Bell Telephone Directories

urban center. Also, there was four times more paved road mileage in 1960 in the study area than in 1930, increasing from 61 miles in 1930 to 329 miles in 1960 (Department of Transportation Road Maps 1930, 1960). There also were three more urban centers in or near the study area (Table VI and Figure 26).

In 1990, no towns were 30 or more miles from an urban center, 13 percent were between 20 and 29 miles from an urban center, 44 percent were from 10 to 19 miles from an urban center, and 44 percent of the trade centers were between zero and 9 miles from an urban center (Table VI and Figure 27). Also in 1990, the study area had 48 percent more paved road mileage, increasing from 329 miles in 1960 to 486 miles by 1990. Most of this increased mileage can be attributed to the development of four-lane highways which were built between Denison, Texas, and McAlester, Oklahoma, between 1960 and 1990 (Department of Highways Map 1960 and 1989). The four-lane highway also decreased the distance between Durant and Calera, making it a bedroom community of Durant.

Table VII shows the relationship between percent change in the distance from urban centers and change in the number of functions in the rural trade centers. Between 1930 and 1960, 44 percent of the trade centers experienced a decrease in the distance from an urban center and also experienced a 20 to a 73 percent decrease in the number of functions they offered as people gained better access to the larger

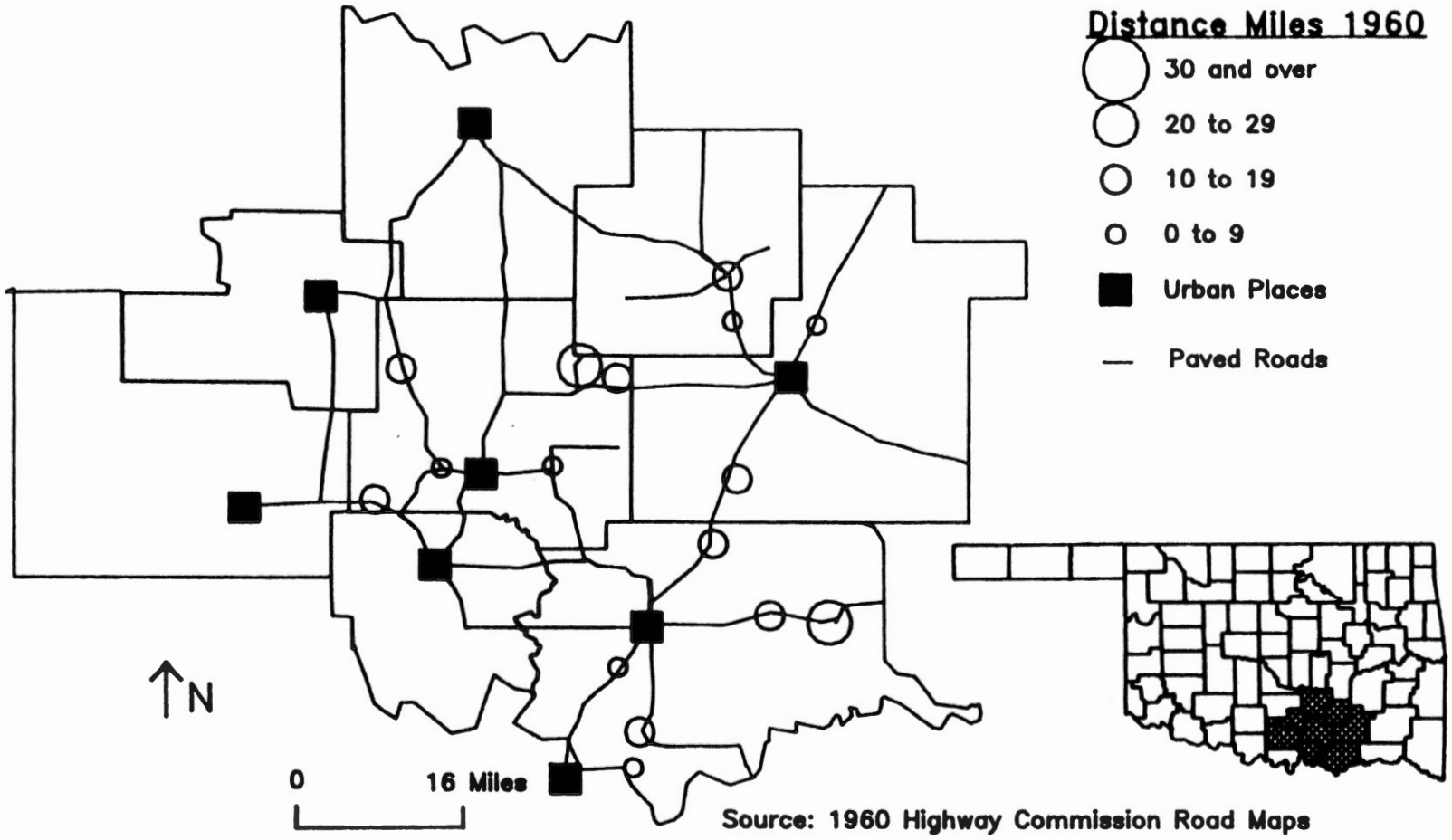

Figure 26. Small Town Distance from Urban Centers 1960

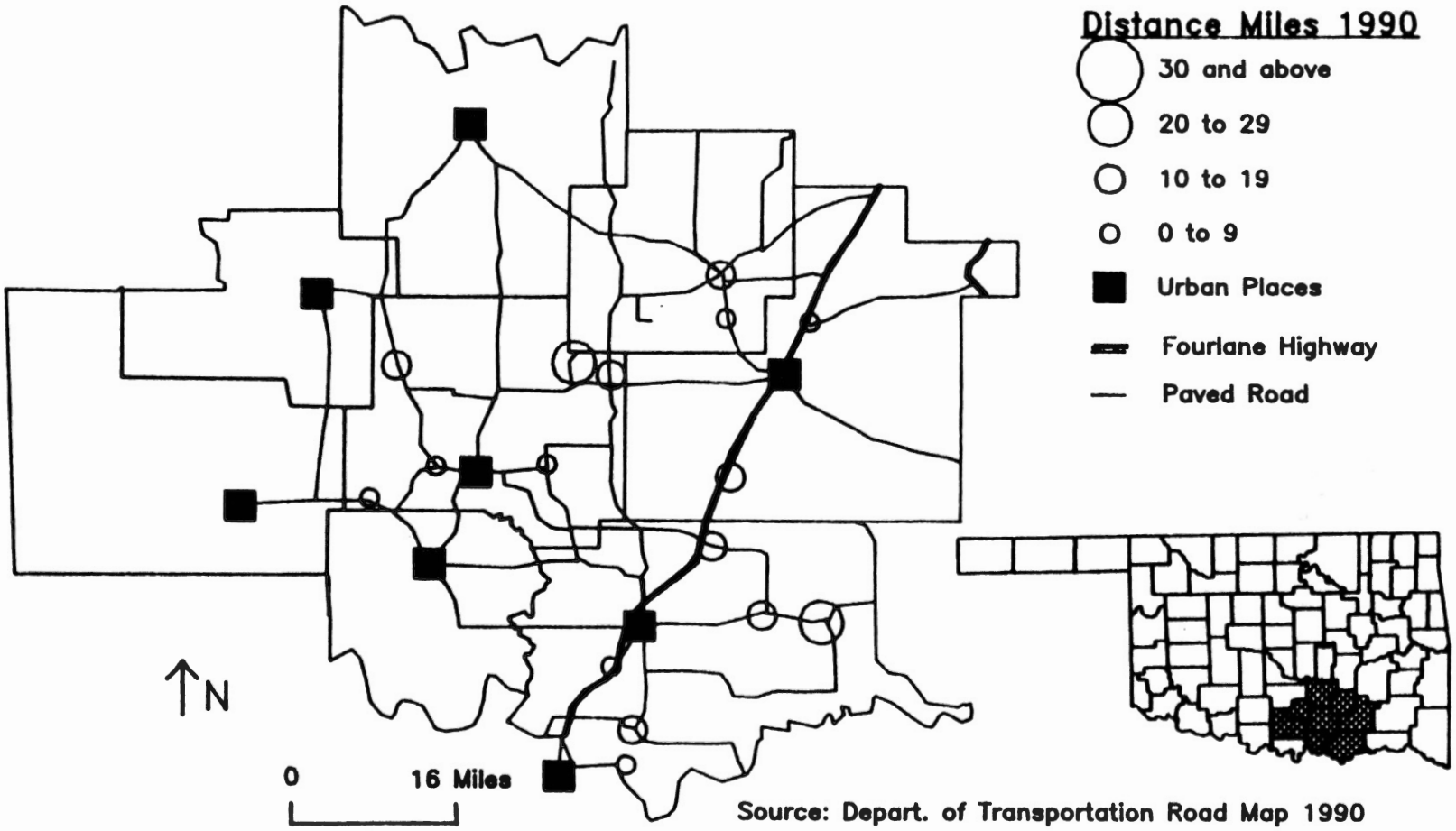

Figure 27. Small Town Distance from Urban Centers 1990

TABLE VII

RELATIONSHIP BETWEEN CHANGE IN DISTANCE FROM URBAN PLACES AND CHANGE IN THE NUMBER OF FUNCTIONS FROM 1930 to 1960 and 1960 to 1990

	1930-1960 PERCENT			1960-1990 PERCENT	
TOWN	DISCHG	FUCTCHG	TOWN	DISCHG	FUCTCHG
Ravia	-88	-62	Calera	-20	160
Stringtown	-82	-46	Mannsville	-18	200
Lehigh	-79	-70	Caddo	-08	10
Milburn	-72	-61	Bokchito	-07	35
Coalgate	-56	7	Bennington	-05	-11
Caney	-45	-20	Stringtown	0	100
Bromide	-44	-73	Lehigh	0	100
Wapanucka	-39	-39	Achille	0	63
Mannsville	0	-71	Wapanucka	0	55
Mill Creek	0	-65	Hendrix	0	50
Bennington	0	-57	Coalgate	0	9
Achille	0	-38	Mill Creek	0	-14
Caddo	0	-25	Caney	09	0
Bokchito	0	-23	Bromide	10	-33
Calera	0	0	Milburn	14	129
Hendrix	0	100	Ravia	33	20

Source: Calculated by the Author

markets. These changes indicated a positive relationship between the two variables or that a decrease in distance was a definite factor influencing a decrease in the number of functions offered in 44 percent of the trade centers.

Coalgate had a decrease in distance from an urban center but an increase in the number of functions offered indicating a negative relationship in 6 percent of the trade centers. This may have happened because businesses from these urban centers created branch businesses in Coalgate to take advantage of Coalgate's relatively large population and larger market area (Table VII).

Thirty-seven percent of the trade centers remained at the same distance they were in 1930 but experienced a decrease in the number of functions offered. Hendrix, for example, remained at the same distance but increased 100 percent in the number of functions offered, while Calera remained at the same distance and was unchanged in its number of functions. These changes indicated that there was no relationship between distance from an urban center and the number of functions in 50 percent of the trade centers and that other variables were responsible for the decrease in their functional basis (Table VII).

Between 1960 and 1990, 13 percent of the trade centers increased in their distance from urban centers, due to modifications in the road network, and experienced an increase in the number of functions. Bennington decreased in distance from an urban center with a corresponding

decrease in its number of functions. These changes indicated a positive relationship in 19 percent of the trade centers or that changes in distance caused the same type of change in the number of functions offered by these four trade centers (Table VII).

Twenty-five percent of the towns decreased in distance from an urban center but experienced an increase in the number of functions offered. Yet, Bromide increased in distance from an urban center but decreased in the number of functions offered. These changes indicated a negative relationship in 31 percent of the trade centers because change in distance caused the opposite change in the number of functions (Table VII).

Thirty-eight percent of the towns remained at the same distance as in 1960 but increased in their number of functions. Mill Creek, however, remained at the same distance but decreased in its number of functions, while Caney increased in its distance from an urban place but remained unchanged in its number of functions. These changes indicated no relationship between distance from an urban center and functional change in 50 percent of the trade centers and that other variables were responsible for the change in the number of functions (Table VII).

Therefore, between 1930 and 1960 there was a positive relationship between distance from urban centers and changes in the functional basis of the rural trade centers in 44 percent of the towns and a negative relationship in 6

percent of the towns. Whereas, between 1960 and 1990 there was a positive relationship between the two variables in 19 percent of the towns and a negative relationship in 31 percent of the towns.

Consequently, it could be concluded that a change in the distance from an urban center tended to decrease the number of functions from 1930 to 1960. One explanation for this is that as rural communities came closer to larger urban centers and as road quality improved most of their population commuted to the larger centers to shop because of lower prices and a better selection of goods. However, the opposite happened from 1960 to 1990 when a decrease in the distance from an urban center accompanied an increase in the number of functions offered. Two possible reasons is that these rural trade centers were attracting businesses which tended to be branch businesses from larger communities and convenience outlets which serve a mobile population (Dun and Bradstreet Book of Commercial Ratings 1960, 1990).

A different way of examining at the above results is by using the concept of threshold and range of goods and services. In 1930, the range of many goods and services was small which increased the demand for many goods and service to be offered in the smallest trade centers because the rural population was large and was unwilling to travel to urban centers because of poor road conditions. By 1960, the range of many goods and services increased due to better transportation networks and the declining rural population,

which attracted many people to the larger trade centers and decreased the demand for many goods and services in the smaller trade center putting many functions out of business. However, by 1990 the threshold of many functions increased because of the innovation of four-lane highways which contributed to the population increase in the rural countryside where people lived and commuted to work. They demanded the conveniences such as convenience stores, auto-garages, cafes, groceries, and branch banks which all situated along the main roads and the four-lane highways to service the mobile population. These centers also became retirement places for some of the rural farmers who used mom and pop grocery stores, cafes, pool halls, or taverns for socialization purposes.

Conclusion

This chapter examined how the number of functions have changed in 16 rural trade centers in the study area between 1930, 1960, and 1990 due to percent population change, population size of the trade centers, and their distance from places of more than 2500 in population. The conclusion could be drawn that these three factors may be strong indicators of the viability of functions in the rural trade centers of Oklahoma and that small town functions are indeed surviving in the midst of changing demographics, technology, and the economic structure of rural America.

CHAPTER V

CHANGES IN TYPES OF FUNCTIONS

Introduction

Several studies (Chittick 1955, Stafford 1963, Thomas 1960, and Davidson 1990) claim the primary purpose of the rural trade center is to supply goods and services to the surrounding population and that the types of functions offered illustrate how the purpose changes from one trade center to another. For instance, Davidson (1990) explored several Texas small towns and found that there were three different types of trade centers, including farming or ranching, recreation-retirement, or transition to retirement, which all had different types of functions that supplied goods and services to a particular type of population. Consequently, the types of functions offered by a trade center can show what type of population the trade center is serving as well as how it is evolving in its structure and purpose due to the changing economy, technology, demographics, and human settlement patterns of the surrounding countryside.

Johansen and Fuguitt (1984) explored how the types of functions changed in relation to percentage of places which offered each activity and found that most activities had

declined in their frequency of occurrence from 1950 to 1970. The most common types of functions such as groceries, hardware stores, clothing stores, farm implements, and eating places declined the most, while the least common activities increased such as electrical repair, radio and TV dealers, florists, sporting goods, and farm supply stores. It was postulated that many of these commercial activities increased because of increased mechanization, leisure time, and disposable income, while the most common functions decreased due to increased competition with larger cities and because the population had become more mobile with the creation of four-lane highways and faster automobiles during the study period.

Olson (1951) also analyzed how the types of functions have changed because of changing farm structure, land utilization patterns, and transportation structure of the surrounding hinterland. He does not mention, however, which functions are appearing and which are disappearing due to changes in these three variables but only eludes to the fact that the types of functions in Washington, Oklahoma, have changed because of a decrease in cotton production, a smaller number of farms, larger farm size, decreasing farm population, and increased mileage and quality of highways. Therefore, this chapter explores how the types of functions have changed due to changing farm structure, land utilization patterns, and transportation systems within the study area. It looks at how the types of functions have

changed in relation to increased leisure or recreation time and increased technology in order to determine if the purpose of these trade centers is changing.

A total of 68 functions were common in either 1930, 1960, or 1990 (Table VIII). These functions include retail, service, light-industrial, and agricultural processing functions which may relate to changes in the rural economy and transportation systems of the study area. Some functions were deleted because they were not listed by Dun and Bradstreet, such as railroad depots, barbers, beauty shops, insurance agencies, and realty agencies. These particular functions are discussed in the subsequent chapter. Other functions were included with a more common counterpart and are listed after their common counterpart in Table VIII. The next two sections consider how farm structure, land utilization patterns, and the transportation networks of the study area have changed between 1930 and 1960 or 1960 and 1990. Then, the final section of the chapter describes how these variables have affected the types of functions offered by the rural trade centers.

Changes in Farm Structure and Land Utilization

Changes in the farm structure of the study area may have an effect on the types of functions offered by these rural trade centers because the functional basis of many of these towns is dependent on the support of the rural

TABLE VIII

TYPES OF FUNCTIONS OFFERED BY AT LEAST ONE TOWN IN EITHER 1930, 1960, or 1990

Type Of Function	Type of Function
1. Grocery	36. Jewelry
2. General Store	37. Trucking
3. Automobile Repair	38. Sawmill
4. Cotton: Gins, Seed Mills	39. Harness Shop
5. Drug Store: Notions, Cosmetics	40. Photographer
6. Dry Goods	41. SportingGds.
7. Cafe or Resturant	42. Ice Retail
8. Coal Retail	43. Gas Retail
9. Post Office	44. Depart. Store
10. Hardware	45. Variety Store
11. Service Station	46. Applnce. Rep.
12. Lumber: Building Material Carpet, Cabinets	47. Camping
13. Blacksmith	48. Florist
14. Meat Market: Poultry	49. Meat Locker
15. Clothing: Shoes, Millinery	50. Creamery
16. Furniture: Appliances, Drapes Upholstery, Electronics	51. Tavern
17. Feed or Farm Supplies: Seed	52. Fertilizer
18. Bank	53. Antiques or Pawn Shop
19. Oil Retail	54. Gifts: Crafts
20. Confectionary: Soda Fountain	55. Convenience or Thrift Store
21. Grist Mill: Miller	56. Livestock Farm or Ranch
22. Grain and Hay: Processing, Retail	57. Welding
23. Farm Implements: Tractors, Lawn Mowers, Livestock Trailers	58. Auctioneers
24. Produce or Fruit Retail	59. Metal Builds
25. Auto Dealership	60. Liquor Store
26. Printing or Publishing	61. Pool Hall
27. Shoe Repair	62. Book Store
28. Construction: Crushed Rock, Plumber Well Drilling, Excavation	63. Peanut Goods
29. Mortuary	64. Mobile Homes
30. Auto Supplies	65. Cable TV
31. Tailor	66. Office Supp.
32. Tinner	67. Music Store
33. Telephone	68. Toy Store
34. Bakery	
35. Motel or Hotel	

Source: 1930 Bradstreets Book of Commercial Ratings
1960 and 1990 Dun and Bradstreets Book of Commercial Ratings
1990 Southwestern Bell Telephone Directories

residents. Table IX shows that there was a drastic decrease in the number of farms per county between 1930 and 1990 and a significant increase in farm size. This indicates that farms have been consolidating and larger farms have become more popular as the economy of the surrounding hinterland has changed. The population outside of the incorporated places (which was figured by subtracting the population of all incorporated places from the county population) decreased from 1930 to 1960 in all four counties indicating a consequent decrease in the number of farm residents patronizing the rural trade centers. Then, from 1960 to 1990 the population outside of the incorporated places increased indicating more people were moving back to the rural areas and were patronizing local businesses (Table IX).

Farm tenancy also decreased dramatically from 1930 to 1960 and from 1960 to 1990, indicating that less people were working on farms. Full ownership of farms decreased between 1930 and 1960 but increased between 1960 and 1990, suggesting that people were leaving the rural countryside between 1930 and 1960 but were moving back between 1960 and 1990, possibly because of increased mobility. Increased mechanization was another trend, with 20 times more tractors in the study area in 1960 than in 1930 and two times more tractors in 1990 than in 1960 (Table IX). This contributed to the decrease in the number of farms because the more equipment a farmer has the more acreage he can cultivate.

TABLE IX

CHANGE IN THE STRUCTURE OF FARMS IN THE STUDY AREA

County	No. of Farms 1930	No. of Farms 1960	Chang in No. Farms 1930-1960	No. of Farms 1987	Chang in No. Farms 1960-1990
Atoka	1860	1058	-43	942	-10
Bryan	3767	1518	-60	1388	-09
Coal	1414	620	-56	580	-06
Johnston	1523	680	-55	539	-21

County	POP1930 Outside Incorp. Places	POP1960 Outside Incorp. Places	PERCHG IN POP Outside Inc. Pls.	POP1980 Outside Incorp. Places	PERCHANGE IN POP Outside Incp. Pls.
Atoka	7664	6933	-10	7731	12
Bryan	21483	10049	-53	12574	25
Coal	8593	3061	-64	2870	-6
Johnston	9328	4294	-54	4630	8

County	Average Farmsize 1930 (Acres)	Average Farmsize 1960 (Acres)	Percent Chang in FarmSize 1930-1960	Average FarmSize 1987 (Acres)	Percent Change in FarmSize 1960-1990
Atoka	145	393	169	410	4
Bryan	113	292	158	299	2
Coal	159	450	183	465	3
Johnston	208	459	120	600	31

County	No. of Fms with Tenants 1930	No. of Fms with Tenants 1960	PerChg in Farm Tenancy 1930-1960	No. of Fms with Tenants 1987	PerChg in Farm Tenancy 1960-1987
Atoka	1325	79	-94	54	-32
Bryan	2808	209	-93	124	-41
Coal	1012	53	-94	28	-47
Johnston	1126	80	-92	47	-41

TABLE IX (continued)

County	No. of Fms with Owners 1930	No. of Fms with Owners 1960	PerChg in Farm Owners 1930-1960	No. of Fms with Owners 1987	PerChg in Farm Owners 1960-1987
Atoka	413	228	-45	644	182
Bryan	601	500	-16	903	81
Coal	249	153	-39	390	154
Johnston	252	177	-30	341	92

County	No. of Tractors on Farms in 1930	No. of Tractors on Farms in 1960	PerChg No. of Tractors 1930-1960	No. of Tractors on Farms in 1987	PerChg No. of Tractors 1960-1987
Atoka	21	617	2838	1244	102
Bryan	92	1486	1515	1883	27
Coal	34	429	1162	767	79
Johnston	40	505	1163	780	54

Source: 1930 Census of Population
1959 and 1987 Census of Agriculture

It also enhanced his competitive edge vis-a-vis farmers who could not afford the necessary equipment (McMillan 1949). Therefore, farm structure has changed from small, labor-intensive, tenant owned farms in 1930 to large, mechanized, owner operated farms by 1990.

Land utilization patterns also changed dramatically between 1930 and 1990. The acreage of cotton, corn, peanuts, and oats decreased significantly over the entire time period while hay acreage increased (Table X). Wheat acreage increased between 1930 and 1960, but decreased in Atoka and Johnston counties and increased in Bryan and Coal Counties between 1960 and 1990. Pasture acreage also increased between 1930 and 1960, but decreased in Atoka and Coal Counties and increased in Bryan and Johnston Counties between 1960 and 1990 (Table X).

The decline in cotton, corn, and oats is related to severe soil erosion, drought, low prices, as well as the boll weevil and other insect pests during the 1930s and 1940s (LaGrone 1950). Moreover, government programs subsidized farmers while they reduced the acreage planted in these particular crops. These programs encouraged better tillage and soil conservation practices through the use of contour plowing, terracing, and the planting of crops that would increase soil fertility. Consequently, farmers decreased their acreage of cotton, corn, and oats, planted wheat and hay, or allowed the land to return to grasslands. These new activities decreased soil erosion and promoted

TABLE X

CHANGES IN AGRICULTURAL LAND UTILIZATION
IN THE STUDY AREA

County	Cotton Acreage 1930	Cotton Acreage 1960	PerChg CotAcg 1930-60	Cotton Acreage 1987	PerChg CotAcg 1960-87
Atoka	13518	1190	-91	0	-100
Bryan	65773	10180	-85	0	-100
Coal	15023	2751	-81	0	-100
Johnston	20461	2877	-86	0	-100

County	Corn Acreage 1930	Corn Acreage 1960	PerChg CrnAcg 1930-60	Corn Acreage 1987	PerChg CrnAcg 1960-87
Atoka	37770	2432	-94	499	-79
Bryan	72694	10398	-86	1394	-86
Coal	27741	945	-97	0	-100
Johnston	38992	2276	-94	151	-93

County	Oats Acreage 1930	Oats Acreage 1960	PerChg OatsAcg 1930-60	Oats Acreage 1987	PerChg OatsAcg 1960-87
Atoka	4954	1114	-78	105	-91
Bryan	32456	4896	-85	765	-84
Coal	6657	1612	-76	263	-84
Johnston	4545	2106	-54	118	-94

County	Peanut Acreage 1930	Peanut Acreage 1960	PerChg PenAcg 1930-60	Peanut Acreage 1987	PerChg PenAcg 1960-87
Atoka	5251	3775	-28	2910	-23
Bryan	29946	15023	-49	11618	-22
Coal	3627	510	-86	0	-100
Johnston	4351	2857	-34	1868	-35

TABLE X (Continued)

County	Wheat Acreage 1930	Wheat Acreage 1960	PerChg WhtAcg 1930-60	Wheat Acreage 1987	PerChg WhtAcg 1960-87
Atoka	57	93	63	0	-100
Bryan	271	3984	1370	8707	119
Coal	183	341	86	5318	1460
Johnston	818	1358	66	1175	-13

County	Hay Acreage 1930	Hay Acreage 1960	PerChg HayAcg 1930-60	Hay Acreage 1987	PerChg HayAcg 1960-87
Atoka	5385	14030	161	28143	100
Bryan	7515	25525	240	47117	84
Coal	5056	11951	136	20872	75
Johnston	6663	12745	91	18345	44

County	Pasture Acreage 1930	Pasture Acreage 1960	PerChg PastAcg 1930-60	Pasture Acreage 1987	PerChg PastAcg 1960-87
Atoka	161	325	102	318	-02
Bryan	143	295	106	302	02
Coal	125	248	98	229	-08
Johnston	202	253	25	283	12

County	Cropland Harvested Acrg 1930	Cropland Harvested Acrg 1960	PerChg Cropland 1930-60	Cropland Harvested Acrg 1987	PerChg Cropland 1960-87
Atoka	73000	25000	-66	32000	28
Bryan	222000	78000	-65	73000	-06
Coal	65000	23000	-64	24000	04
Johnston	85000	28000	-67	22000	-21

TABLE X (continued)

County	No. Farms Reporting Cows 1930	No. Farms Reporting Cows 1960	PerChg CowFms 1930-60	No. Farms Reporting Cows 1987	PerChg CowFms 1960-87
Atoka	925	1531	65	854	-44
Bryan	1458	2173	49	1210	-44
Coal	654	922	41	555	-40
Johnston	711	988	39	509	-48

County	No. Farms Reporting Dairy Cows 1930	No. Farms Reporting Dairy Cows 1960	PerChg Dairy Farms 1930-60	No. Farms Reporting Dairy Cows 1987	PerChg Dairy Farms 1960-87
Atoka	NA	555	NA	45	-92
Bryan	NA	758	NA	48	-94
Coal	NA	332	NA	42	-87
Johnston	NA	352	NA	42	-88

Source: 1930, 1959, 1987 Census of Agriculture
*NA means not available from Census materials

better use of the land (Dale 1948). Then, between 1938 and 1960 the number of farms growing cotton, corn, and oats decreased even more because of increased mechanization, improved irrigation methods, and fertilization techniques. These innovations increased farm size and contributed to a shift in the primary cotton region to southwestern Oklahoma where irrigation methods substituted for the lower amounts of rainfall and where soil erosion was combated by improved farming techniques (Webb 1963). Between 1960 and 1990 mechanization increased as the number of farms decreased and average farm size increased, indicating farmers were using more equipment for less intensive crops such as wheat and hay (Table X). Therefore, crop production decreased drastically in the study area because of government programs that reduced soil erosion and the spread of the boll weevil but increased farm mechanization. Consequently, these programs helped to increase farm size and shifted the economy to other agricultural activities.

One of these new agricultural activities was livestock production, which increased from 1930 to 1960. In many cases, farms were converted into ranches or pasture as crop production was reduced (Table X). The number of cattle increased an average of 45 percent in the four county area between 1930 and 1960, but decreased from 1960 to 1990 as dairy production declined (Table X). Therefore, between 1930 and 1990 the cotton and corn crops were replaced by hay, wheat, and livestock production. This contributed to an

increase in farm size and a decrease in the rural population, which mirror Olson's (1951) findings in Washington, Oklahoma.

Changes in the Transportation Structure

Changes in transportation, especially an increase in the number of motor vehicles and increased paved roads, also affected the functional basis of rural centers. People were more mobile and it was easier to travel to larger trade centers to shop, work, or conduct business. In 1930, only Bryan and Johnston counties had paved roads (Figure 28), with 49 percent and 20 percent, respectively, of their roads paved (Table XI).

By 1960, however, every county had paved road mileage (Figure 29) with between 60 and 90 percent of the roads being paved (Table XI). There was a 625 percent increase in the mileage of paved roads in the four county area, increasing from 52 miles in 1930 to 377 miles in 1960 (Table XI). This improved access to urban centers and made the rural areas less isolated and more competitive with the urban population for the sale of goods and services. This may also have been one of the factors responsible for the decrease in the number of functions in the rural trade centers between 1930 and 1960. People could easily travel to trade centers which offered the best prices and the best selection of goods and services, no matter if it were the same size trade center as their home town or larger. This

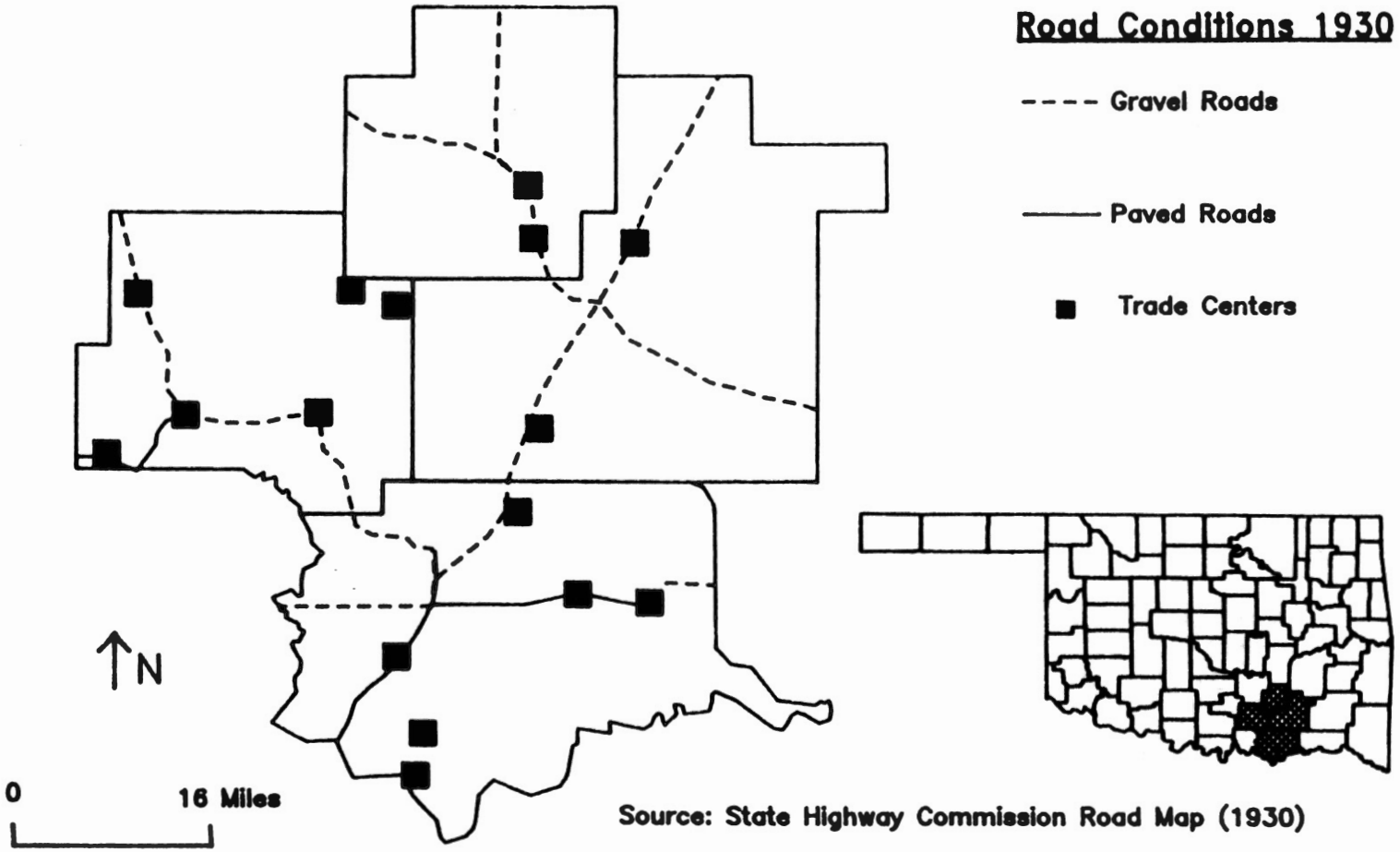

Figure 28. Road Conditions in 1930

TABLE XI

CHANGES IN TRANSPORTATION IN THE STUDY AREA
FROM 1930 to 1960 and 1960 to 1990

COUNTY	TOTAL ROAD MILEAGE 1930	PERCENT PAVED ROAD MILEAGE 2-LANE 1930	PERCENT GRAVEL ROAD MILEAGE 1930
ATOKA	76	0	100
BRYAN	81	49	51
COAL	49	0	100
JOHNSTON	61	20	80
TOTAL	267	19	81

COUNTY	TOTAL ROAD MILEAGE 1960	PERCENT PAVED ROAD MILEAGE 2-LANE 1960	PERCENT GRAVEL ROAD MILEAGE 1960
ATOKA	88	91	9
BRYAN	157	78	22
COAL	108	60	40
JOHNSTON	147	74	26
TOTAL	500	75	25

COUNTY	TOTAL ROAD MILEAGE 1990	PERCENT PAVED ROAD MILEAGE 2-LANE 1990	PERCENT GRAVEL ROAD MILEAGE 1990	PERCENT PAVED ROAD MILEAGE 4-LANE 1990
ATOKA	114	64	0	36
BRYAN	198	84	0	16
COAL	110	100	0	0
JOHNSTON	147	100	0	0
TOTAL	569	87	0	13

TABLE XI (continued)

COUNTY	PAVED ROAD MILEAGE 1930	PAVED ROAD MILEAGE 1960	PERCHG PAVEDRD MIL3060	PAVED ROAD MILEAGE 1990	PERCHG PAVEDRD MIL6090
ATOKA	0	80	NA	114	43
BRYAN	39	123	215	198	61
COAL	0	65	NA	110	69
JOHNSTON	13	109	738	147	35
TOTAL	52	377	625	569	51

Source: Oklahoma State Highway Commission Report (1930)
Oklahoma State Highway Commission Road Map (1960)
Oklahoma Department of Transportation Map (1989)
*NA means not applicable

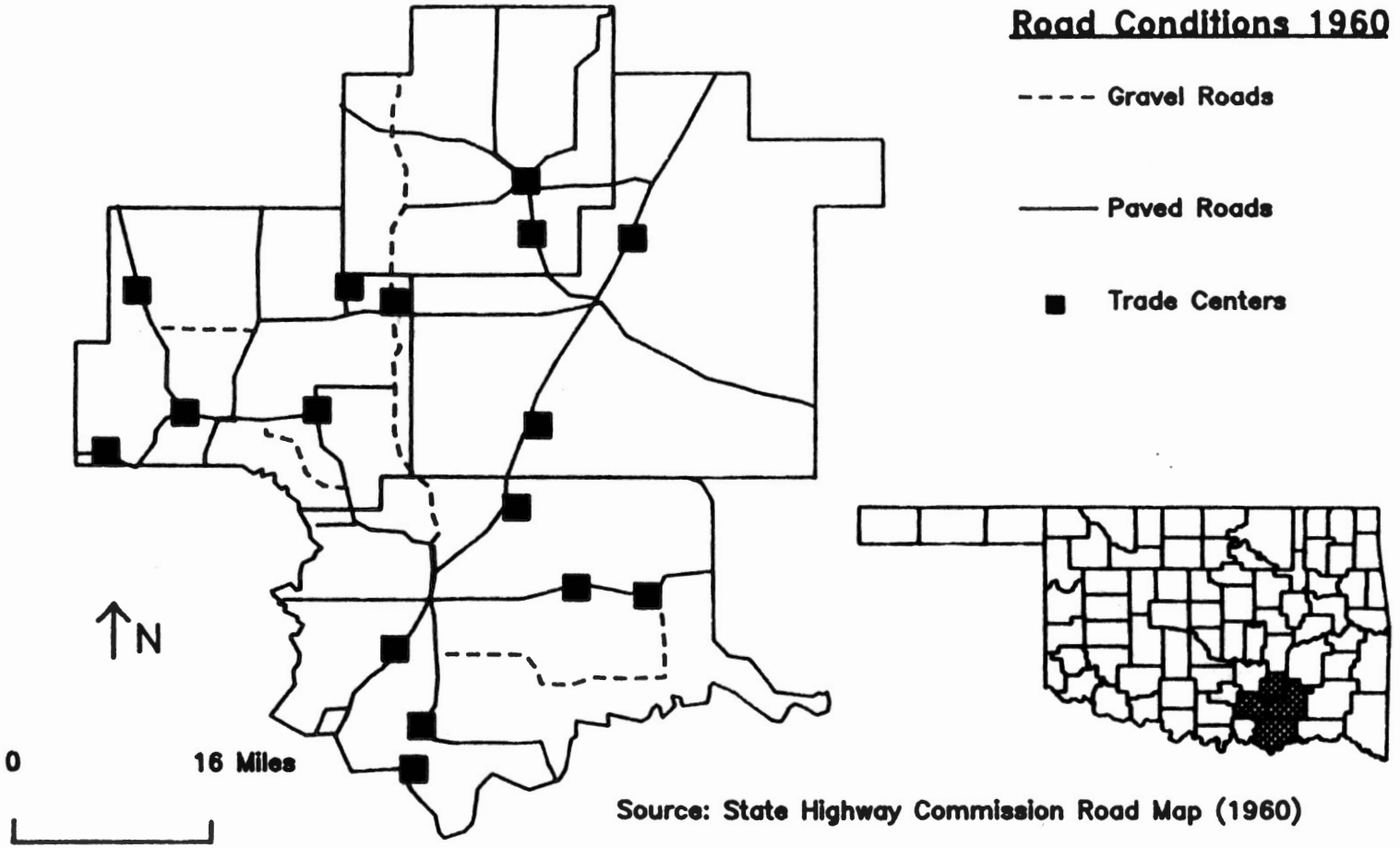

Figure 29. Road Conditions in 1960

is also related to the concept of threshold and range (Baskin 1966). As the distance from urban centers decreased, the range of many goods and services increased because people were more willing to travel to larger centers for their goods and services while the threshold decreased because the demand for these functions was no longer eminent. Also, between 1930 and 1960 the number of automobiles registered per county increased 83 percent and the number of farm trucks increased 305 percent (Table XII). This resulted in a decrease in the number of functions in some of the rural trade centers because more people were traveling to competing rural trade centers or urban places to purchase their goods (Olson 1951 and Johansen and Fuguitt 1984).

In 1990, between 64 and 100 percent of the total highway mileage was two-laned paved highways in the four county area. Atoka and Bryan counties also had 36 and 16 percent of their road mileage as four-laned paved highways (Table XI). Better highway availability (Figure 30) was also indicated by a 51 percent increase in the mileage of paved roads in the study area between 1960 and 1990, increasing from 377 miles in 1960 to 559 miles in 1990 (Table XI). This may also have affected the functional basis of the rural trade centers by making people even more mobile and by encouraging functions, such as service stations, restaurants, and convenience stores to locate next to the four-lane highway instead of on main street.

TABLE XII

CHANGE IN THE NUMBER OF FARM TRUCKS
AND CARS REGISTERED PER COUNTY

COUNTY	No. of Farm Trucks Registered 1930	No. of Farm Trks Registered 1960	PerChg No. of FmTrks 1930-60	No. of Farm Trks Registered 1990	PerChg No. of FmTrks 1960-90
ATOKA	217	1224	464	1040	-15
BRYAN	623	2013	223	2062	2
COAL	129	647	402	463	-28
JOHNSTON	215	913	325	533	-29
TOTAL	1184	4797	305	4098	-15

COUNTY	No. of Cars Registered 1930	No. of Cars Registered 1960	PerChg No. of Cars 1930-60	No. of Cars Registered 1990	PerChg No. of Cars 1960-90
ATOKA	1094	2303	111	7139	210
BRYAN	4009	8416	110	23081	174
COAL	1305	1445	11	3408	136
JOHNSTON	1429	2176	53	5459	151
TOTAL	7837	14340	83	39087	173

Source: 1930 Report of the State Highway Commission
1960 and 1987 Reports of the Oklahoma Tax Commission

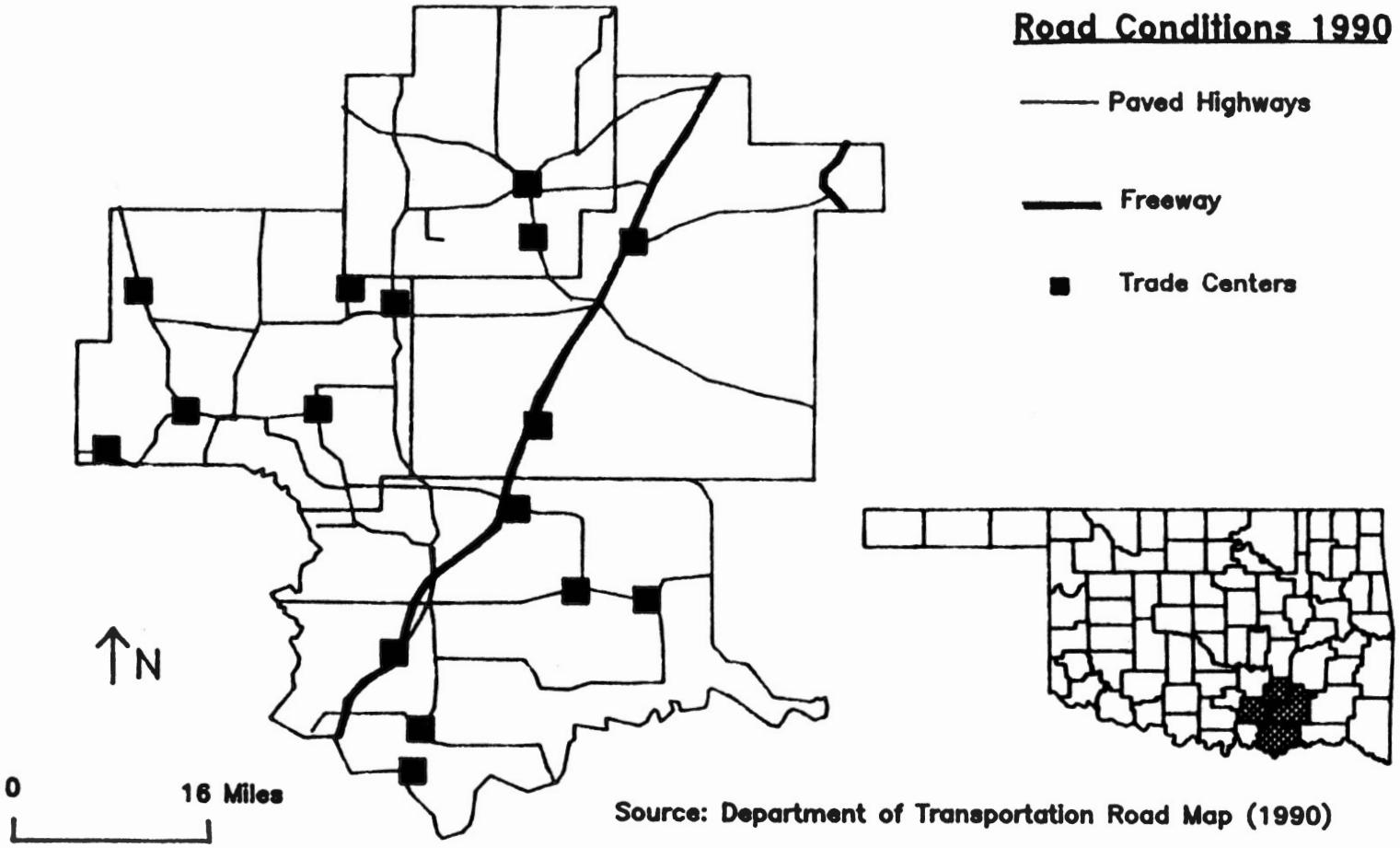

Figure 30. Road Conditions in 1990

Therefore, the range of these particular services was decreased as more four-lane highways developed and as more people demanded these particular goods and services. Four-lane highways passed near four of the rural trade centers, including Calera, Caddo, Caney, and Stringtown. Also, the number of automobiles increased 173 percent between 1960 and 1990, which increased travel possibilities to urban centers and decreased the possibility that the hinterland population was supporting the rural service centers. Conversely, the number of farm trucks decreased 15 percent in the study area, which could be attributed to the decrease in the number of farms during this period (Table XII).

Transportation has changed considerably since 1930 (Figures 28-30) with an increase in the mileage of paved highways, the introduction of the four-lane highway, and the increased use of motor vehicles, especially automobiles. Railroad mileage decreased substantially between 1930 and 1990 (Figures 31-33) as people shifted to motor vehicles for travel and as agricultural products were transported by truck or trailer instead of by trains (Olson 1951).

Changes in the Types of Functions Offered by the Sixteen Rural Trade Centers 1930-1990

In 1930 there were 42 functions offered in the 16 rural trade centers. For the most part, they were highly specialized and geared towards crop productions, a

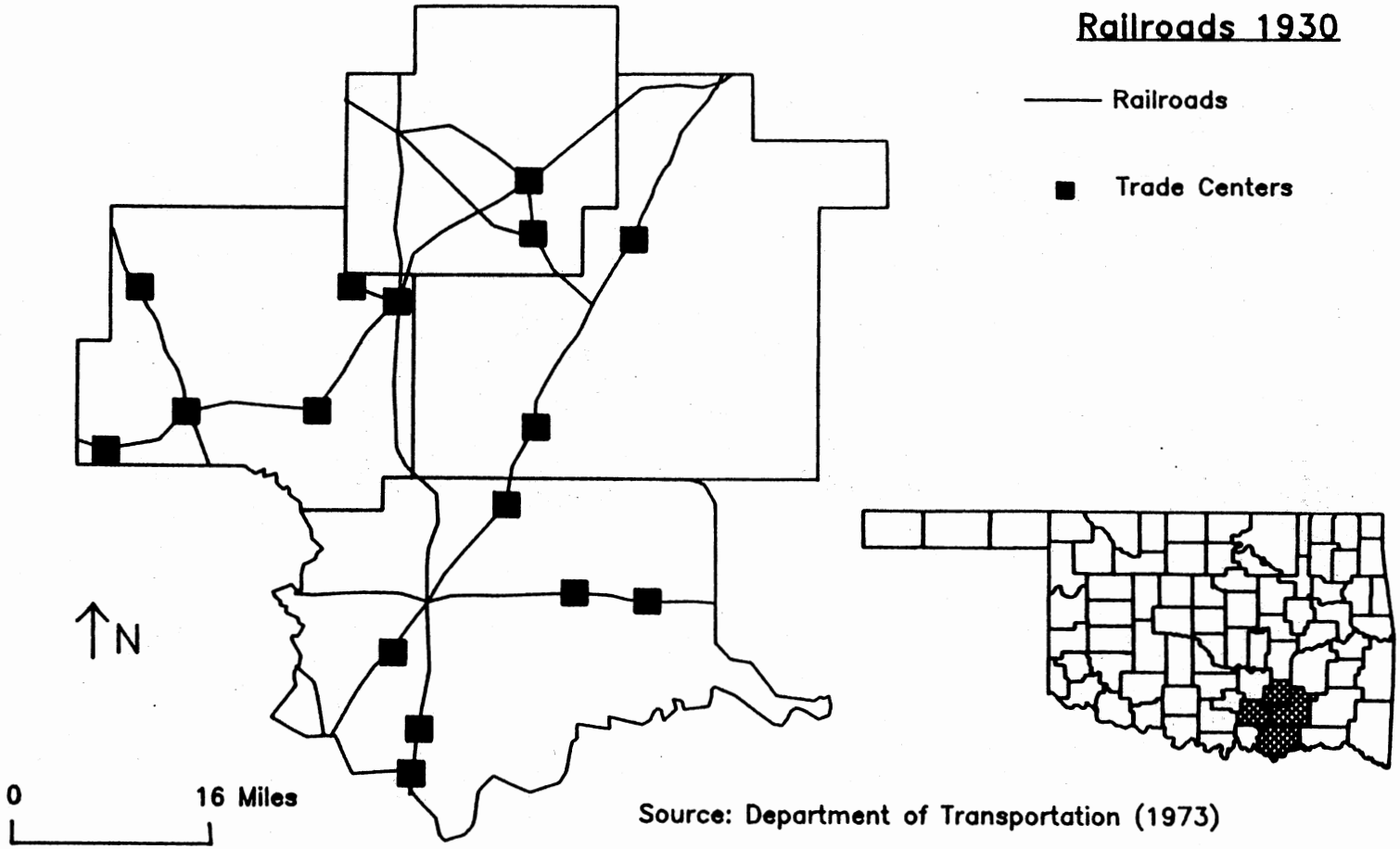

Figure 31. Railroads in 1930

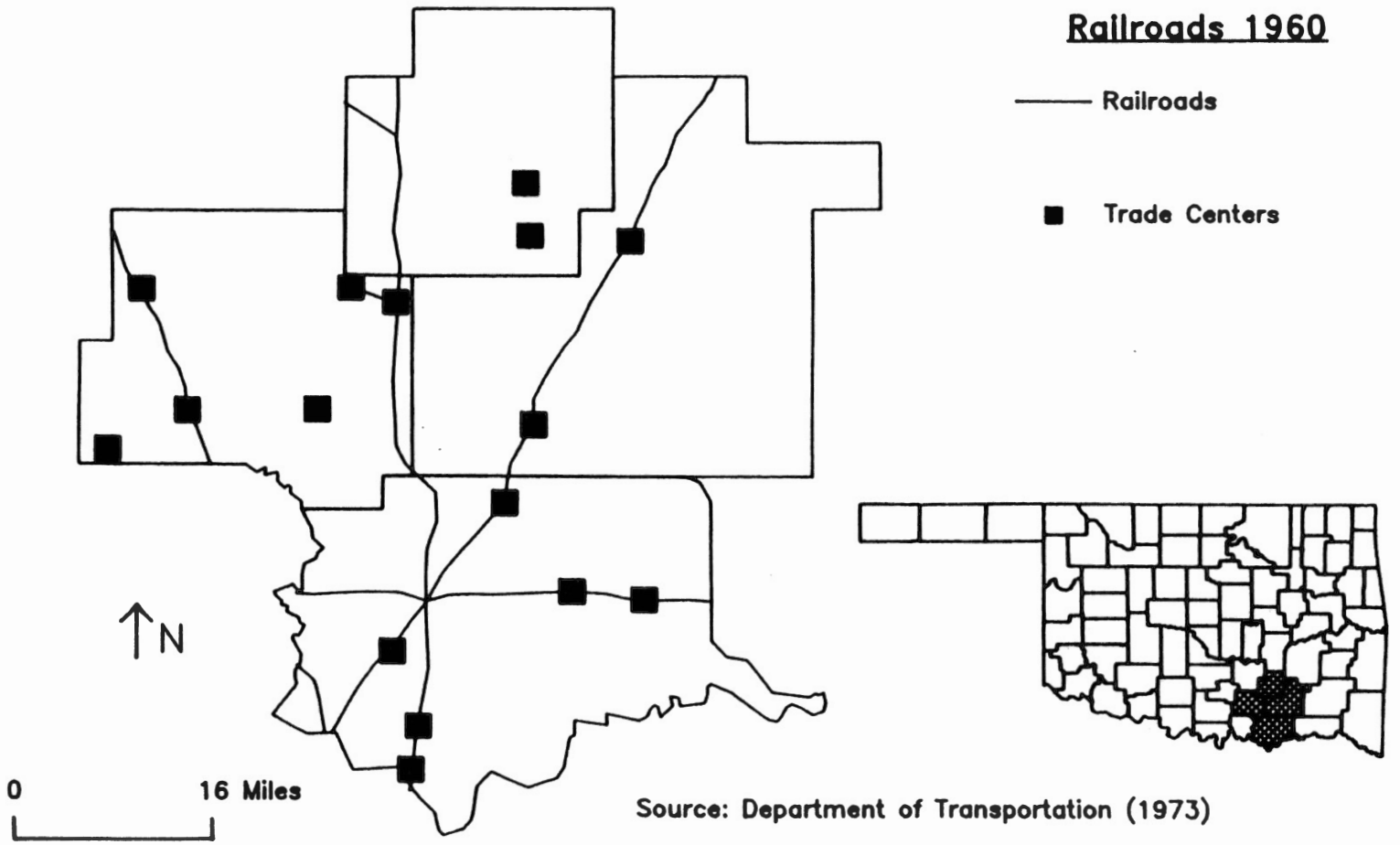

Figure 32. Railroads in 1960

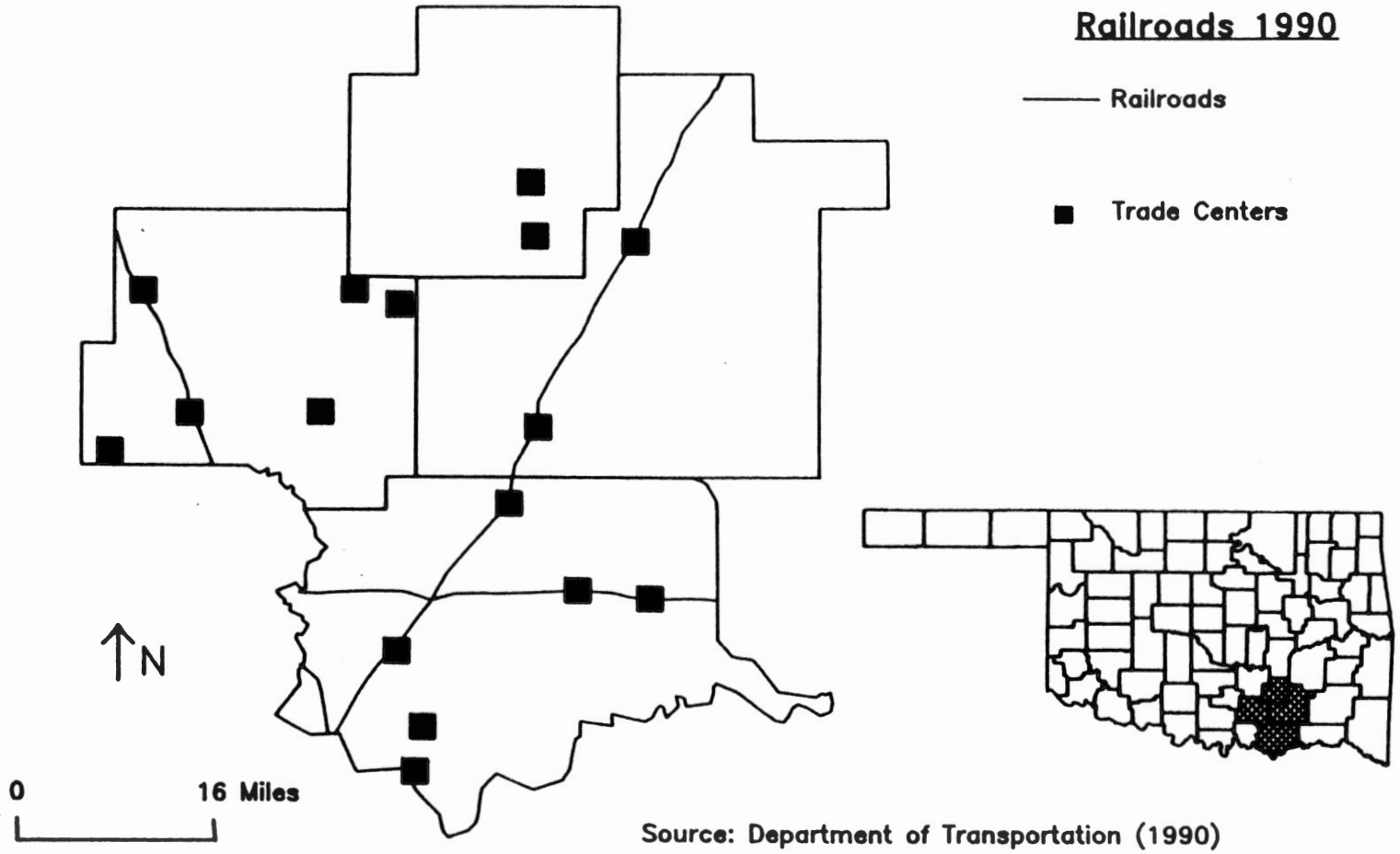

Figure 33. Railroads in 1990

relatively large rural market, and an increasingly mobile population (Table XIII). Cotton was king in 1930 with every town operating its own gin and three or four towns operating as well a cotton oil mill or a compress. In the fall, each town would be teaming with wagons full of cotton bolls ready to be ginned and then compressed into bales while the seeds were used for oils. Close to 50 percent of the towns also had grist mills or grain processing plants as corn, oats, and wheat were also common crops in the 1930s. Farm supply stores specialized in selling seed to the local farmers and were popular, especially in the spring of the year, when farmers were planting their crops. Farm implement stores were also desirable as more and more farmers were using tractors, cotton pickers, and planters (Table XIII).

The relatively large population outside of incorporated places is exemplified in the large number of grocery stores, general stores, drug stores, dry goods stores, hardware stores, clothing stores, meat markets, and banks. These establishments were popular because the threshold of demand was high for these particular services (Table XIII). For instance, there was an average of three grocery stores per trade center, which indicated that the local population was still supporting these businesses and was not traveling to urban centers to obtain these goods and services. This could be attributed to the fact that only 19 percent of the roads were paved in 1930 (Table XI).

A large market population also indicates specialization

TABLE XIII

TYPES OF FUNCTIONS OFFERED IN 1930 IN THE SIXTEEN RURAL TRADE CENTERS

Type of Function	Number Offered By the Sixteen Trade Centers	Type of Function	Number Offered By the Sixteen Trade Centers
Grocery	74	Grain/Hay	6
General Store	32	Farm Implements	6
Auto Repair	23	Produce/Fruit	5
Cotton	23	Auto Dealership	5
Drug Store	21	Printing/Publish.	4
Dry Goods	19	Shoe Repair	4
Cafe/Restaurant	19	Construction	4
Coal Retail	19	Mortuary	3
Post Office	16	Auto Supply	3
Hardware	16	Tailor	3
Service Station	16	Tinner	3
Lumber/BdMat	15	Telephone	2
Blacksmith	15	Bakery	2
Meat Market	14	Motel	1
Clothing/Shoes	11	Jewelry	1
Furniture/Appliance	8	Trucking	1
Feed/Farm Supplies	7	Sawmill	1
Bank	7	Harness Shop	1
Oil Retail	7	Photographer	1
Confectionery	7	Sporting Goods	1
Grist Mill	7	Ice Retail	1

Source: 1930 Bradsteets Book of Commercial Ratings

in goods and services. As was shown in Table VIII, there were four different functions involved in selling foodstuffs, drug stores could be separated from notions and cosmetics stores, clothing stores could be separated from shoe stores and millineries, and furniture stores could be separated from appliance and upholstery stores. There also were several businesses specializing in auto-repair, service stations, oil retail, auto-supply, and auto-dealers, which indicated a sufficient demand to support these businesses. However, horse and wagon transportation was still evident with a blacksmith operating in almost every town and a harness shop operating in one town. Restaurants were also part of the commercial community.

Therefore, in 1930 commercial functions were oriented toward specialized goods and services, crop production activities, an increase automobile ownership, and mechanization (Table XIII).

By 1960, all the above characteristics changed considerably because of a sharp decrease in cotton and corn production, the number of farms, and the population outside of incorporated places. These changes led to a decrease in the demand for many of the former functions. Olson (1951) attributed these changes to the depression, severe soil erosion, the boll weevil infestation, and to better transportation opportunities. Both Olson (1951) and Johansen and Fuguitt (1984) also found that increased transportation and decreased rural population caused

decreased specialization, which may explain why the number of original functions decreased from 42 in 1930 to 31 in 1960. However, 13 new functions replaced the 11 old functions, bringing the total number of functions offered in 1960 to 44 (Table XIV).

Cotton related functions dropped 87 percent, grist mills dropped 86 percent, and farm-implement stores dropped 67 percent. Much of the land was converted to livestock production and farms grew as the land was increasingly used for grazing or hay production. The number of feed stores grew 29 percent as livestock production increased and as farmers quit producing their own feed. Meat lockers, which processed meat fresh from the farm, became a new function as ranching increased. After the meat was processed, it was taken to local meat markets, which increased dramatically. Dairy production was also prevalent between 1930 and 1960 with the introduction of creameries to the functional basis of the area. Functions related to grain or hay remained stable while oat production decreased and wheat and hay production increased in production (Table XIV).

These findings parallel Olson's observations that government programs and low prices caused a decrease in cotton and corn production and led to an increase in other types of agricultural production. Other findings drawn by Olson and Johansen and Fuguitt also apply to this study, including that trade centers became less specialized between 1930 and 1960 as many functions decreased (Table XIV)

TABLE XIV

TYPES OF FUNCTIONS OFFERED IN 1960 AND PERCENT CHANGE IN THE 1930 FUNCTIONS

Function	No. of Each Funt. in 1960	Percent Change from 1930	Function	No. of Each Funt. in 1960	Per. Chg. Fr 30
Grocery	39	-47	Jewelry	2	100
Service Sta	37	131	ShoeRep	2	-50
Meat Market	28	100	Florist	2	NF
General St.	17	-47	ApplRep	2	NF
Post Office	16	0	Gifts	2	NF
Lumber/BdMat	10	-33	Printing	1	-75
Furn/Appl	10	25	GristMill	1	-86
Feed/Fm Supp	9	29	Sawmill	1	0
Cafe/Restrnt	8	-58	SportGds	1	0
DrugStor	8	-62	Camping	1	NF
AutoRep	7	-70	ConvStor	1	NF
Dry Goods	6	-68	MeatLock	1	NF
Hardware	6	-63	Creamery	1	NF
Grain/Hay	6	0	Tavern	1	NF
Auto Supplies	5	-67	Fertilizer	1	NF
Gas Retail	5	NF	Antiques	1	NF
Cloth/Shoes	5	-55	OilRetail	0	-100
Trucking	4	300	Confection	0	-100
Telephone	4	100	Prod/Fruit	0	-100
Construct.	4	0	AutoDeal	0	-100
Cotton	3	-87	Tailor	0	-100
Bank	3	-57	Tinner	0	-100
DepartStor	3	NF	Bakery	0	-100
VarietStore	3	NF	HarnessShop	0	-100
Blacksmith	2	-87	CoalRetail	0	-100
Farm Implt	2	-67	Photographer	0	-100
Mortuary	2	-33	Ice Retail	0	-100
Motel/Hotel	2	100			

Source: 1960 Bradstreets Book of Commercial Ratings
NF = New Function

corresponding to a decrease in the rural population, an increase in the mobility of the population, an increase in the range of many goods and services, and a decrease in the demand for these functions. The most drastic decreases included dry goods stores, hardware stores, drug stores, clothing stores, and banks, all of which decreased over 50 percent. Bakeries and produce stores may have been integrated with grocery stores as the rural trade centers could no longer support these functions separately as demand decreased (Table XIV).

Department stores and variety stores became common, especially in the larger trade centers. They offered clothing, shoes, notions, drugs, dry goods, and general merchandise under one roof. General stores decreased in the larger towns but remained stable in the smaller rural trade centers which could not successfully support the larger department or variety stores. Jewelry stores also became standard in the larger trade centers where they were offered in conjunction with the department stores and attracted business from them. Furniture and appliance stores increased in number with the introduction of the television, refrigerators, and other electrical appliances. This increased the need for appliance repair, which became one of the new functions offered in 1960 (Table XIV).

Between 1930 and 1960, when there was increased mobility there was a subsequent increase in the number of service stations and the introduction of the first

convenience store which offered gas as well as groceries (Table XIV). There was also a decrease in auto-repair garages, auto supply stores, and auto dealers as these functions either moved up the urban hierarchy or were integrated with service stations (Johansen and Fuguitt 1984). Blacksmiths decreased 87 percent and harness-shops decreased 100 percent, indicating the end of horse-drawn transportation and the dominance of the automobile. Propane gas also replaced coal as the main fuel type, reflecting the dramatic decrease in coal production and the increase in gas production in the study area during this period (Coling 1966).

There was also an increase in the number of recreational functions as leisure time increased. These functions included the tavern, camping, and sporting goods stores. The confectionery was replaced during this period as soda pop was sold in bottles or cans in the local grocery stores. More people were also interested in maintaining lawns or gardens and often purchased lawn mowers from a farm supply store and trees or flowers from the florist. Finally, antique stores also increased in popularity (Table XIV).

Therefore, between 1930 and 1960 businesses became less specialized and offered more functions under one roof. Land utilization patterns also changed dramatically as crop production was replaced by livestock production and farms became larger, which decreased the number of farms and the

number of farm tenants. Population size also played a role as the larger rural trade centers offered many goods in a department store or variety store instead of separate localities. This decreased the number of specialized stores in all the trade centers as more people either traveled to the department stores or to larger urban centers. Many rural trade centers also lost their auto-repair or auto-supply stores, which were either offered by the larger communities or were integrated with the service station (Johansen and Fuguitt 1984). These changes may also be attributed to a decreased demand for many of these goods and services as the rural population decreased and as more people were willing to travel to urban centers to obtain a better selection of goods at lower prices because of improved transportation (King 1984).

In 1990, there were 54 different functions offered in the 16 towns while seven functions decreased 100 percent in number since 1960 (Table XV). The largest increases occurred in the automobile related functions, in construction, and social and recreational activities. The convenience store increased 2200 percent between 1960 and 1990 with at least one or two stores in every trade center. These places sold gas, groceries, snacks, and drinks, and were oriented towards a mobile population. Forty-nine percent of the grocery stores, 76 percent of the general stores, and 73 percent of the service stations closed their doors. Service stations decreased as auto-repair and auto-

TABLE XV

TYPES OF FUNCTIONS OFFERED IN 1990 AND PERCENT CHANGE IN THE 1960 FUNCTIONS

Function	No. of Each Funt. in 1990	Percent Change from 1960	Function	No. of Each Funt in 1990	Per Chg Fr 60
CafeRest	33	312	Cotton	2	-33
Construct	27	575	Printer	2	100
AutoRep	23	229	Motels	2	0
ConvStor	23	2200	VarietSto	2	-33
Grocery	20	-49	LiqStor	2	NF
LivestRan	18	NF	MetBuilds	2	NF
Post Off	16	0	PoolHall	2	NF
AutoSupp	15	200	Trucking	1	-75
Gas Retail	15	200	MeatMark	1	-96
Lumb/BdMat	15	50	Telephone	1	-75
Furn/Appl	14	40	Mortuary	1	-50
Feed/FmSupp	12	33	ShoeRep	1	-50
ServStat	10	-73	DepartSto	1	-67
Tavern	9	800	Camping	1	0
Welding	8	NF	Creamery	1	0
SportGds	8	700	Book Store	1	NF
Gifts/Crafts	8	300	Peanut Supp	1	NF
Hardware	7	16	Ice Retail	1	RF
MeatLock	6	500	Cable TV	1	NF
VideoRent	6	NF	Prod/Fruit	1	RF
Bank	5	67	Office Supp	1	NF
Antiques	5	400	Music Store	1	NF
Fertilizers	5	400	Toy Store	1	NF
GeneralStor	4	-76	Dry Goods	0	-100
Cloth/Shoes	4	-20	Blacksmith	0	-100
Auction	4	NF	Grain/Hay	0	-100
DrugStore	3	-63	Grist Mill	0	-100
Florist	3	50	Jewelry	0	-100
AutoDeal	3	RF	Sawmill	0	-100
FarmImplts	4	100	ApplianceRep	0	-100
Mobile Home	3	NF			

Source: 1990 Dun and Bradstreet Book of Commercial Ratings
1990 Southwestern Bell Telephone Directories
NF = New Function
RF = Returning Function

supply stores increased indicating that the trade centers were serving a more mobile public. The cafe and restaurant also increased in popularity. One reason for an increase in convenience stores, auto-repair stores, and cafes is that several of these trade centers were located on paved state highways in 1960 and 1990 which increased their market. Four of the communities were also located near a four-lane highway which attracted businesses, especially in Calera which is right next to the four-lane. The number of taverns also increased dramatically between 1960 and 1990. Other social functions that became popular over the time period included pool halls and liquor stores (Table XV).

Recreational functions associated with more leisure activity, hobbies, and crafts also increased dramatically. These included sporting goods stores, antique stores, gift or craft stores, florists, auto-dealers, mobile home dealers, and book stores. Technological changes also introduced such functions as video-rental, cable television, and music stores as people had more leisure time and were adapting the available technology to watch movies or television in their homes. Functions related to construction, farm and appliances, hardware, and lumber or building materials also increased indicating that people are again moving into the study area and are building homes, businesses, or farm buildings. From an agricultural standpoint, functions related to cotton production, corn production, and grain production decreased dramatically

(Table XV) because of the emphasis on ranching and livestock production, mechanization of farms, and increasing farm size. Farmers were cultivating over 5,000 acres of wheat in Coal and Bryan Counties and 1,100 acres in Johnston County, which explains why farm implements and fertilizer businesses increased over the time period. The presence of peanut supply stores also indicated that peanuts were still produced even though production decreased from 1960 to 1990.

Although the number of cows on farms decreased, livestock functions were on the increase, especially livestock ranches and meat processing lockers which sell their products directly to the consumer. Auction barns became popular as farmers needed a place to buy cattle to maintain or supplement their herds. Also, feed and farm supply stores increased as more farmers were buying feed supplies, such as corn or hay supplements, instead of producing them. One creamery was still operating, indicating that the area had some dairy production, even though the number of dairy cows decreased between 1960 and 1990 (Tables X and XV).

With the recent population increases, both in the rural trade centers and in the farm population, banks also increased. However, drug stores, clothing stores, variety stores, shoe repair stores, department stores, dry goods stores, and jewelry stores all decreased. Although the population of the study area increased, people did much of their shopping in the larger urban centers.

Conclusion

From 1930 to 1990, the 16 towns have changed from service and trade centers for the rural agricultural population to convenience, social, and residential communities for the mobile, ranching, or retired population. This reflects changes in the range and threshold of many goods and services. As a consequence, the appearance of main street changed as the large brick retailing operations were abandoned and replaced by newer metal constructed operations. This left many of the original main streets abandoned in nearly 70 percent of the 16 trade centers as the new functions located on the main intersections of town, along the main highway, or along the four-lane outside of town where they would attract traffic off of the highway (Authors Fieldwork 1990). The next chapter expands upon these conclusions.

CHAPTER VI

THE COMMERCIAL LANDSCAPE OF FOUR OKLAHOMA SMALL TOWNS

Introduction

The commercial landscape has changed substantially in many small towns because of the decline in the railroad as a main means of transportation and an increase in the construction of paved highways and the use of the automobile. Bailey (1984) alluded to the changes in the commercial landscape in her study of small towns in northeastern Oregon where she found that the population size of the communities, economic change over time, and the advent of the auto era had an impact on the types of businesses offered, the distribution of those businesses, and the construction styles of the buildings.

This chapter presents a comparison of how the commercial landscape, including the types of commercial functions, the distribution of commercial functions, and the construction styles (architecture or building styles) of commercial buildings, has changed over time in four of the sample towns in the study area (Figure 34). Sanborn Fire Insurance maps from 1920 for Calera, Caddo, Wapanucka, and Bromide were used in the field to map changes in the

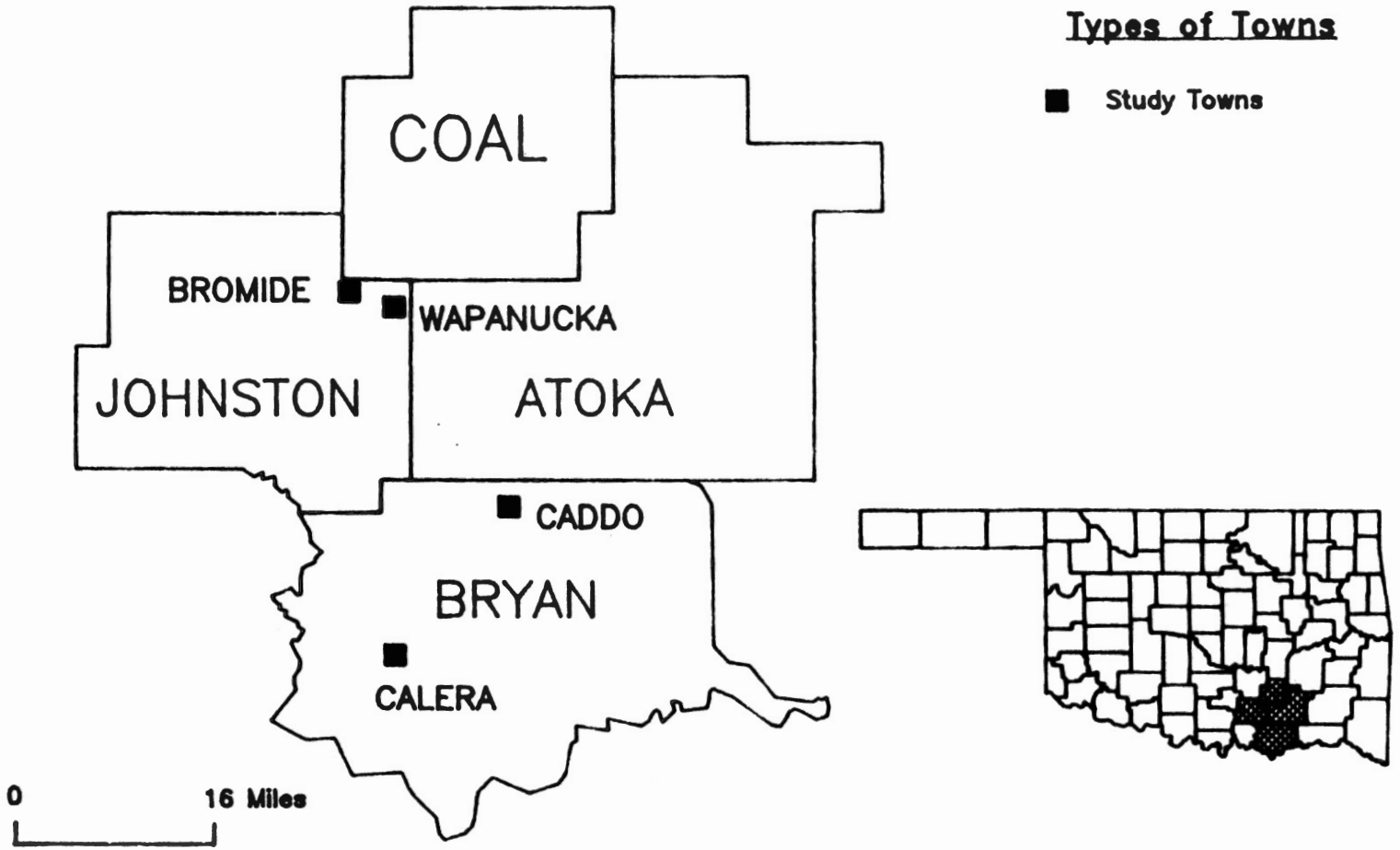

Figure 34. The Commercial Landscape Study Area

commercial landscape in these four towns and to compare these changes with what was characteristic of the commercial landscape in 1920. The 1920 and 1990 maps for Wapanucka are used to illustrate spatially how the types of businesses, distribution of businesses, and built environment have changed over time.

Types of Functions Offered in 1920 Verses 1990

Tables XVI and XVII show how many towns contained each particular function, what percent of the towns offered each function, and the total number of each function in the four towns in 1920. Fifteen functions were common in all four towns (Table XVI) and other functions became prevalent as either the town gained population or as the economy of the town changed. The grocery store was represented 20 times and was the most common feature of the commercial district, suggesting the importance of this type of function (Table XVII). People also were limited to how far they could travel for these goods so there was likely to be more than one grocery in a town in order to service the hinterland population and because the threshold of demand was high for these particular goods.

The general store was widespread because it was a place where one could purchase a wide range of goods including groceries, hardware, and clothing. It was not divided into departments but instead had a variety of items located

TABLE XVI

NUMBER OF FIELD TOWNS OFFERING EACH FUNCTION IN 1920

FUNCTION	No. of Towns in 1920	Percent of Towns in 1920	Funtion	No. of Towns in 1920	Percent of Towns in 1920
Grocery	4	100	MovPict	2	50
CottGin	4	100	Plumbing	2	50
AutoRep	4	100	Bakery	2	50
GenStor	4	100	Tinshop	2	50
Drugs	4	100	Jeweler	2	50
Bank	4	100	Telephone	2	50
Restrnt	4	100	LodgeHall	2	50
Hotel	4	100	Cobbler	2	50
Lumber	4	100	SdOilMill	2	50
MeatMark	4	100	Harness	2	50
Blacksmth	4	100	AutoSupp	1	25
Depot	4	100	FeedMill	1	25
PostOff	4	100	Undertakr	1	25
Livery	4	100	BoilWork	1	25
Barber	4	100	Produce	1	25
Confection	3	75	Clothing	1	25
FeedFmImp	3	75	DepartStor	1	25
Furniture	3	75	DyePlant	1	25
Hardware	3	75	FlourMill	1	25
Printing	3	75	InsurOff	1	25
DryGoods	3	75	Cleaners	1	25
GristMill	3	75	Shoes	1	25
GrainHay	3	75	CarpShop	1	25
CityHall	2	50	Sawmill	1	25
Tailor	2	50	AutoSales	1	25

Source: 1920 Sanborn Fire Insurance Map for Caddo
1919 Sanborn Fire Insurance Map for Bromide
1918 Sanborn Fire Insurance Map for Wapanucka and Calera

TABLE XVII

TOTAL NUMBER OF EACH FUNCTION IN THE FOUR FIELD TOWNS IN 1920

Function	Total No. of each Funct 1920	Function	Total No. of each Funct 1920
Grocery	20	Clothing	3
Restrnt	12	CityHall	2
CottonGin	11	Tailor	2
AutoRep	10	Tinshop	2
HotMot	9	Plumbing	2
Blacksmith	9	Bakery	2
GenStor	8	FeedMill	2
FeedFmImp	7	Jeweler	2
Drugs	7	Telephone	2
Furniture	7	Lodge	2
Bank	7	SeedMill	2
DryGoods	7	Harness	2
Barber	7	AutoSupp	1
Hardware	6	UnderTaker	1
Lumber	6	BoilingWks	1
MeatsMark	6	DepartStor	1
Livery	5	DyePlant	1
Confection	5	FlourMill	1
Depot	4	InsurOff	1
PostOff	4	Produce	1
GristMill	4	DryCleaning	1
Cobbler	4	Shoes	1
MovPict	3	CarptShop	1
Printing	3	Sawmill	1
GrainHay	3	AutoSales	1

Source: 1920 Caddo Sanborn Fire Insurance Map
1919 Bromide Sanborn Fire Insurance Map
1918 Wapanucka and Calera Sanborn Fire Insurance Maps

throughout the store (Bailey 1982). Most towns also had dry goods stores, hardware stores, and drug stores which all specialized in just one particular type of business activity (Table XVII).

Another characteristic feature of these small towns in the 1920s was the cotton gin. The 1920s were noted as being the most productive years for cotton production in the state of Oklahoma. During this time period Caddo had up to five gins, Calera had two or three, Wapanucka had two, and Bromide had two gins. Grist mills, cotton seed oil mills, cotton warehouses, and seed stores were also common in every town as cotton and corn production were very popular (Sanborn Insurance Maps 1920). Animal feed and farm implements establishments were also very common as the farmers started to raise livestock and as more farmers started to shift from horse drawn equipment to motorized equipment, such as tractors (Table XVII).

As a result of the automobile, many new functions appeared on the landscape such as auto-repair garages and auto-dealerships. However, livery stables and blacksmiths were still very common during the early 1920s as the conversion was just taking place from the horse-drawn wagon or buggy to the automobile. The depot was also a common feature in all four of the towns as people frequently traveled by train. However, by 1920 railroad service was declining with the increase in automobile ownership (Jakle 1982). Restaurants and hotels were in every town, in part

because travel was slow and people could not always return home the same day due to train schedules or because they had no lights on their wagon or automobile.

Common characteristics in all four small towns were a bank and a post office which served as both storage and distribution sites for money and mail delivery. Insurance agencies, telephone offices, and jewelry stores were also very prevalent and were often located in combination with banks, general stores, or dry goods stores and were typically located on the second floor of these establishments. Confectioneries were popular as people frequented soda fountains to get their ice cream and cold drinks. Other informal socializing functions included the bank or barber shop for men and the bakery or tailor for women. A formal socializing function was the lodge hall which was common in 50 percent of the towns and brought people together on a regular basis (Bailey 1984).

In 1990, the city hall, post office, and convenience store were located in all four towns. However, the functions which were the most popular, based on total number of establishments, included the convenience store, beauty salon, auto-repair shop, and restaurant (Tables XVIII, XIX). The city hall and post office were also found in all the incorporated towns.

The beauty and style salon replaced the barber shop as a common place to get a haircut and the restaurants or taverns, such as the Dairy Queen in Caddo or the Buffalo

TABLE XVIII

NUMBER OF FIELD TOWNS OFFERING EACH FUNCTION IN 1990

FUNCTION	No. of Towns in 1990	Percent of Towns in 1990	Funtion	No. of Towns in 1990	Percent of Towns in 1990
ConvStor	4	100	Cobbler	0	0
PostOff	4	100	Harness	0	0
CityHall	4	100	MovingPic	0	0
AutoRep	3	75	UnderTak	0	0
Bank	3	75	Drugs	0	0
Grocery	3	75	Hardware	0	0
Resturant	3	75	GenStor	0	0
BeautySalon	3	75	DryGoods	0	0
Telephone	2	50	Confection	0	0
Clothing	2	50	Barber	0	0
Antiques	2	50	TinShop	0	0
Museum	2	50	Tailor	0	0
MovieRent	2	50	AutoSupp	0	0
Cabinets	2	50	Printing	0	0
LodgeHall	2	50	Plumber	0	0
HotelMot	1	25	BoilingWks	0	0
SportGds	1	25	Produce	0	0
Upholstery	1	25	CottGin	0	0
Tavern	1	25	Meats	0	0
LiquorSt	1	25	Livery	0	0
VarietSto	1	25	Blacksmith	0	0
Welding	1	25	Depot	0	0
MobilHom	1	25	Bakery	0	0
ServStat	1	25	DepartStor	0	0
TradingPos	1	25	DyePlant	0	0
Laundry	1	25	FlourMill	0	0
Realty	1	25	GristMill	0	0
Crafts	1	25	FeedMill	0	0
MeatProc	1	25	SdOilMill	0	0
FeedFmImpt	1	25	Sawmill	0	0
Lumber	1	25	DryCleaners	0	0
AutoSupp	1	25	CarpnterShop	0	0
Furniture	1	25	GrainHay	0	0
Jeweler	0	0			
InsurOff	0	0			
Shoes	0	0			

Source: Authors Fieldwork, October 1990, in Caddo, Wapanucka, Calera, and Bromide

TABLE XIX

TOTAL NUMBER OF EACH FUNCTION IN THE FOUR FIELD TOWNS IN 1990

Function	Tot. No. in each town 1990	Perct. Change 1920-90	Function	Tot. No. in each town 1990	Perct. Change 1920-90
ConvStor	8	NF	Drugs	0	-100
BeutySal	7	NF	DryGoods	0	-100
AutoRep	5	-50	Confection	0	-100
Resturnt	5	-58	Blacksmith	0	-100
CityHall	4	100	Hardware	0	-100
PostOff	4	0	Barber	0	-100
Grocery	3	-85	Meats	0	-100
Bank	3	-57	Depot	0	-100
Antiques	3	NF	MovPict	0	-100
LodgeHall	3	50	Tailor	0	-100
MovieRent	2	NF	Printing	0	-100
Museum	2	NF	Livery	0	-100
Upholstry	2	NF	GristMill	0	-100
Telephone	2	0	AutoSupp	0	-100
Clothing	2	-33	Plumbing	0	-100
HotelMotel	1	-89	Bakery	0	-100
Furniture	1	-86	Tinshop	0	-100
Lumber	1	-83	FeedMill	0	-100
FeedFmImp	1	-86	Jeweler	0	-100
AutoSales	1	NF	Undrtaker	0	-100
Sportgoods	1	NF	BoilingWks	0	-100
Tavern	1	NF	DepartStor	0	-100
LiquorStor	1	NF	DyePlant	0	-100
VarietySt	1	NF	FlourMill	0	-100
Welding	1	NF	InsurOff	0	-100
MobHome	1	NF	Produce	0	-100
ServStat	1	NF	Harness	0	-100
Cabinets	1	NF	Sawmill	0	-100
TradPost	1	NF	SdOilMill	0	-100
Laundry	1	NF	DryCleaners	0	-100
Realty	1	NF	Shoes	0	-100
Crafts	1	NF	Cobbler	0	-100
MeatProc	1	NF	CarpentShop	0	-100
CottonGin	0	-100	GrainHay	0	-100
GenStor	0	-100			

Source: Authors Fieldwork in October 1990 to Caddo, Wapanucka, Calera, and Bromide

Chip Saloon in Wapanucka, continued to serve as important socializing places. The number of lodge halls increased fifty percent between 1920 and 1990, attributable in part to increased leisure time and as the small towns catered more to a retired population.

Convenience stores became prevalent as mobility increased and as people traveled to larger towns to purchase most of their goods and services in cash chain stores. They bought low order items at the convenience stores, which also served as social spaces. The number of grocery stores, however, declined 86 percent (Table XIX). Calera, Wapanucka, and Caddo each had local grocery stores in addition to convenience stores but reportedly business was not good. Jerry Marsh, owner of Marsh's grocery in Caddo, claimed most of his business came from older residents who were less likely to travel to other towns for shopping (Marsh 1990). Frank Blue (1990) of Wapanucka remembered when he use to socialize in John Riley's grocery or in Morton's grocery and meat market until they went out of business in the 1950s. A.D. Falk (1990) also remembered when John Attaway and Henry Hunt owned grocery stores in Caddo and when Hobbies Garage was becoming popular as people obtained automobiles.

The advent of the auto era eliminated blacksmiths and harness shops as auto-garages became the common transportation fix-it shops. However, the number of auto-repair shops actually decreased by 50 percent (Table XIX)

between 1920 and 1990 as people evidently service their autos when they patronized the larger towns. Hotels and the depot have also become functions of the past, decreasing 88 percent and 100 percent between 1920 and 1990, as passenger trains are no longer in service and because people can travel from their homes to a nearby market center within a couple of hours and return the same day (Bailey 1982).

The general store, clothing store, shoe store, and dry goods store were replaced by the multi-functional variety store. Drug stores, hardware stores, and lumber yards were absent in 1990 as there were not enough customers to support them (Johansen and Fuguitt 1984). Movie theaters also closed, in part because of competition from video shops (Bailey 1982).

One bank was found in three of the towns but were all small branch banks. As shown in Table XIX, banks declined 57 percent between 1920 and 1990. Insurance agencies and jewelers also moved to larger cities as the threshold of these goods required a larger number of people to support them. Antique stores and craft shops, however, increased dramatically since 1920 as the demand for these commodities has increased nationwide over the past three decades. Other functions that increased between 1920 and 1990 were the pool hall, museum, and sporting goods store.

Cotton gins have also disappeared since the 1940s (Table XIX). Residents claim that gins were eliminated as farmers found that cotton was no longer economical to grow

and because it depleted the soil. Therefore, cotton production plummeted during this time period along with most of the functions related to it. Joe and Kathy Meadows (1990) claimed that Caddo used to be one of the largest cotton towns in the area until the 1930s and 1940s when cotton production fell in the Caddo area. They remember that two of the gins burned in the late 1930s and early 1940s and were never rebuilt and the other gin went out of operation in the early 1950s. A.D. Falk (1990) claimed that Wapanucka suffered in the 1930s when the cotton business and the railroad started to collapse. Then by 1960 only six of the original businesses were left in Wapanucka.

Today, agricultural implement stores, seed mills, feed and seed stores, and most other types of functions dealing with crop production have been replaced by functions dealing with ranching. For instance, Caddo has a farm and ranch supply store which mostly sold agricultural supplies and feed to the local rancher. Caddo also has a meat locker which processed meat fresh and sold it back to either the farmer or to the local consumer, eliminating the need for local meat markets (Table XIX). Supplies for growing peanuts are also offered as peanut production is common in the area (Miller 1990).

Therefore, functions oriented towards crop production, the railroad, retail specialization, and a high rural population were replaced with functions geared towards ranching, automobiles, convenience shopping, and recreation

or hobbies. These developments represent the changing orientation of these four towns from supplying a complete array of goods and services to supplying more specialized functions, largely for the mobile and retired populations.

Distribution of Functions

The distribution of businesses in the 1920s was concentrated on either side of a main street or on various side streets having shifted from railroad sidings. Each of the four towns has a story about the changing location of its commercial district through time. Tables XX through XXVII show the number of functions in each town, what percent of the functions were located on main street, what percent were located on side streets, and what percent were located on both. They also show what percent were located along the railroad in each town, and which functions were the most popular in each of the above locations for each of the towns in 1920 and 1990. Figures 35-38 illustrate how the distribution of businesses has changed in Wapanucka. It provides a case study of what is happening in all of these small towns.

The Changing Commercial District of Wapanucka

Wapanucka's original commercial district developed in the southwestern part of town, but when the Chicago and Rock Island railroad came through in the early 1900s the commercial district shifted about a half mile to the

northeast. The railroad ran through the center of town and to the west or southwest of the new commercial district (J.D. Falk 1990). Choctaw Avenue and Main Street were the main commercial streets in the 1920s with 25 establishments facing Choctaw Avenue and 23 establishments on Main street. Wapanucka had 40 functions of which 58 percent were located in this commercial district, including groceries, general stores, confectioneries, dry goods stores, and other primary functions (Table XX and Figure 35). The two banks, a general store, and a dry goods store were all located at the junction of Main and Choctaw. All these buildings were spacious two-story buildings, except the dry goods store, and all had functions above them including a telephone office, an insurance office, and a jeweler (Figure 35).

Twenty-three percent of Wapanucka's functions (Table XX) were located south of the commercial district or on side streets, including tin shops, auto garages, a printing store, and feed stores. The two lumber yards were located along Fifth Street, with one in the side street district and one in the railroad district. Both of these businesses occupied two or three lots.

The railroad district was located on the southwest side of town (Figure 36). It had 17 percent of the town's functions including the O.A. Reed cotton gin, the James Dale Dye Plant, two cottonseed plants, and the Wapanucka Oil and Milling Company. The latter included a gin, an oil mill, a cotton press, and a seed house (Table XX). The A.G.

TABLE XX

DISTRIBUTION OF FUNCTIONS IN WAPANUCKA 1920

NUMBER of FUNCTIONS in 1920	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in both the Side or Rail	Percent in the RailDist
-40	58	23	2	17

Functions in the Comm Dist	Functions in the SideSt Dist	Functions in both the Side or Rail	Functions in the RailDist
1. Bank	24. AutoRep	33. Lumber	34. Hotel
2. DryGoods	25. Plumbing		35. Gin
3. Grocery	26. TinShop		36. SdMill
4. GenStor	27. Boilworks		37. DyePlt
5. FeedFmImp	28. Printing		38. Depot
6. Hardware	29. GrainHay		39. SawMill
7. Drugs	30. AutoSupp		40. PostOff
8. Furniture	31. Blacksmth		
9. InsurOff	32. Livery		
10. Undertaker			
11. MovingPict			
12. Bakery			
13. Cobbler			
14. Shoes			
15. Meats			
16. Confection			
17. Jeweler			
18. Barber			
19. Tailor			
20. Resturant			
21. Telephone			
22. GristMill			
23. Harness Shop			

Source: 1918 Sanborn Fire Insurance Map of Wapanucka

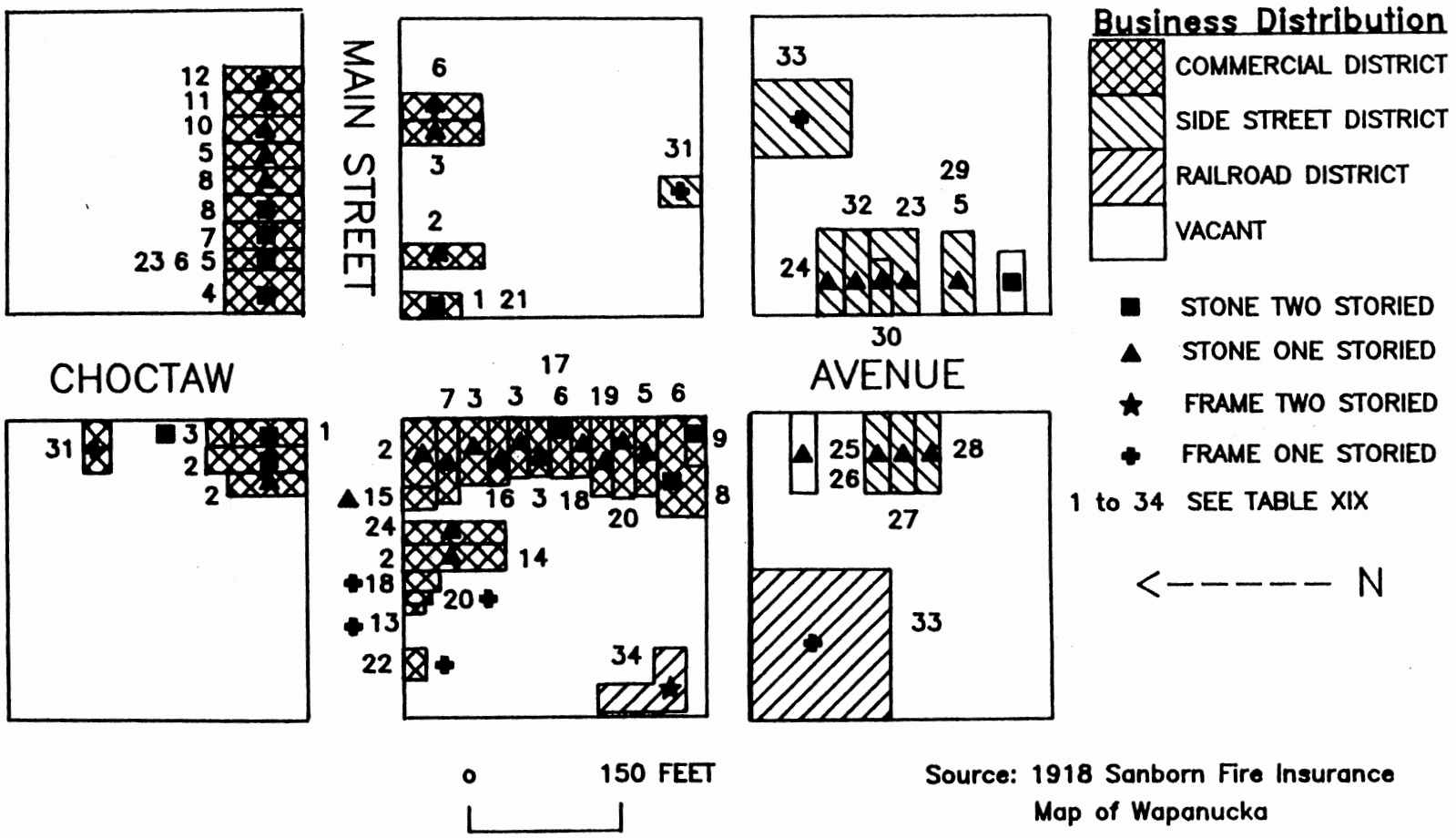

Figure 35. Commercial Landscape of Wapanucka 1920

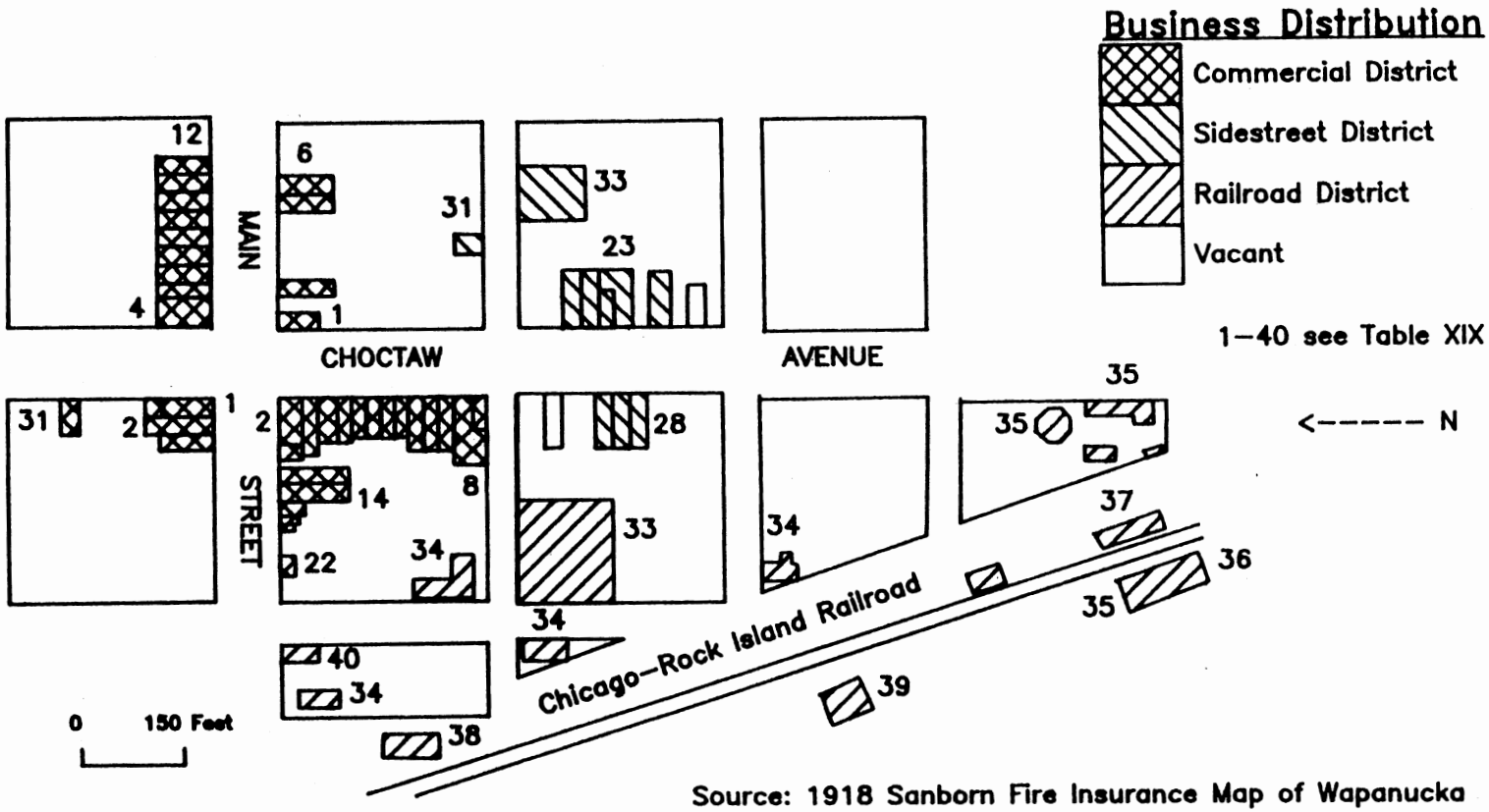

Figure 36. Commercial Landscape of Wapanucka 1920

Hancock Gin was also located in this area. The railroad depot was located just to the west of the commercial district and served Wapanucka until the late 1940s when the last passenger train came through the area (A.D. Falk 1990). Three hotels (the Stuart, Allen, and the City), a boarding house, and the post office were located to the west of the commercial district and were dispersed along the railroad. This arrangement indicated that hotels were easily accessible to train passengers and that the mail was still being transported by train to the local post office located next to the railroad (Figure 36).

Today, Wapanucka contains 19 active functions of which 53 percent are located on the original commercial blocks (Table XXI). These functions include convenience stores, P and R Grocery, a bank, Mike Morrison's Buffalo Chip Saloon, an auto garage, the post office, and Robert's Upholstery (Figure 37). Forty-seven percent of the functions, including the Trolley Cafe and Motel, the telephone office, city hall, a liquor store, two lodges, and a pool hall are located on the blocks south of the main commercial district. The lumber yards are gone.

Sixteen of the original buildings are still standing along main street, of which 44 percent are abandoned and in disrepair (Figure 38). One was rebuilt and is now used as the Buffalo Chip Saloon (Mike Morrison 1990). Wapanucka recently experienced a fire in the abandoned dry goods store on the southwest corner of Choctaw and Main and the old bank

TABLE XXI

DISTRIBUTION OF FUNCTIONS IN WAPANUCKA 1990

NUMBER of FUNCTIONS in 1990	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in the RailDist	Percent in both the Rail or Side
19	53	47	0	0

Functions in the Comm Dist	Functions in the SideSt Dist
1. Bank	5. FarmRanchSupp
3. Grocery	20. Resturant
18. BeautySal	21. Telephone
24. AutoRep	34. Motel
40. PostOff	41. CityHall
42. ConvStor	44. LiqStor
43. Tavern	45. Lodge
47. CabinetSh	46. FireStat
48. Construct	50. Pool Hall
49. Upholstery	

Source: Field Notes from Authors Field Research (1990)

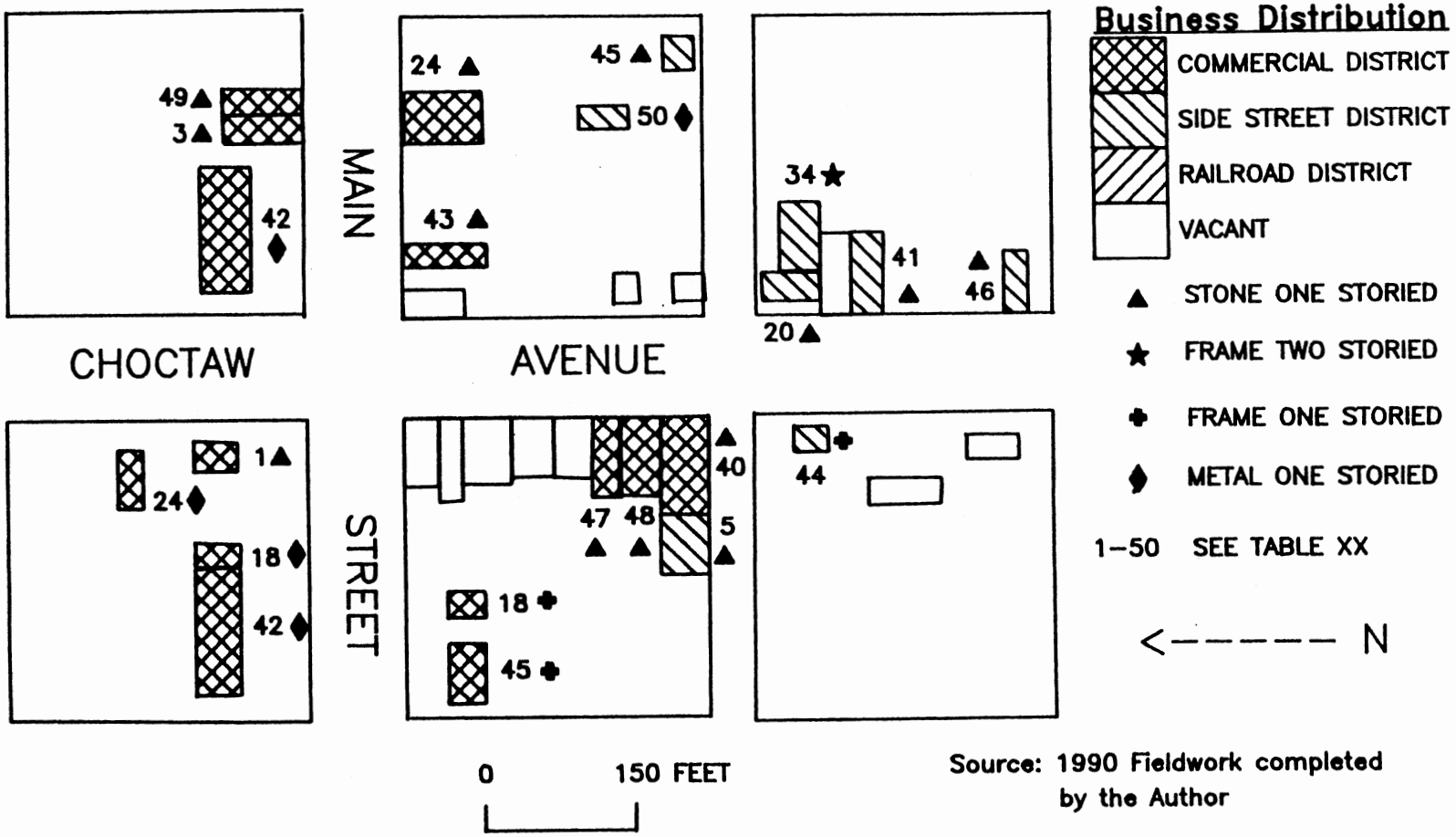

Figure 37. Commercial Landscape of Wapanucka 1990

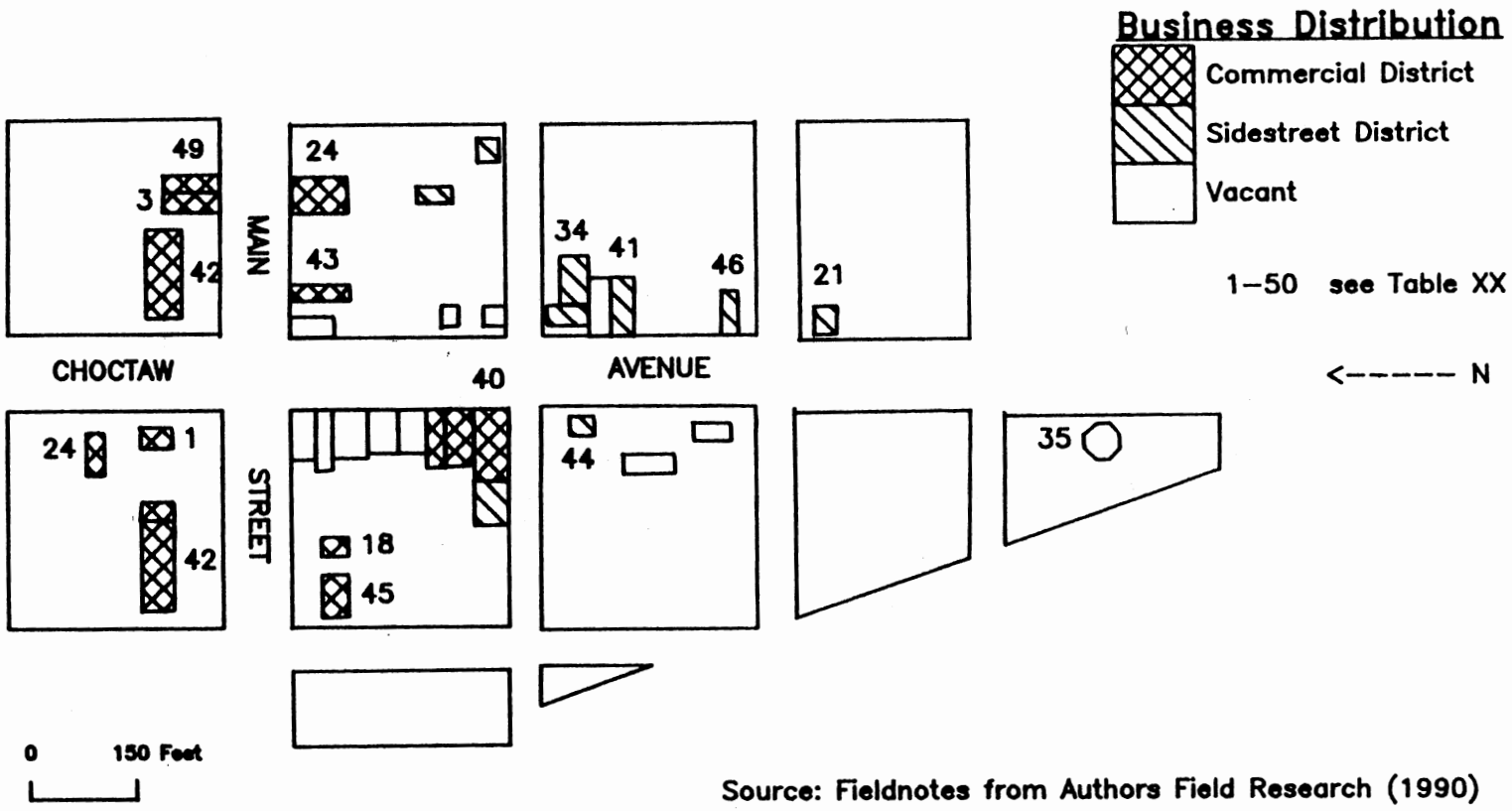

Figure 38. Commercial Landscape of Wapanucka 1990

building on the southeast corner of Choctaw and Main was recently torn down.

The old Reed cotton gin is also abandoned on the south side of town, where it stands as a reminder of the former dominance of cotton in the area. The railroad depot was torn down in the 1970's, and the railroad tracks were removed subsequently as the railroad company abandoned this route in the late 1980's. All that remains of the railroad today is the old bed on the west side of town. Today, convenience stores dominate the commercial landscape of Wapanucka and are located across the street from each other at the junction of Main and Choctaw (Figure 37 or 38).

The Changing Commercial District of Caddo

In 1920 the businesses in Caddo were no longer aligned along the railroad or the original main street but were distributed along a new main street named Buffalo Avenue. The commercial district was on the east side of town and two blocks west of the railroad. Old Main street and the agricultural district separated the railroad from the commercial district. Forty establishments specializing in 29 commercial functions were located in the main commercial district, along Buffalo Avenue and Arkansas Street (Table XXII). Seventy-four percent of Caddo's 39 functions were located in this main commercial district, including grocery stores, banks, confectioneries, dry goods stores, drug stores, hardware stores, and general stores. The Royal

TABLE XXII

DISTRIBUTION OF FUNCTIONS IN CADDO 1920

NUMBER of FUNCTIONS in 1920	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in the RailDist
-39	74	16	10
Functions in the Comm Dist	Functions in the SideSt Dist		Functions in the RailDist
Jeweler	GristMill		CottonGin
PostOff	FeedFmImp		Depot
Furniture	Produce		GrainHay
Drugs	LiveryStab		SdOilMill
Hardware	Blacksmith		
GenStor	FeedMill		
Bank			
DryGoods			
Grocery			
Confection			
Barber			
Tailor			
Resturnt			
Meats			
Clothing			
Bakery			
DepartStor			
Cobbler			
DryCleaning			
Lodge Hall			
CarpenterShop			
City Hall			
Moving Pict			
Auto Garage			
Printing			
Plumbing			
Hotel			
Lummber			
Tinshop			

Source: 1920 Caddo Sanborn Fire Insurance Map

Hotel, the Cottage Hotel, and a two-story theater were located on Arkansas Avenue to the south of the main retail businesses and a block west of the railroad depot (Table XXII or 1920 Caddo Sanborn Fire Insurance Map).

Sixteen percent of the functions (Table XXII) were located along side streets, including grist mills, blacksmith shops, livery stables, wagon yards, and feed or farm implement stores. Bailey (1982) classified these types of functions as light industrial or secondary functions as were located off of main street. Caddo had a high number of primary functions located in its core business district and there was little room for the secondary functions to develop. These businesses also required a larger lot, which was only available along side streets (Bailey 1982). Ten percent of the functions were located in the agricultural district, including several cotton gins, cotton or corn warehouses, cottonseed or oil mills. All these functions were closer to the railroad because they needed better access for loading their goods on to railroad cars while the commercial establishments received goods from the railroad and could easily transport their goods by wagon to their stores. In 1920, Caddo also had elevated sidewalks, which still exist today. The sidewalks were about three feet high and were used for loading and unloading wagons and goods coming directly from the railroad (Davison 1990). Therefore, Caddo was a relatively prosperous agricultural center and still relied heavily on the railroad with 95

percent of the commercial district being located within a block of it.

Today, Caddo's business district is still located along Buffalo Avenue and Arkansas Street. Most of the original brick buildings are still standing and have been decorated with false fronts and fresh paint. Thirty-five percent of the buildings are abandoned and the second floors of the five two-story buildings are boarded up and are no longer in use. Caddo has 24 commercial functions of which 88 percent were located on main street (Table XXIII), including Craighead's variety store, Marsh's Grocery, Wesley's sporting goods, the post office, a museum and a convenience store. The Lingo-Leeper lumber company still stands on Arkansas Avenue and is one of the last original businesses left in the commercial district. The other lumber yard, the theater, and the two hotels have closed; only the foundations remain where these buildings once stood.

Twelve percent of the businesses are located on side streets (Table XXIII), including the bank which moved to the edge of town to be more accessible to the four-lane highway. A meat processing business and a feed and ranch supply store were located north of the commercial district along old main street and indicated Caddo's importance to the surrounding ranching economy.

The agricultural district no longer exists because Caddo no longer relies on cotton farmers for business. Raymond Miller (1990) claimed that the agricultural district

TABLE XXIII

DISTRIBUTION OF FUNCTIONS IN CADDO 1990

NUMBER of FUNCTIONS in 1990	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in the RailDist
24	88	12	0

Functions in the Comm Dist	Functions in the SideSt Dist
AutoRep	Bank
Grocery	MeatProc
Resturant	FeedFmImplts
CityHall	
PostOff	
Clothing	
SportGood	
ConvStor	
VarietyStor	
Welding	
Antiques	
Museum	
MovieRent	
ServStat	
Cabinets	
TradPost	
Laundry	
Realty	
Crafts	
Lodge	
Lumber	

Source: Field Notes from Authors Fieldwork (1990)

disappeared gradually between 1930 and 1950 when farmers stopped growing cotton and when the railroad declined in importance. The railroad is located to the east of town but trains no longer stop and the depot was torn down in the 1950s (Meadows 1990). Therefore, the bustling town of Caddo has declined significantly in the number of business activities as it no longer is a significant market for farmers and because most of its population commutes to Durant or Atoka for their goods and services.

The Changing Commercial District of Calera

Calera was also platted next to the railroad, which ran from north to south on the east side of the commercial district. In the 1920s the commercial district was located on Main Street, west of the railroad. The commercial district contained 87 percent of Calera's functions, with the majority of them being distributed near the intersection of First and Main streets. Businesses included general stores, drug stores, banks, groceries, a barber, and a confectionery (Table XXIV).

The Rockwell Brothers lumber yard was officially a part of Main Street and the Calera Hotel was also at the heart of the commercial district. This is unlike the situation in Caddo and Wapanucka where the hotels and lumber companies were developed off main street. Calera did not have any businesses along side streets, which implies that it had enough room to locate secondary functions on main street.

TABLE XXIV

DISTRIBUTION OF FUNCTIONS IN CALERA 1920

NUMBER of FUNCTIONS in 1920	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in the RailDist
23	87	0	13

Functions in the Comm Dist	Functions in the RailDist
City Hall	Depot
PostOffice	CottonGin
FeedFmImp	GrainHay
Drugs	
GenStor	
Bank	
AutoGarage	
Grocery	
Confection	
Tailor	
Resturant	
AutoSupp	
Printing	
Hotel	
Lumber	
MeatMark	
Livery	
Blacksmith	
AutoSales	
LodgeHall	

Source: 1918 Calera Sanborn Fire Insurance Map

The railroad district included 13 percent of Calera's functions (Table XXIV), with the railroad depot located to the southeast of the commercial district (Calera Sanborn Map 1918). It was in operation until the 1940s when the first roads were paved through the area (Glover, 1990). The W.E. Turley cotton gin was located one block north of the commercial district and was built just off the railway where it served as Calera's main agricultural function.

Today, Calera has a four-lane highway dividing it from the railway. Its old commercial district is completely gone except the old city hall which is the only original building still standing. Part of the old commercial district has been developed into an access road, which runs parallel to the four-lane highway for about 16 blocks. Part of it has been converted to residential use and it also has the city hall, fire station, and an upholstery shop.

McKinley Street now serves as the new main street and is located two blocks west of the strip and the four lane highway. It runs parallel to the new highway and is divided from the commercial strip by a residential area which is now located along first street. Forty-one percent of Calera's 17 functions are located along McKinley street (Table XXV), including B and D Grocery, the city hall, a museum, a video store, the post office, and a pool hall called the Tin Barn. There were also five abandoned buildings on the street including a former dentist office, auto-garage, arcade, and antique store.

TABLE XXV

DISTRIBUTION OF FUNCTIONS IN CALERA 1990

NUMBER of FUNCTIONS in 1990	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in Both Districts
17	41	47	12

Functions in the Comm Dist	Functions in the SideSt Dist	Functions in Both Comm Dist and SideSt Dist
Grocery	Furniture	Resturant
CityHall	Bank	AutoRep
PostOff	Telephone	
Upholstery	Clothing	
Museum	ConvStore	
MovRent	Antiques	
PoolHall	MobilHomes	
	AutoSales	

Source: Field Notes from Authors Field Research (1990)

The strip contained 47 percent of Calera's business activities (Table XXV), including a bank, a telephone company, three convenience stores, two car washes, two antique stores, a women's clothing store, an auto dealer, and a mobile home business. Restaurants and auto garages were located on both the strip and in the commercial district but 75 percent of the total number of each function were located along the strip.

Velma Glover mentioned that she does all her shopping in Denison, Texas, because of good road access and because she can get all that she needs in one centralized location. She remembered when Calera was a railroad town and she use to ride the passenger train to Denison. She also remembered the old businesses such as the Harris general store, Sweeney's grocery, Moor's store and livery stable, the Calera Hotel, and Moody service station. She claimed the depot was torn down in the 1940s and most of the businesses were demolished in the late 1950s or early 1960s to make room for the new highway. The businesses on the strip were developed from the mid-1960s to the early 1970s, about the same time the bank moved from Main Street to the new highway (Glover 1990).

In 1990, Calera also functioned as a bedroom community for Durant and Denison. Therefore, Main Street has completely switched directions since 1920 when it was oriented to the west away from the railroad. Today, the Main Street, or McKinley Avenue, leads north and south

parallel to the four-lane and the railroad, which are both two blocks to the east.

The Changing Commercial District of Bromide

In 1920, Bromide's commercial district was located at the junction of Juanita Avenue and Bromide Avenue. It had 70 percent of Bromide's 20 functions including grocery stores, the furniture store, the drug store, garages, hotels, and the bank (Table XXVI). Twenty percent of the functions were located south and east of the commercial district on side streets. These included a grist mill, blacksmith shop, flour mill, and the W.E. Thomas Lumber Company. The railroad district included several gins and the railroad depot, which was developed on the opposite side of town from the commercial district.

In 1990 all of these commercial establishments have been abandoned. Only two original structures were still standing, but had not been used since the 1950's. Ray Toney (1990) claimed the Kinnsey general store and the Channell drug store were the last two original businesses to close their doors around 1955. The railroad depot was razed in the 1940s and the last leg of the railroad was abandoned in 1975 when crushed rock lost its importance in Bromide (Toney 1990).

Today, Bromide contains four functions, of which three are located in the original main street district (Table XXVII). The post office is a small square building of frame

TABLE XXVI

DISTRIBUTION OF FUNCTIONS IN BROMIDE 1920

NUMBER of FUNCTIONS in 1920	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in the RailDist
20	70	20	10
Functions in the Comm Dist	Functions in the SideStDist		Functions in the RailDist
Telephone	Flourmill		CottonGin
PostOff	GristMill		Depot
Furniture	Lumber		
Drugs	Blacksmith		
Hardware			
GenStore			
Bank			
AutoRepair			
Grocery			
Barber			
Resturant			
Hotel			
MeatMark			
Livery			

Source: 1919 Sanborn Fire Insurance Map for Bromide

TABLE XXVII

DISTRIBUTION OF FUNCTIONS IN BROMIDE 1990

NUMBER of FUNCTIONS in 1990	Percent in the Comm Dist	Percent in the Sidest Dist	Percent in Railroad District
4	75	25	0
	Functions in the Comm Dist	Functions in the SideSt Dist	
	PostOffice CityHall Telephone	ConvStor	

Source: Field Notes from Authors Field Research (1990)

construction. It is around ten years old and by its small size could not serve many people. A stone city hall and an abandoned service station are located at the junction of Juanita and Broadway. The service station closed in September of 1990 (Toney 1990). The telephone office is located in a little brick building across Juanita Avenue from the abandoned service station. It has been in this location since 1920 but was rebuilt in the 1960s. The only function located in Bromide's original side street district is a convenience store. It is located at Broadway and Juanita avenues to the south of the abandoned service station. This is the only major commercial function in town and offers groceries and gas to the local customers. The convenience store opened its doors about ten years ago and is the only new business developed in Bromide since the 1940s (Toney 1990). Garner Morris remembered when Bromide was a prosperous little town because of the Bromide Springs, which were developed from an artesian well. This attracted thousands of people to the area every year to swim at the bath house or to drink from the fresh water springs. The springs lost their popularity in the late 1920s and the early 1930s when passenger trains ceased service and other areas became accessible by car (Morris 1990).

Relationship between Construction Materials and the Types of Functions

Construction materials of the local buildings are an aspect of the landscape which could show the researcher what types of functions are most prominent in a small town. For instance, Bailey (1982) found that activities in the commercial district were associated with brick construction and functions located outside the commercial district were located in frame or metal buildings. Tables XXVIII and XXIX show the number of functions in each town, what percent of the functions were located in brick, frame, or both construction types, and which functions were associated with each construction material. Figures 35 and 37 also give a spatial view of how the construction materials of the buildings have changed over time in relation to changing functions.

In 1920, 65 percent of the commercial functions in Wapanucka, 59 percent of the functions in Caddo, 26 percent of the functions in Calera, and 35 percent of the functions in Bromide were located in brick or stone buildings (Table XXVIII). Davison (1990) claimed that these materials were very common because they were not a high fire hazard compared to frame structures. Frame buildings were considered a hazard because the businesses were located so close together that if one caught fire the whole block was in danger.

In all four towns, drug stores, general stores, banks,

TABLE XXVIII

CONSTRUCTION MATERIALS COMMON WITH DIFFERENT TYPES OF FUNCTIONS 1920

	Number of Functions	Percent in Brick or Stone Build.	Percent in Frame Buildings	Percent in a Mixture of Matrs.
WAPANUCKA	40	65	30	5
CADDO	39	59	36	5
CALERA	23	26	74	0
BROMIDE	20	35	45	20

Functions Common in		
Brick or Stone	Frame	Mixture
Drugs	GristMill	AutoRepair
Gen Store	FeedMill	Hotel
Grocery	Lumber	Livery Stable
Bank	Gin	Cobbler
Resturant	Blacksmith	Barber
MeatMark	Depot	
Hardware	Tinshop	
Furniture	Printer	
FeedFmImp	Plumber	
MovPict	Dye Plant	
DryGoods	Produce	
Confection	Grain or Hay	
Tailor	Seed Oil Mill	
PostOffice	Carpenter Shop	
City Hall	Sawmill	
AutoSupply	Auto Sales	
FlourMill	Harness Shop	
LodgeHall	Clothing	
DepartStor		
DryCleaning		
Shoes		
Bakery		
Undertaker		
Telephone		
Insurance Off.		
Jeweler		
Boiling Wks.		

Source: 1920 Sanborn Fire Insurance Maps

and grocery stores, were located in brick or stone buildings (Table XXVIII). This indicated their regional importance to the area as well as their functional importance in the commercial district. Bailey (1982) categorized these as primary type functions because they are all located on main street and are most likely to be of brick construction. She classified functions that are located of main street as secondary functions. These included light-industrial functions and railroad businesses, which were usually of frame construction. Secondary functions that were frame construction in all four towns included lumber yards, cotton gins, grist mills, blacksmith shops, and railroad depots.

Table XXVIII and Figure 35 illustrate the dominance of the primary functions and brick construction as compared to the secondary functions and frame construction. The hotel is interesting because it is assumed to be an important function during the 1920's but only Caddo and Bromide have brick hotels. The importance of the towns is the only likely answer because Caddo is well-represented as a passenger and cotton marketing railroad center while Bromide is noted for its artesian wells which brought many people to the area. The auto garage represents a clear picture of who has the local materials because Wapanucka and Bromide both have their auto garages built of stone, as they both had rock quarries nearby, while in Caddo and Calera the auto garages were of frame construction.

In 1990, 60 percent of the functions in Wapanucka,

83 percent in Caddo, 41 percent in Calera and 50 percent in Bromide were located in brick buildings (Table XXIX). Tin was another type of construction gaining popularity with 8 percent of the functions in Wapanucka, 13 percent in Caddo, 21 percent in Calera, and 25 percent of the functions in Bromide being of tin or corrugated metal structures (Table XXIX). The city hall, banks, groceries, restaurants, and post offices were the most common functions in brick buildings. These are the same types of functions that were located in brick buildings in 1920 which indicates that they are still important to commercial structure of main street (Figures 35, 37).

Today, most of the newest businesses are constructed from corrugated metal. The convenience stores in Wapanucka, Calera, and Bromide were all built of this type of material (Map 37). Dun and Bradsteet (1990) listed several industries in the four-county study area which manufactured and marketed this type of material, explaining why it was popular for some of the new businesses.

Therefore, many of the functions located in the commercial district were of brick construction in 1920 and were either brick or metal construction in 1990, while businesses located outside the commercial district were of frame construction in 1920 and were metal in 1990. This indicated the importance of different types of activities as to where they were located and also showed the changing availability of different building materials as time passed.

TABLE XXIX

CONSTRUCTION MATERIALS COMMON WITH DIFFERENT TYPES OF FUNCTIONS 1990

Towns	No. of Functs.	Percent in Brick or Stone Build.	Per. in Metal Buildings	Per. in Frame Bldgs.	Per. in a Mixture of Matrs.
Wapanucka	19	63	10	11	16
Caddo	24	83	13	4	0
Calera	17	41	24	12	23
Bromide	4	50	25	25	0

Functions Common in			
Brick or Stone	Tin or Metal	Frame	Mixture
Bank	Furniture	Lumber	Clothing
AutoRepair	ConvStore	Motel	Upholstery
Grocery	MobilHome		Antiques
Resturant	MeatProc		LodgeHall
CityHall	FeedFmImp		BeautySal
PostOff			
SportGood			
Tavern			
LiqStor			
VariteySt			
Welding			
Museum			
MovieRent			
ServStation			
Cabinets			
TradePost			
Laundry			
Realty			
Crafts			
Telephone			

Source: Field Notes from Authors Field Work (1990)

Relationship between Building Height and the Types of Functions

In 1920, 31 percent of the functions in Caddo and 22 percent in Wapanucka were located in two-story buildings as compared to 9 and 10 percent of the functions in Calera and Bromide (Table XXX). This exhibits about the same relationship as the construction styles. The two most developed towns fostered the most two-story brick buildings. The functions which were most likely to be in two-story buildings were the drug store, bank, general store, department store, hotel, jeweler, doctor, insurance office, and telephone company (Table XXX). The drug store and general store, and bank were on the ground floor with the jeweler, doctor, insurance office and telephone company located above them (Figure 35). The only three-story building, in Bromide, included a hotel on the top two floors and a general store or drug store below.

Jewelers, insurance agents, and telephone operators were considered secondary functions which mostly provided a service to the local population and did not sell major amounts of retail goods. People were also willing to travel farther (on up stairs) to purchase more expensive items or to frequent lower order services. Therefore, commercial space on the ground floor was left for the primary retail businesses and the secondary retail businesses or services located on the second or third floors. The grocery store, hardware store, blacksmith, auto garage, post office,

TABLE XXX

FUNCTIONS COMMON IN EITHER ONE, TWO, or THREE STORY BUILDINGS 1920

Town	No. of Functions	Perc. in 3-story Buildings	Perc. in 2-story Buildings	Perc. in 1-story Buildings	Perc. in Mixture Two or One
Wapanucka	40	0	22	73	5
Caddo	39	0	31	67	2
Calera	23	0	9	87	4
Bromide	20	15	10	70	5

ThreeStory Bromide only	Functions Common in Two-Story	One-Story	Mixture Two or One
Drug Store	DrugStore	Printing	GenStor
Bank	Bank	Plumbing	FeedFmImp
Hotel	Hotel	Lumber	Telephone
	Jeweler	Gin	DryGoods
	InsurOff	Livery	MovingPict
	Clothing	Meats	
	LodgeHall	GristMill	
	DepartStore	PostOff	
	DryCleaning	Hardware	
		AutoGarage	
		BlackSmith	
		Depot	<u>One-Story</u>
		Resturant	Tailor
		FeedMill	FlourMill
		Grocery	Bakery
		Confection	CityHall
		Barber	AutoSupply
		Furniture	
		Shoes Tailor	
		HarnessShop	
		AutoSales	
		SawMill	
		Carp. Shop	
		SeedOilMill	
		Grain-Hay	
		Dye Plant	
		Produce	
		Tin Shop	
		Cobbler	
		BoilingWks	
		Undertaker	

Source: 1920 Sanborn Fire Insurance Maps for Wapanucka, Caddo, Calera, and Bromide

restaurants, and livery stable were located in one-story buildings (Figure 35). These more specialized activities were concentrated in the one-story buildings because they sold only one type of merchandise and did not need as much room to expand as did general stores or clothing stores (Bailey 1982).

In 1990, there were no two-story businesses in any of the towns except Wapanucka, which had a two-story motel (Table XXXI or Figure 37). Caddo had five two-story buildings but all the upper levels were unoccupied and two of these buildings were completely abandoned. Every function now had their own building and they were not all concentrated on Main Street. Back in 1920, businesses were located on both floors of many commercial buildings in order to concentrate as many functions on main street as possible. Today, commercial functions are more dispersed because of increasing mobility and changing technology.

Conclusion

This chapter portrayed how four small towns have changed over time in their commercial landscape as a graphic picture of what is happening throughout the study region. Results substantiate that the types of businesses have become more specialized and oriented to a mobile population. The distribution of businesses have changed to meet the new demands of the auto era. Businesses are no longer located along the railway or directly downtown but are either

TABLE XXXI

FUNCTIONS COMMON IN EITHER ONE, TWO, or THREE STORY BUILDINGS 1990

TOWN	No. of Functions	PERCENT IN THREE STORY BUILDINGS	PERCENT IN TWO STORY BUILDINGS	PERCENT IN ONE STORY BUILDINGS
Wapanucka	19	0	5	95
Caddo	24	0	0	100
Calera	17	0	0	100
Bromide	4	0	0	100

Functions Common in		
Two Story Buildings	One Story Buildings	One Story Buildings
Motel	Bank	Welding
	AutoRep	Antiques
	Grocery	MobilHomes
	Resturant	Museum
	CityHall	MovieRent
	PostOff	ServStat
	Telephone	Cabinets
	Clothing	TradingPost
	SportGood	Laundry
	ConvStore	Realty
	Upholstery	Crafts
	Tavern	MeatProc
	LiquorStor	FeedFmImplts
	VarietStor	Lumber
	BeautySalon	Furniture
	LodgeHall	

Source: Field Notes from Authors Field Research

distributed along a main highway that comes through town or next to the four-lane outside of town. The construction materials have changed from the use of mostly brick to the use of tin or metal and the height of buildings has changed to mostly all one-story buildings as businesses became more dispersed over time. Change in the population size of the town and changes in the local economy have also played a role in determining what functions remain viable with the changing landscape and technology of these small towns (Bailey 1982).

CHAPTER VII

SUMMARY AND CONCLUSIONS

The main objective of this study was to analyze how the number of functions, types of functions, distribution of functions, and the built environment have changed in several rural trade centers in south-central Oklahoma. It also sought to compare these changes with changes in demographics, farm structure, agricultural land use, transportation, and distance from urban centers. This allowed for an evaluation of how these variables affected the functional base of these trade centers between 1930 and 1990. Another objective was to examine the changing settlement structure of rural Oklahoma, an area which has been poorly studied. The study followed the methods employed by Johansen and Fuguitt (1973), Olson (1951), and Bailey (1982) in an attempt to compare the results of this research with studies conducted in other parts of the country.

It was found that the number of functions in the study area decreased in 80 percent of the trade centers between 1930 and 1960 as people moved away, as the farm structure changed, and as increased mobility allowed residents to travel to larger urban centers; Johansen and Fuguitt (1973) found similar results in Wisconsin between 1939, 1954, and

1970. This meant that population changes, the economy, and changes in transportation were important factors in determining the functional basis of this region of rural America between 1930 and 1960.

Between 1960 and 1990, however, this study concluded that the number of functions increased as the population size and percent change in population increased, and as distance from urban places remained constant. This indicated that people were moving back into the rural trade centers and were attracting different types of functions. They were more mobile and often worked or shopped in larger trade centers, but still demanded convenience and local recreation functions. This finding was probably reflective of a movement back to rural areas throughout the country, which occurred because of the construction of four-lane highways, invention and improvement of the automobile, faster speed limits, and better access to larger urban centers. Johansen and Fuguitt (1973) should update their study to evaluate if the small towns of Wisconsin have developed similar to these Oklahoma towns up to 1990. Another difference, between the two studies, was that the types of functions shifted due to increased mechanization while the economy remained unchanged in Wisconsin and mechanization increased corresponding to a complete transition in the agricultural economy, because of soil erosion and government programs, in Oklahoma.

Another researcher could also examine a significant

number of towns in Oklahoma to make a study comparable with Johansen and Fuguitt by incorporating correlation and regression methods. A small number of observations were used in this study making correlation insignificant. However, a problem with this new study is that there exists a diversity of economic activities in Oklahoma and it is hard to find an area similar to southwestern Wisconsin, which has a homogeneous agricultural economy.

This study also found that as land use changed from cotton and corn production to ranching and livestock raising, the agricultural functions disappeared from the rural trade centers in question and that ranch supply stores and meat processing lockers increased in number. The decrease in crop production affected small towns drastically because cotton or corn required a large labor force, small farms, and a large number of tenants who demanded specialized goods and services in the rural trade centers. Consequently, as cotton decreased, rural residents moved away, farms increased in size, the agricultural and railroad districts were abandoned, and the retail district declined in importance. Increased mobility also affected the types of functions by lowering the threshold of demand of many goods and services as people could get the same goods and a wider variety at cheaper prices in the larger urban centers. This decreased the number of functions offered, made the businesses less specialized, and more oriented to the mobile population. These towns have also become retirement

communities which require recreation or retirement functions. Therefore, as land use, farm structure, and transportation changed, the types of functions and role of the trade centers likewise changed.

Olson (1951) obtained the same results in Washington, Oklahoma, and suggested that changes in land use, farm structure, mileage of paved roads, and increased number of motor vehicles changed the types of functions to convenience, ranching, and retirement functions. However, Olson merely described how Washington and its surrounding hinterland were changing without actual statistics to show that the types of functions, land use, number of motor vehicles, and farm structure were in a state of transition. This study retrieves the actual statistics and portrays graphically how changes in transportation, farm structure, land use, and population have affected the sixteen small towns in the study area.

Finally, the current study analyzes the changes in the commercial landscape of Oklahoma trade centers to compliment the increased mobility of the population and the changing economy. For example, the functions of the rural trade centers are no longer distributed along the railroad or in the main commercial district, but are located along the major thoroughfares, whether it is main street or a four-lane highway. The construction styles of the establishments have changed from brick construction to metal construction as the role of the trade centers changed. The second

stories of many buildings were abandoned as businesses became more dispersed or moved away from the smaller trade centers. Bailey found similar results in Oregon.

However, Bailey's study was different because she categorized her towns into different developmental stages based on the types of functions, distribution of functions, construction styles, and building height. She found, between 1920 and 1975, that the number and types of functions have declined as their distribution changed, as the number of establishments have declined, and as the buildings became smaller and more dispersed. These changes occurred in all the developmental stages because of increased mobility and the changing economy. Comparatively, this study described four small towns of different population size and how the types of functions, distribution of functions, construction materials, and building height have changed between 1920 and 1990.

Therefore, the role of rural Oklahoma trade centers, and perhaps rural trade centers throughout the country, has changed from supplying specialized goods and services to a largely immobile, agricultural, and rural population to serving a mobile and retired population with conveniences, recreation, and socializing functions. This is the role of many small towns today and probably will be for the next several years unless new functions, technical innovations, and government programs can be developed to help enhance small town life and restore commercial vitality. This may

include town redevelopment to attract businesses and population back to these rural areas. It may also involve attracting manufacturing and construction businesses which would create jobs and would perhaps bring more residents and functions back into these rural trade centers. The further development of recreation and retirement functions may also draw other types of activities and may allure people who are on the verge of retirement to move into the rural trade center.

The Oklahoma Main Street Program may also apply, especially to Coalgate. This program offers tax breaks and other incentives for development and revitalization of the commercial district. The requirements of this program include a population between 5,000 and 50,000 as of the 1980 Census, verification of first year funding with evidence of a three year commitment for the local main street program, funding for a full time project manager, an existing downtown organization or commit to organize one, and a compact, clearly defined central business district with sufficient historic or architecturally significant buildings (Oklahoma Department of Commerce 1986).

The Main Street program does not apply to fifteen of the study towns, but they may be able to use some of the components included in the Main Street program to revitalize their commercial districts. The components include organization, promotion, design, and economic restructuring. Organization involves developing a coordinated strategy for

revitalization among the merchants and residents of the community, or working together to help improve the appearance of the town. Design includes removal of the incompatible elements, such as old abandoned buildings, and enhancement of the viable businesses to make the look of main street more attractive. Promotion involves projecting an image that attracts businesses or residents to the community. Through an aggressive promotion program involving special events and imaginative merchandising, the downtown can strengthen its role as a viable business center and will look like an exciting place to live and do business (National Trust for Historic Preservation 1981). Signs or other attractive development along the four-lane highway may be good promotion techniques to attract people into town off of the four lane. For instance, a sign that says "Welcome to Caddo" and lists all the businesses of Caddo may be an attraction for motorists and may help the commercial district.

Economic restructuring involves recruiting new businesses, diversifying to fill vacancies, and improving the overall economic viability. A small committee should be formed to draw up a comprehensive recruitment plan and assist in its implementation. The attraction of a light industrial firm, as mentioned earlier, may also draw population to the area and could bring economic security back to these small communities (National Trust for Historic Preservation 1981). In addition, the Oklahoma Department of

Commerce and the Main Street program may be implementing a program for Oklahoma small towns, under 5,000 in population, to help in the revitalization process. However, this project depends on state funding (Clinard 1990).

Suggestions for further research include studying a community which currently is using the Main Street program to see if it is attracting businesses or population to the area and what methods can be used in other communities to help them use this program in a beneficial way. A second study could examine how the construction styles and general appearance of these same sixteen towns has been altered over time by interviewing residents and obtaining historic photographs to compare with the current landscape. This would depict how the "sense of place" of these particular villages, or the general attitude of the population concerning the appearance of their towns, has changed over time. Finally, a third study may examine a different area in Oklahoma to see if the findings of this study relate to other places. If the trade centers in other areas are similar to the trade centers in this study, then they may want to take steps to help their communities survive, such as some of the suggestions above. It is the residents and merchants of these communities who have control over their town's future and viability. Therefore, they should implement some of the above activities to help their communities survive, otherwise, their communities may become a faded memory on the Oklahoma road map.

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Morrison, Mike. October, 1990. Owner of the Buffalo Chip Saloon in Wapanucka.

Toney, Ray. October, 1990. Resident and farmer near Bromide.

APPENDIX

OPERATIONAL DEFINITIONS

Operational Definitions

Built Environment: The constructions styles and height of the commercial buildings in an agglomeration.

Commercial Landscape: The types of functions offered, the distribution of those functions, and the characteristics of the built environment in an agglomeration.

Functional Base: The number and kinds of functions offered in a community.

Function: The different kinds of business activities which operate in a community such as a grocery store or a filling station.

Negative Relationship: The dependent variable is indirectly related to the independent variable or as the independent variable increases in value the dependent variable decreases in value.

Primary Function: An activity that is in high demand by the local population and is often located in the main commercial district.

Positive Relationship: The dependent variable is directly related to the independent variable or as one variable decreases or increases in value the other increases or decreases in value.

Rural: Places which have less then 2,500 inhabitants.

Secondary Function: An activity which is in low demand by the local population and is often located in the sidestreet district, along the railroad, on second floors of the main commercial district, or are located in larger trade centers.

Trade Center: A settlement with the primary purpose of supplying goods and services to inhabitants in the surrounding hinterland.

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