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LAND-USE IN RICHMOND, VIRGINIA;

1880, 1910, 1940

A Thesis

Presented to

The Faculty of the Department of Sociology The College of William and Mary in Virginia

In Partial Fulfillment Of the Requirements of the Degree of Master of Arts

> by David Ray Newcomb

APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

David R. Newcomb-

Approved, January 1989

Edwin H. Rhyne

Satoshi Ito

Jay A. Kreps Gary A. Kreps

DEDICATION

To my wife, Jacqueline Anne

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ABSTRACT

The purpose of this study was to determine the changes in land-use patterns in Richmond, Virginia over a sixty-year period at three, thirty year periods (1880, 1910, 1940) and how these changes were related to transportation.

Areas of land-use were classified as either retail use, wholesale or manufacturing use, or residential use based upon devised period city maps. Period maps for 1880, 1910, and 1940 land-use were developed by the selection and postting of appropriate addresses to represent each classification of land-use. Each time period was considered in terms of its popular transportation; 1880 in terms of walking, 1910 in terms of the trolley, and 1940 in terms of the automobile.

What was found was that dramatic changes had taken place in land-use that were made possible by changing transportation systems. Citizens of Richmond in 1880 had walked to their destinations, by 1910 many were riding the trolley, and in 1940, increasingly, citizens were driving automobiles to their destinations. From 1880 to 1940 this greater mobility was also reflected in the changing residential patterns, retail areas, and wholesale/manufacturing areas. Middle class residential areas had shifted from the center city in 1880 to the suburbs by 1940. Working class areas also were located far enough from the city's core in 1940 to have prevented walking access to work or shop. Not only did the main retail area expand from 1880 to 1940 but satellite retail areas developed away from the central business district. While the chief wholesale/manufacturing area had some growth, for the most part this area remained stable and new areas developed.

LAND-USE IN RICHMOND, VIRGINIA; 1880, 1910, 1940

INTRODUCTION

The purpose of this thesis is to empirically examine land-use patterns over time and show how transportation is related to them. Richmond, Virginia was selected as the physical entity of this study and 1880, 1910, and 1940 were selected as the time period variables for study. Yet, the mode of transportation, or eras of transportation, may affect land-use patterns more than do chronological years.

My interest in land-use patterns includes the separation or segregation of land for specific use, the actual locations of precise activities in relation to one another, any change that may occur in land-use over time. and how transportation influences land-use. To me, transportation seemed the paramount element in land-use segregation and changes in land-use patterns.

It is my contention that land-use patterns change over time and that transportation is the major factor in this change, for while land-use patterns may remain fairly constant over decades of time, land-use is not so constant over changing transportation eras. Given the rapid diffusion of technology enjoyed in American society, Richmond's land-use over the past one hundred years or so is probably more similar to other American cities' land-use than it is different.

This hypothesized similarity between the Richmond experience and other American cities was a factor in selecting Richmond for a study. However, this was not my only reason. The city of Richmond offered the convenience of archives and libraries and there were personal reasons for selecting Richmond. I had lived in Richmond most of my life, matured there, and developed an affection for Richmond, its people and history.

My method of research began by being inundated with about six months of study of Richmond's history. As I began this research I felt confident in the knowledge that I already possessed. However, I soon learned how relatively little I did know of Richmond history. Both this humbling experience and my newly acquired knowledge aided me during the most tedious phase of my research, namely, the acquiring of thousands of specific addresses and the plotting or posting of these addresses onto appropriate maps. The interpretation of the maps was the final phase of my research.

In Chapter I, pertinent theories and thoughts concerning land-use are discussed. A short history of Richmond from 1607 to 1879 is outlined in Chapter II. Richmond's land-use and two prominent land-use theories are discussed in chapter III. Chapter IV deals with Richmond as a walking city and chapter V treats Richmond as a trolley city, while Chapter VI portrays Richmond as an auto-metro area. The final chapter, Chapter VII contains conclusions.

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CHAPTER I

LITERATURE REVIEW

According to Amos Hawley (1950), human ecology began as, and remains, a sociological concern, dealing with a central problem of sociology (development and organization of the community). The study of the form and the development of the community in human populations is of major concern for the human ecologist. How growing, multiplying beings maintain themselves in a changing, restricted environment is a beginning point in the human ecological perspective. As a sociological concern, human ecology was refined by Amos Hawley, and Otis Duncan's P.O.E.T. (1959) conceptualization has added to and complemented Hawley's view.

The form or structure of a community is reflected in the community's land-use patterns. To consider a community's land-use patterns over time is to consider a community's evolution. Land-use patterns reflect how humans maintain themselves physically and socially in space. Two sociological theories that will be applied for the interpretation of land-use patterns in this thesis are E. W. Burgess's concentric zone theory (1925) and Homer Hoyt's sector theory (1939).

Reducing social/human existence to its most basic form

(organism and environment) provides a mechanism through which human populations can be better viewed and understood. Amos Hawley has pointed out that, whereas, the ecological approach is not exhaustive in understanding human communities, ecological principles can be applied successfully to the analysis of human communities. In human ecology, the unit of concern is the collective whole or population/aggregate. This concentration on the collective whole rather than the individual suggests one of the most basic premises in sociology; namely, human existence is collective or social existence. Man exists only in a social context with others. Human adaptation to environment is collective adaptation to environment. Roderick McKenzie (1968) has stated that emphasis on the aggregate is a distinctive feature of human ecology. Hawley has suggested that not only population variables such as age, race, religion, and occupation are important, but mere numbers are very important.

Size, according to Hawley, is the most important limiting factor in human existence. Size is viewed as not only affecting social behavior and social change, but size places limits on specialization, organization, and activities. Conversely, according to McKenzie, population size and organization are limited by their environment and technology. In the ecological viewpoint of Otis Duncan and Leo Schnore, distinctive human activities and organization are properties of aggregates or populations. Population is viewed as a system with emergent properties. Hawley (1950), McKenzie (Hawley: 1968), and Duncan & Schnore (1959) are not in conflict, but complement one another. Duncan & Schnore suggest further that social organization should be viewed as resulting from collective adaptation to an environment by a population.

According to Amos Hawley, community represents the least reducible environment in which ecological phenomena can be observed. Human communities, like human populations, consist of similarities and differences. In human ecology, the community represents both response to and adjustment of habitat. The human community is seen as the mechanism used by a population to adapt and maintain itself in a physical environment. The human community also can be thought of as inextricably interwoven functional relationships (Hawley). Interdependence in the community is stressed in human ecology as well as in biology, as a crucial element (Duncan & Schnore). Interdependence of human activities is also a basic premise of sociology. The human community has its origin in human needs/human nature (McKenzie: 1968), and includes population, physical habitat, and material culture. Community, then, is a collective response to habitat. Hawley defines community as a symbiotic-commensalistic phenomenon, having categories of corporate and categoric groups.

Otis Duncan has suggested (1959) that social-human existence has four factors (population, organization,

ecology, technology: P.O.E.T.). These four factors can easily be adapted as a means or framework for interpreting total human society, human or social history, or any aspect of human society. Although each factor in P.O.E.T. is viewed as conceptually independent of the others, each factor must be viewed as dependent on the others. A brief overview of each element and its relationship to the others follows.

<u>Population</u>; For the purpose of this study, population will be defined by numerical size. Although population is generally thought of as a quantitative concept, it also has qualitative aspects. Population as a quantitative variable involves natality, immigration, and emigration. Birth rates, death rates and other vital rates, in turn, are qualitatively related to organization, ecology, and technology.

Organization; For the purpose of this study, organization will be defined and limited to a general classification with both agrarian and industrial influences apparent. At no point under consideration could Richmond be categorized as reflecting only agrarian traits, nor only industrial traits. Trite as it may seem, in implying an agrarian-industrial combination, a comparison between them is a very useful tool in interpreting my data. The sixty short years from 1880 to 1940 in Richmond, Virginia

represent nothing less than an astounding transformation in the very way people lived their day-to-day lives. Organization of families, communities, and society changed radically. Households in 1880 tended to be multigenerational (grandparents, parents, children), reflecting an agrarian influence and need, but by 1940, the nuclear family (parents, children) was the mode, reflecting the higher mobility of industrialization. Communities changed from the tight-knit neighborhoods where everyone knew everything about everyone living there or anyone that may have walked by in 1880, to the much less personal neighborhoods of the suburb where residents rode by in 1940. Clearly, from the types of businesses listed in the Richmond city directory of 1880 compared to 1940, remarkable changes took place not only in buying and storing food items, but also in dress/clothing. Richmond then, as did the rest of American society, experienced dramatic or revolutionary change in the feeding, clothing, and housing of its population.

Somewhat more abstractly, the organization of plant, animal, or human community relates to its population, its environment, and its technology at hand. Organization must relate directly to its population. Organization must develop if populations are to develop. Just as organization exists because the population exists, population exists because of organization. Populations sustain themselves through organization, and this organization comes to impact the quality and quantity of the population. Organization appears indispensable for a population to adapt to its environment. It is in response to the environment that a population organizes itself. Human populations are unique because of their extended social environments and the organization of those social environments, in particular, the division of labor. As the environment influences the organization of human populations, the organization of human populations comes to influence the environment.

<u>Ecology/Environment</u>; Environment will be defined as physical space, acknowledging other not-so-tangible environments such as economic and social. Economic and social environments certainly impact one another and the physical environment, however, the thrust in this thesis is land-use.

Ecologically, environment confronts and challenges a population. In addition, the environment makes possible the existence of and the nurturing of a population (plant, animal, or human). Human populations, of course, are different in having social environments to serve as buffers from natural environments. The first human social environment may have begun as a means to adapt to the natural environment. Human populations are not possible without both social and natural environments. Organizations, likewise, exist only through a social environment. Technology, as well, can exist only within a social environment for human population. The physical environment is somewhat like nature's stage, where a population, through its organization and technology, plays its roles. Although the natural environment confronted man with his greatest threat to (and promise of) existence, man's social environment (through organization and technology) became his greatest promise of existence.

<u>Technology</u>; For the purpose of this study, the principal technology to be studied is the mode of mass transportation. The three periods under investigation represent three different periods of transportation as related to technology. Although the noble horse was plentiful in 1880 Richmond, most people walked from place to place. In 1910, Richmond enjoyed the benefits of the electric streetcar. The internal combustion engine (in autos and buses) by 1940 was becoming the chief means of moving people.

Technology in the form of means of transportation in this thesis is viewed as the pivotal element in land-use for Richmond from 1880-1940. Changing transportation systems enabled the population to mushroom and made possible the great physical expansion, as well as impacting social organization. Without a technology, no plant, animal or human population can adapt to its environment. Possibly no greater factor in modern human population increases can be identified than technology. Technology not only influences and changes organization, organization impacts technology. Technology can arise only within a population, which can exist only in an environment. Likewise, environment (physical/social) influences the technology, and environment is influenced by technology. To many, technology's exponential advancement during the past two hundred years has resulted in technology becoming the prime gene of society. More than population, organization, and ecology each individually impacting technology, technology has become a chief determinate element of population, organization, and environment.

LAND-USE PATTERNS: CONCENTRIC ZONE THEORY AND SECTOR THEORY

Land-use patterns, or spatial relationships, reflect dimensions of time and space that allow a means to observe and measure ecological organization (Hawley). The spatial patterns that make up a community are of primary concern in human ecology.

According to Hawley (1950), two tasks are involved in the analysis of the community. Not only do the parts making up the whole need to be identified, but the overall pattern also needs to be discovered. Duncan and Schnore (1959) suggest three reasons why spatial relationships occupy such a key role in human ecology: the unit character of populations result chiefly from territoriality; physical space needs to be overcome and is needed for the activities of a population; and space provides "convenient... reference points for observation" (Duncan & Schnore: 136).

To consider Richmond, Virginia over a sixty year period (1880-1940) in terms of land-use patterns, is to study space over time within a human ecological framework. The time period 1880-1940 interwoven with the physical space, Richmond, reveals great social change locally as well as nationally. As American society continued to shift from an agricultural society to an industrial society during this sixty year period, so did Richmond.

Concentric zone theory and sector theory are two sociological models, pertaining to human ecology, that will be applied to understand Richmond's changing land-use patterns. Walter Firey identifies concentric zone and sector theories as idealized descriptive schemes. As idealized descriptive schemes, similarities between the two include the assumption of uniform geographical patterns resulting from the distribution of social activities, natural forces resulting from uniform patterns that shift and sort social activities over physical space, and the assumption that humans have no active or choice-making role in shaping these uniform patterns. The main difference between CZT and ST is the geographical patterns that result from social activities which impact land-use. A review of each theory follows.

Concentric Zone Theory; E. W. Burgess of the

University of Chicago, after intensive research concerning land-use patterns in Chicago during the early part of the twentieth century, developed the concentric zone hypothesis. Burgess found that the spatial structures of Chicago could be represented by a series of concentric circles or zones emanating outward from a central core or zone.

The central business district is at the center. This is the first zone and is what is generally referred to as downtown. In the central business district there can be found a concentration of retail businesses, department stores, banks, hotels, office buildings, and other similar activities. The second zone begins on the fringe of and surrounds the central business district. Railroad depots and wholesaling businesses are located in the second zone. The third concentric zone is referred to as the zone in transition (called so because this zone at an earlier period had been considered to be a wealthy neighborhood, yet currently it is a zone of residential deterioration). Low income individuals and low income families live in this zone and some light manufacturing may take place here. In the fourth zone are to be found the homes of independent workers, mainly industrial workers that have moved from the third zone. In the fifth zone are high-class residences containing larger expensive single-family units and high income apartment buildings. The sixth and last concentric zone is called the commuter's zone. As its name suggests, this zone has a broad commuting population, middle and

upper class residences, and may contain satellite cities.

Sector Theory; Homer Hoyt's sector theory suggests that land-use of a city follows a pattern composed of different sections. Residential areas, retail areas, and wholesaler/manufacturer areas, each have their own section of town. Together these numerous and diverse sections comprise a city. The boundaries of these different sections, though fixed in a general way, tend not to appear surgically-like divided, but tend to overlap. The movement of high rent residential neighborhoods was a primary concern to Hoyt. It was believed that high rent areas of sectors tend to pull the growth of the entire city. According to sector theory, as the urban areas or sections grow, wedge-shaped sectors of high rent areas tend to radiate out, following a definite path. Hoyt took into account physical features (something that Burgess's model did not) on land-use.

The understanding and interpreting of land-use within a city is complex. The task is made easier in the human ecological approach by considering the said city a collective whole environment. While viewing a city or community as a singular entity, it must be remembered that this singular entity has multiple components of at least population, organization, environment and technology. As guiding models for interpreting land-use, Burgess's CZT and Hoyt's ST are applicable. In the following chapters land-use over time in Richmond, Virginia will be explored, CZT and ST will be applied to changing land-use patterns, and transportation, an aspect of technology, will be shown to be decisive in land-use patterns. First a short early history of Richmond (prior to the period under consideration) will be presented in hopes that it will introduce and familiarize the reader with one of America's oldest cities.

CHAPTER II

RICHMOND, VIRGINIA: A BRIEF SOCIAL HISTORY (1607-1879)

As with any city, tangible aspects of Richmond, Virginia such as physical boundaries, city officials, employees, buildings, parks, and streets can be easily identified. Summed, however, these aspects alone will not equal a city. The history or experience of a city can be viewed as both tangible and intangible. History, being a recording of human behavior, reflects human experience with words, but cannot fully represent the depth of human experience. Perhaps more than any other social science, sociology provides a framework for the objective interpretation of social reality, past and present. Sociology stresses both the relativity and the context of human activities.

In particular, Richmond's land-use patterns in relation to transportation systems, over time, have been similar to other American cities. Richmond's extensive social history is beyond the scope of this thesis, yet cannot be separated from it. Richmond's origin as a site of continuous human habitation did not begin with the British colonization of North America. North American natives, or American Indians, had lived at the present site of Richmond for hundreds, even thousands of years before the establishing of Jamestown.

Also, it is more than probable that Spanish explorers visited the Falls (so named later by the English), or what would become Richmond, some thirty years before the founding of Jamestown. The British, however, in time would be the first Europeans to people a village at Richmond. A brief review of Richmond social history prior to 1880 follows.

Ten days after having landed at the site of Jamestown, English explorers under the command of Captain Christopher Newport continued their exploration up the James River and went ashore for the first time on May 24th, 1607, at the site that would become Richmond. The purpose of the exploration was to locate a shortcut to the South Seas and resulting riches. What these intrepid explorers found, instead, were an Indian settlement and the rocks of the Falls, preventing further exploration by ship. After a short stay with the Indians, the British returned to the Jamestown area and did not visit the Falls again until September, 1608, when they returned and explored westward about forty miles on foot.

Captain John Smith was president of the Jamestown Colony in 1609, and sought to secure a settlement at the Falls to establish a western frontier. An almost unbelievable sequence of events took place as a result. One hundred and twenty men, led by Captain Francis West, left Jamestown and planted themselves in an indefensible location that also tended to flood, near the Falls. When Captain Smith arrived months later for an inspection, he was alarmed

at their choice of sites. Smith quickly negotiated a trade with Little Powhatan (Powhatan's son) for the latter's wellfortified village, situated on a hill, in exchange for some Smith was in for quite a surprise: not only did copper. West's men not like the idea of moving to a new site, but they considered Smith to be interfering, and attacked Smith and his party. Smith retreated and had gone only a short distance when he heard sounds of West's contingent being attacked by Indians. Smith quickly returned, saved the day, reclaimed his authority, and moved the settlement to the former Indian stronghold, which Smith named Nosuch. However, West soon moved the settlement back near the river. Captain Smith decided to return to Jamestown, and on the way, an accident occurred injuring him, that resulted in his leaving Virginia for England, never to return. Not long afterward. West and his men returned to Jamestown. After an abortive attempt to build a permanent site called Fort Charles, the next people to attempt to settle at the Falls were about seven hundred Indians in 1656. It is not known for certain if they were Iroquois or Siouan Indians. What is known is that when a British force allied with Pamunkey and other Indians attacked the unwelcome Indians, the result was a disaster for the English and their allies. Some time later, for some unknown reason, the victorious Indians left the area.

In 1659, Thomas Stegg, Jr. began acquiring land at the Falls. Within a few years, he owned about 1800 acres there,

and built a house. He died in 1671, leaving most of his property to his 18-year-old nephew, William Byrd, who soon moved into his inherited house, located about a mile from the Falls' south bank. During the next few years Byrd was very busy. He not only began a trading post at the Falls, but he also sent trading expeditions into the wilderness, and he greatly increased his property holdings. In 1673 he married, and his son William Byrd II was born the following year.

When William Byrd died in 1704, his son inherited Westover Plantation and 26.000 acres (largely at the Falls) which included a warehouse, a store, and a ferry, as well as a monopoly on both tobacco trading and a lucrative trade with the Indians. Fearing the competition to his businesses that new growth might bring, William II tried in vain for years to block the establishment of a town at the Falls. Nevertheless, from fifty acres of Byrd's land holdings, as required by England, the town was laid off in 1737 by Major Mayo, and William Byrd II became recognized as the founder of Richmond. In 1742, the General Assembly incorporated Richmond, named after Richmond, England. At that time, the new town covered one-fifth of a square mile in size, and had a population of 250. William II died in 1744 and his son, William III, disposed of 30,000 acres at the Falls through a lottery in 1768.

An annexation in 1769 resulted in Richmond increasing to .74 of a square mile and a population of 574. From

various reports, Richmond was a rough-and-tumble place during this period. Street fighting, tavern brawling, and the gouging out of an opponent's eyes during such conflicts were common. Gambling in taverns on cockfights and horse races were favorite pastimes, to the dismay of local ministers. If an English visitor to Richmond about this time period was correct, Richmonders were "indolent, inactive and unenterprising" (Dabney, <u>Richmond</u>: 21). Still, this village of Richmond continued to grow in importance because of tobacco. Farmers transported their tobacco to Richmond for warehousing and shipment to England.

In 1773, the Boston Tea Party had resulted in the barricade of Boston Harbor. Citizens of Richmond sent what aid was possible to the citizens of Boston. In March of 1775, a Virginia Convention was held at St. John's Church in Richmond to discuss the impending military conflict with Great Britain, and to decide on a course of action. Richmond had been chosen for the convention because there was less likelihood of British interference than at the colony's Capital, Williamsburg. St. John's Church was chosen because it was the largest building in Richmond at that time. It was at this convention, due largely to the eloquence of Patrick Henry's famous "Give me liberty..." speech, that Virginia voted for the arming and training of a state militia for the ensuing conflict. Such noted Virginians as Thomas Jefferson, George Mason, and George Washington were present. Richmond began preparing for war;

men drilled and cannons and gun powder were manufactured. The Declaration of Independence of July 4, 1776, was read aloud for the first time publicly on the streets of Richmond on August 5, 1776, amid much celebration.

In 1780, the General Assembly moved the capital from Williamsburg to Richmond for safety because Richmond was up river and farther away from British troops. The following year, in 1781, Benedict Arnold, then a British officer, came calling on Richmond with about 900 British troops. Thomas Jefferson, the Governor of Virginia at the time, made a timely retreat from Richmond and observed events from nearby Manchester. Arnold destroyed, at will, many warehouses and buildings before exiting. Within a few months, Arnold was back; however, this time General Lafayette had managed to arrive first, so the British instead burned and destroyed buildings in Manchester. Not long afterwards, the British took Richmond one last time under Colonel Tarleton, sending Governor Jefferson and the General Assembly fleeing this time west of the city. After linking up forces with Earl Cornwallis at Richmond, Tarleton marched off in the direction of Williamsburg. Even as Cornwallis left Richmond, Lafayette was arriving for the attack on June 22nd. Pursuit of Cornwallis continued until October, when, at Yorktown, the Revolutionary War ended.

By General Assembly charter in 1782, Richmond officially became a city. Though it remained more a town than a city, Richmond was changing. Gambling, brawling and

the like continued, but, the town was changing physically and socially. Sites were being filled in or leveled for new buildings, and in 1785, the cornerstone of the Jefferson-designed State Capitol was laid. Another annexation in 1786 increased Richmond's size to 1.08 square miles with a population of 1,800, about half of which were were black slaves (Dabney, <u>Richmond</u>: 31-32). With a new city charter, Dr. William Foushee was elected Richmond's first mayor.

In 1788, the Virginia Convention met in Richmond for the purpose of deciding whether or not to ratify the 1787 Federal Constitution. At that time, Richmond was one of the nation's larger cities and Virginia was the largest of the thirteen states in size and population. Of the famous Virginians present were James Madison, John Marshall, and George Wythe who were in favor of the ratification; and Patrick Henry, George Mason, and James Monroe who were against the ratification. By a vote of 89 to 79 Virginia ratified the Federal Constitution. Also in 1788 John Mayo, son of Major Mayo who laid off Richmond in 1737, built a toll bridge across the James River connecting Richmond and Manchester, which was the first bridge to span the James. Prior ferry service had been the only means of public transportation from side to side. The Rocketts ferry had been in operation in the very early period of Richmond history, while the Coutts ferry provided services in the late 18th century.

In 1889, the canal around the Falls opened, stretching seventeen miles. George Washington had strongly urged the Virginia General Assembly in 1784 to build a canal to link Richmond with the then western-most part of the country. In theory, the canal would link Richmond with the Kanawha River, which flowed into the Ohio River, thereby opening up trade with the west. However, ultimately the railroad would dash the plans for the canal.

In 1810, through another annexation, Richmond increased to 2.4 square miles and a population of 9,785 (3,748 of which were slaves) and was divided into three wards (Jefferson, Madison and Monroe).

In the 1850's, Richmond's relative position, compared with other American cities, was a favorable one. For its size, Richmond was as prosperous and wealthy as any. Regionally, Richmond was an industrial center with a large iron works, tobacco manufacturing, and flour milling. This trend would continue through 1860, the eve of the Civil War.

By 1860, northern and northeastern regions of the United States were, relative to the southern region, considerably industrialized. Southern states, economies, and thinking remained agrarian. Beyond the then pertinent issues such as slavery or states' rights that arose, two different eras in a real sense confronted one another. This is not to imply that industrial aspects could not be found in the south, nor that agrarian elements did not exist in the north. Though it may be an oversimplification, feelings of community were strongest in southern states, while thoughts of society predominated in northern states. When aspects of population, organization, ecology and technology are considered in addition to eras, a more thorough image emerges. Although Richmond in 1860 was more industrial than other southern cities, Richmond lagged behind many northern cities. Richmond did have its famed Tredegar Iron Works but little else in the way of heavy manufacturing. From New England cities down to Baltimore, waterways and railways nourished industrial expansion that would forever surpass Richmond's manufacturing capabilities because of its lack of ready access to the west.

With the Revolutionary War over and the American nation in its infancy, Richmond had been in the forefront of American events. In the short time of about 80 years, though, technology and transportation systems would favor Richmond's northern neighbors. As the antebellum period approached its end, Richmond's importance continued regionally but was reduced nationally. The city's economic and social ties increased with the southern community, while becoming more distant from the society advocated by the north. Richmond collectively, socially, and historically had labored in the cause of the United States government. As the possibility of armed conflict between agricultural community and industrial society escalated to open conflict, Richmond and the state of Virginia chose their affiliation. From 1861 to 1865 Richmond used its energy to try to tear

apart the same United States it had helped create. Once the Civil War was over and the issue of a divided or united United States was settled, Richmond quickly regained its status in regional importance.

CHAPTER III

RICHMOND, VIRGINIA: CONCENTRIC ZONE THEORY & SECTOR THEORY

In the chapters that follow, the maps representing the three time periods of 1880, 1910, and 1940 will be analyzed. Each time period will be represented by maps reflecting the locations of residential use and several different businesses and community activities.

First, it is necessary to discuss the general framework in which the specific patterns of land-use fit in Richmond. In a preceding chapter concentric zone theory and sector theory were presented as models for understanding land-use patterns. While Richmond's land-use patterns did not rigidly parallel concentric zone theory, CZT proved of some use as a guiding model. Sector theory proved a more appropriate pattern for explaining land-use in Richmond. However, transportation appears to be the main cause of change in land-use patterns and not just growth in population. Changing transportation systems from 1880 to 1940 resulted in the desirability of residential locations reversing and locations of retail areas and wholesaler/ manufacturer areas decentralizing. The Richmond experience will now be compared with these models.

Richmond: Concentric Zone Theory; If at all, Richmond

in 1880 more than at any other time period under consideration, conformed to the notion of concentric zones; however, precise, rigid conformity was absent. Close conformity to CZT can be observed only by ignoring major aspects of nonconformity to CZT. Still, the idea of concentric zones can be useful as a jumping off point or beginning point for summarizing land-use patterns. CZT can serve as a sensitizing device to portray the ordered, segregated land-use of a city.

From Richmond's core in 1880, extending outward from Capitol Square, there was a central business district followed in succession by pseudo-zones of wholesale businesses, working class residents, middle class residents, upper class residents and a commuter zone. None of the mentioned areas or zones is totally concentric; yet, by applying the CZT model to 1880 Richmond, the impression could be left that human or social activities were segregated uniformly over physical space and the land-use patterns bear some approximation to the land-use patterns suggested by CZT.

Problems with total conformity to CZT begin with Zone 1 and extend all the way out. Retail areas, hotels, etc. were present in Zone 1, but also there were upper and middle class residential areas to the west and north of Capitol Square. Also, in Zone 1 there was a lower middle class area (east of Capitol Square) and part of the wholesaler/ manufacturer area (south of Capitol Square). In Zone 2 it

can be seen that most of the wholesaler/manufacturer area is where CZT predicts it to be. But also in Zone 2 are retail areas and all classifications of residential areas. Zone 3 certainly has a share of lower income individuals as well as some tobacco manufacturing taking place. However, Zone 3 also has high income residential areas and some retail areas present. In Zone 4 there can be found the homes of industrial workers as well as middle class homes. Upper middle class residential areas as well as working class residential areas were present in Zone 5. Middle class neighborhoods were indeed present in Zone 6, but there were a larger number of working class neighborhoods. In summary, in 1880 the divergencies from CZT are as prominent as are the similarities.

CZT applied to 1910 Richmond is less successful than in 1880, and in 1940 it is even less so. Less and less would land-use patterns resemble concentric zones. As a model, CZT is a basic easy-to-use conceptual representation of physical space (land-use), however, in applying the CZT model to the Richmond experience, a number of problems arise. In addition to CZT not accurately reflecting actual land-use, growth was never concentric. Using Richmond as an example, from 1880 to 1940 physical size increases did not accompany proportional increases in size of concentric zones. Indeed, zones of use in Richmond were never fully concentric. Even in 1880 there were at least as many discrepancies as parallels to CZT.

As suggested earlier, CZT's value in understanding land-use patterns within cities may be more general than specific. CZT conveys an image of unplanned but orderly land-use. That cities don't have nice, neat concentric zones may be of little importance in a broad sense. True, CZT does not reflect Richmond's actual land-use experience but CZT does point in the approximate direction. However, Homer Hoyt's sector theory more accurately describes Richmond's experiences, and we turn to that now.

Richmond: Sector Theory; Richmond more closely conforms to the basic premise of sector theory than to CZT. In considering ST, a sector is defined as a distinctive part, having shape and boundaries, rather than a geometrical figure having two radii and an arc of a circle. Instead of the neat concentric zones, ST suggests that sectors or sections of activity are irregular in shape and size. Also, sectors may or may not have exact, precise boundaries. Still, land-use is so concentrated that areas or sections are readily classifiable as either residential or retail (see Maps 7-9).

One real advantage of ST over CZT is that ST allows for natural features such as hills, creeks, and rivers. The Richmond experience of land-use was greatly influenced by such considerations. The James River, which passes through Richmond, has always had a crucial influence on the city's growth and development, for Richmond came into being because of the river and falls. For early Richmond, the James River was the means to or highway to and from the then village. In time the James would come to be viewed as a barrier to be bridged for use by other highways. A deep ravine to the north of Richmond prevented quick entry into, or exit out of Richmond from that direction. Technology in the form of viaducts and the electric trolley would overcome the problems posed by this ravine after 1910 and Richmond's northern boundary increased greatly as a direct result of the viaducts that allowed trolley, and in time, bus and auto traffic.

Creeks and hills also had to be mastered over time. For example, Shockoe Creek which had served as a boundary for the original Richmond city limits, was problematic in colonial times to cross, especially during floods. In time. Shockoe Creek would be channeled through man-made pipes and so covered with asphalt as not even to be noticeable. In earlier periods around Capitol Square there were hills that were bare earth; steep and rugged. In time the bare hills would be covered with streets, sidewalks and multistory buildings.

Within the framework of these natural features, land-use patterns over time in Richmond can accurately be represented by sections or sectors. Consistently over time, land-use uniformly can be readily divided into sections of land-use.

Although the details of sector theory and concentric

zone theory differ, both have similarities. Most important is that both are attempts meant to discern general land-use patterns in American cities. Whereas CZT suggests that a city's land-use patterns can be represented by orderly concentric sections or zones, ST suggests that land-use patterns can be better represented, at times, by not-soorderly sections. Both CZT and ST suggest that land-use patterns reflect highly segregated land-use. That is, land-use tends to be so segregated that areas of dominant usage are readily identifiable.

That areas or sections of a city would have a dominant use (retail, residential, etc.) is not only a mutual theme of CZT and ST but is quite remarkable. It is remarkable in that apparently without conscious attempt, human activities so uniformly sort themselves out over time and space. CZT and ST each attempt to reflect this largely unexplained phenomenon. Homer Hoyt, in a sense, had an advantage in that he had E. W. Burgess's work to build on or to extend. Burgess had captured the fact that land-use patterns exist; Hoyt refined Burgess's original notion.

Also, it should be mentioned, Burgess had closely mirrored land-use patterns that existed in Chicago early in the 20th century. A transportation system or two later, Hoyt's ST would best mirror land-use patterns. In no small way, changing land-use patterns are related to society's shift or change in transportation, and the period of 1880 to 1940 in Richmond is a clear example of this.

Technology, in the form of transportation systems, fosters land-use changes and population growth. With changing transportation, distance becomes less problematic, which encourages population growth directly and indirectly. Indirectly residential space is created for others, usually the working class when middle class residents move to newly developed outlying neighborhoods. New desirable middle class areas help attract middle class individuals from afar to the area, just as the newly available working class housing will attract working class people from afar. new transportation systems directly encourage population growth in several ways. First, with any new system, numerous jobs are created to operate the system that require both skilled and unskilled labor. In addition, businesses have a larger work pool to draw from when distance from workers' homes to work is not a problem, just as employment opportunities for workers increase when distance is not a problem. Also with the greater movement of individuals, businesses are enhanced with more potential customers being able to travel from farther away and more often.

The sixty-year period from 1880 to 1940 captures an important period, containing some of the greatest social change in the past two hundred years. The transitional transportation system during 1880 to 1940 can be viewed in numerous ways. Richmond was a walking town in 1880, a trolley town in 1910, and by 1940 buses and individual automobiles provided the principal mass transportation in the city. Although only a sixty-year period, the town of Richmond (1880) would scarcely recognize itself in the city of Richmond (1940). This sixty-year period of time, at thirty-year intervals, provides a boundary for not only understanding the relationship between transportation and land-use patterns, but captures the degree of increased change that has come to exemplify contemporary American society.

As land-use patterns reflect social relationships, land-use patterns also reflect a relationship with transportation and transportation systems. Although transportation can be defined as having a general meaning (means by which people and/or objects are moved over space), conceptually transportation must be viewed as multifaceted, Because of which impacts most aspects of social life. transportation individuals have greater choice in movement which results in families living farther apart from each other, the work place and its relationships being farther from home, and the choice of friendships not being restricted to a single neighborhood. The movement of goods and services across town or across the state or nation, also impacts the quality of life (namely, the building we live/work in, the clothing we wear, and the food we eat).

CHAPTER IV

1880 RICHMOND: A WALKING TOWN

The 1880 U.S. Census revealed that Richmond, Virginia was a city of 63,600 inhabitants, up by 12,562 people or 24.6% from the 1870 Census. Although sheer numbers cannot reflect the dynamic interactions of human populations, numbers can and do suggest the hustle and bustle of an expanding population. Such an increase as that Richmond experienced in population growth from 1870 to 1880 certainly hints at the energy expended by an increasing citizenry.

"It was the best of times, it was the worst of times..." are words that seem appropriate not only for Richmond (1880), but at any point under consideration. Some saw Richmond during the 1880's as closely resembling the Richmond of 1737, "...disheartening slow..." (Cutchins: 10) in regaining the vitality that the city had lost from the ravages of the Civil War. Others record that the city "roared with progress... [and that] decline never occurred in any absolute sense" (Chesson: 171). Dual and contrary aspects, in ways, typify human societies and in particular Richmond's population over time.

During the early and mid 1880's transportation within the city for the masses meant foot power. Although the more affluent had use of horse power (carriages, surreys, etc.)

and use of a public horse powered/pulled railed streetcar system with a total of about four miles of track, the public in general walked from home to work, to worship, to shop, etc. The necessity of walking began to change in 1888 when Richmond became the first city successfully to operate an electric streetcar system (with a total of about 12 miles of track (Ward: 169). The Richmond revealed in the 1880 city directory, however, was a walking city.

<u>Residence</u> and <u>Occupation</u>; From Map 7 it can be seen that middle class residential areas, for the most part, take the shape of a band or strip running northwest and southeast from the state Capitol. The northwest section of this middle class area fans out beginning at Monroe Park to more of a V shape, moving west, hence the name of this area becoming the fan district. According to my sample, this area was inhabited largely by clerical/salesworkers and by professional/manager/administrators. Moving east toward Capitol Square from the fan district, the next middle class section (bounded by Broad & Main Streets, north and south) appears to have been a wealthier section having more professional/manager/administrators than clerical/ salesworkers residents. There were two smaller middle class sections near the Capitol, one south of Main Street between 1st & 5th Streets, and a wealthier section north of Broad Street near Capitol Square. Although not densely populated, there was another middle class area east of Capitol Square

between Broad and Main Streets, populated mostly by foremen/ craftsmen and, to a lesser extent, by clerical/salesworkers.

Working class areas comprised the larger amount of land to the north, south and east of middle class areas. The better off working class sections appear to have been west and northeast of the Capitol. These working class areas were higher in representation of foremen/craftsmen, professional/manager/administrators and clerical/ salesworkers than were the working class areas northwest and east from Capitol Square. The east and northwest working class sections were proportionally much higher with service/ transportation workers and laborers/private household workers residents.

As noted earlier, problems exist when CZT is applied to 1880 residential patterns. Although there are some examples of conformance, mainly dissimilar results, even opposite results are found. Instead of the working class being the principal residents near the city's core, upper middle class residents dominated this area; and instead of the upper and middle class being the primary residents of the outlying areas, the working class dominated that area. Such a flip-flop of what is expected and what is found is related to transportation or the convenience of transportation.

In a predominantly walking city, such as Richmond in 1880, desirability of location is tied to accessibility. With a premium on closeness to retail areas, business, etc., land values are beyond what the working class or poor can

afford. Thus, living at Richmond's core were the wealthier citizens. Presumably, this situation of high residential value in the city's core was altered by the turn of the century with mass transportation, for only by devaluing housing at the core could the poor afford to live there as CZT predicts. The affluent areas were expanding west away from Capitol Square, but these residents did not rely on walking for transportation. These individuals depended on their own private horses and carriages.

With land values lower on the periphery of the city, working class neighborhoods abounded. This situation would reverse as transportation systems became faster and more economical. As transportation increased the speed at which individuals moved, so also did transportation systems accelerate social change.

Nothing illustrates the importance of walking distance emphasis more than that residence and work place were the same for many retailers (see Appendix A). This was especially true for the area concentrated in the retail area of East Broad Street, which is surveyed for the periods under consideration. In a six block area for 1880 (both sides of East Broad) there were 131 addresses, six of which were only residential addresses. In the remaining 125 addresses, 132 businesses were listed, of which 93 individuals lived at their business address and only 39 individuals lived at addresses other than their businesses. There were 115 additional non-business related residents in this area (see Appendix A for details).

<u>Wholesalers/Manufacturers</u>; Wholesalers tended to be concentrated southwest, south and southeast of Capitol Square (see Map 7). Manufacturers were far less concentrated and were located on a roughly jagged east-west line. Although most manufacturers were close to Capitol Square in an arc from southeast to southwest, a number of manufacturers appeared west and northwest (west on Broad Street and north on Brook Road). A small cluster of manufacturers were also in Rocketts, the eastern-most part of the city.

The wholesalers/manufacturers section was bounded by 5th Street to the west. Main Street to the north. about 26th Street to the east, and the James River to the south. One reason, if not the main reason, that most wholesalers and manufacturers were concentrated in this area is probably the area's proximity to the canal. There can be little doubt that such sections originally developed because of the business concern's relation to transportation. For these businesses the receiving of raw materials, parts, bulk goods, etc., and the shipping of products are dependent on transportation. In earlier time periods, waterways had been the primary means of moving goods. Although the Kanawha Canal was still in limited use in 1880, the six railroads coming into Richmond represented the city's chief transportation link with the state and the nation and most

had terminals near the dock areas (in fact, the Richmond city council voted the last city money ever to be used for the canal's upkeep in 1880).

Addresses of wholesalers and manufacturers were taken from the 1880 city directory based on listings under headings containing either the word 'manufacturer' or 'wholesaler' (example: bitters manufacturers, blank book manufacturers; boot & shoe dealers-wholesale, druggistswholesale). Using this method I committed an oversight and some wholesalers and manufacturers were omitted (including for example, bottlers, coopers, coppersmiths). Still, using this method 160 manufacturers and 60 wholesalers were selected. When an address was known only as a sales office and not the site of manufacturing or wholesaling, it was omitted.

Cotton may have been king in the south, but tobacco appears to have been king in Richmond or at least in Richmond industry. The largest numbers of manufacturers and wholesalers under a single heading were as follows: tobacco manufacturers (38), grocers-wholesalers (31), cigar manufacturers & wholesale dealers (24), carriage manufacturers and coach & wagon builders (11), iron manufacturers (11), confectioners-wholesalers (6), and notions & hosiery-wholesalers (6).

<u>Retailers</u>; The most uniform distribution of the maps occurs for retailers (see Map 1 and Map 7). A somewhat

east-west line can be observed primarily from 900-2500 East Main Street and 100-900 East Broad Street.

Of the selected retailers, the largest in numbers were boot & shoe makers & repairers (125), dry goods (57), clothiers (50), dress & mantua makers (44), boots & shoesretail (32), tailors (25), millinery & fancy goods (18), and furniture-dealers (14).

After the devastating fire in the area south of Capitol Square that was started by retreating Confederates in 1865, Broad Street increasingly became the main retail area. By 1880 East Broad Street and East Main Street appear to have been about even in number and types of businesses. As can be seen from Map 1, East Main Street had a concentration of men's clothing stores. Women's clothing stores seemed concentrated on East Broad Street.

Boot & shoe makers & repairers were found in number on East Main Street, Brook Road, and on 17th Street in addition to being distributed without pattern throughout Richmond. The large number of boot & shoe makers & repairers and their large dispersion suggest several things. Not only were boots probably much more popular than today, but many pairs of boots and shoes, as well, were made by hand. Also, the relative cost of new shoes or boots may, in part, account for so many repairers. The dispersion suggests not only the obviously large need of such services, but suggests something about the business. Since a number were located away from the retail areas and in residential areas, many of these locations may have served as both business and home. Also, the number and dispersion suggest that each boot & shoe maker & repairer business was likely a small business concern that catered to the needs of a walking public. With a walking population, a general problem was that shoes and boots tended to wear and be in need of repair, so a large scattering of repairers not only provided a convenience to their customers but they filled a need. Since 32 retail businesses listed presumably sold manufactured boots and shoes, it is safe to assume that most Richmonders wore manufactured shoes, but retail boot & shoe stores were located only in the retail areas.

Dry goods and millinery and fancy goods stores that totaled 75, offered a variety of goods that, in a way, were the forerunner of the department store. In all likelihood more Richmonders bought their clothing from one of the 50 clothiers than from dressmakers or tailors. Yet, the numbers of dressmakers and tailors suggest no small number of patrons.

Having mainly a walking public may have been as important in retail concentration in a walking city as having highly dispersed shopping centers in our own highly mobile cities. Given the limited distance of foot travel or the economy of travel, consolidated retail sections on East Broad Street and East Main Street probably developed quite naturally. Having such retail areas were not only convenient for the walking customers who could purchase any

item from personal clothing to household goods in one area, but concentration worked for the benefit of the merchant. A larger population of buyers would be drawn into an area of retail diversity, which would generally enhance the sellers' position.

Restaurants, Eating Houses, Boarding Houses, Hotels; In addition to individual residences, hotels and boarding houses offered shelter (temporarily for some, permanently for others), and were plotted with this in mind. Probably due to the comings and goings of those related to the Virginia state legislature and to state affairs, hotels and boarding houses clustered near Capitol Square. Hotels were west, northwest, north, southeast and south of Capitol Square. Hotels primarily shared locations with retail areas on several blocks of both East Broad and East Main Streets. Boarding houses were near and around Capitol Square but spread farther out in all directions than hotels. Restaurants and eating houses were diffused throughout the same approximate area. Whereas restaurants were businesses that sold meals probably to mainly business people, eating houses were actually individual homes that served meals, usually only lunch, to workers as well as some business people. The greater concentration of restaurants was to the south of Capitol Square and the greater concentration of eating houses was east of Capitol Square nearer the manufacturing sites.

As with retail areas, in a walking town the location of establishments such as restaurants, hotels, eating houses and boarding houses depends on accessibility. Such serviceoriented businesses must be placed so that they are both easy to get to and convenient for reaching other destinations. In all likelihood, many of the patrons of the restaurants and boarding houses were state employees or business people who walked from home to work, to eat, then back to work or home. Although some hotel residents lived there permanently, most were visitors who likewise walked to These visitors may have arrived in Richmond by their goals. steamship, steamboat, train or canal boat. Upon arrival, presumably, few opted to walk to their hotel or boarding house, but most employed hacks (horse & carriage-for-hire) or perhaps the horse-drawn streetcar.

<u>Grocers</u>; The importance of retail grocers in the distribution chain is evident. It is from the individual grocer that the individual or the individual family group acquired food items, excluding those individuals who may have eaten out. The grocer is the link between the food wholesaler (food distributors or growers) and the consumer. The significance of grocers and their locations is as basic to human communities as shelter and clothing. For this study a sample population of retail grocers was chosen by the following procedure: a sample of half the grocers listed in the 1880 city directory was plotted and every other grocer was selected.

Grocery density followed residential density, for the most part. Grocers appeared far-flung from Capitol Square and were spread out northwest, east, northeast and southwest from the Capitol. A considerable number were located in the retail areas (Broad & Main Streets, 17th Street) as well as in residential areas. Grocers were noticeably absent from most of the middle class sections, suggesting the necessity of travel to other areas for food supplies. Also it is most probable that most, if not all, grocers located in working class sections were small mom & pop stores.

The grocery-residential location mix is an archetype example of walking towns such as 1880 Richmond. Lacking the advantage of modern storage capabilities in the walking town, trips to the grocer were more frequent; and with food being such a necessity for human existence, the location of such sources would have to be near the home. Therefore, walking was a determining, if not the determining, factor in deciding where or how near to residential sections grocers would be located.

<u>Summary</u>; By 1880, Richmond as a transportation center, especially water transportation, was losing ground to Norfolk; still, Richmond maintained its regional importance. In 1880, only New Orleans surpassed Richmond as the largest manufacturing center in the south and Richmond was one of only ten cities with a population of greater than 25,000 in the south. Six railroads came into Richmond. Both trains and steamships carried passengers and freight to and from Richmond with regularity. In 1888 electric streetcars began regular service in the walking town of Richmond.

The classification of walking town should not obscure Richmond's teeming existence. In walking Richmond, occasionally spontaneous mobs formed, the telephone was first demonstrated, the whipping post was abolished, much opposition to public education existed, the last public hanging in Virginia took place, and thousands of workers marched to mourn the death of a beloved industrialist, just to name a few events that took place in Richmond before the advent of mass transportation.

As individual citizens went about their daily lives in walking Richmond, it was not concentric zones that they passed through, but sections. A middle class person who lived near the city limits (a not too frequent case) would travel through several different sections to reach the city's core or downtown rather than passing through uniform rings of land-use. Likewise, working class individuals going about their daily business journeyed through sections of land-use instead of concentric zones.

CHAPTER V

1910 RICHMOND: A TROLLEY CITY

Richmond, Virginia of 1910 was no longer the Richmond of 1880; yet, Richmond in 1910 was still an extension of the earlier Richmond. By 1910, Richmond had expanded its boundaries in most sections through annexation, and its population increased accordingly. Richmond's population and land size had doubled from 63,600 in 1880 to 127,629 in 1910.

Richmond's population had changed from largely a walking population to increasingly a riding population via the trolley. The electric trolley lines carried and brought not only people but social change. Land-use patterns altered, and social patterns also were forever changed through this transportation transformation. Although Richmond never experienced the extreme negative consequences of industrialization, it did enjoy industrialization's rewards, among them making the masses more mobile. The electric streetcar line brought, as never before, a dispersion as well as a concentration of human populations and their activities. With dispersion there came diversity as never before. Where one lived, worked, shopped, and visited were conscious choices that an increasing number of individuals would make. Not only could single detached

housing units be concentrated in numbers on formerly unused land or farm land far from the city's center, but apartment buildings which concentrated residents in layers, could also be located in outlying areas. In addition to the trolley, horse-drawn vehicles, a few internal combustion enginepowered vehicles and foot power transported individuals through space in 1910 Richmond.

Residence and Occupation; Middle class neighborhoods in 1910 were strikingly similar to middle class neighborhoods in 1880 (see Map 8). Middle class areas tended to be mostly northwest to southeast of Capitol Square, bounded by Broad Street on the north and Main Street on the south. In 1910 this section or wedge extended farther west while the middle class section north of the Capitol and Broad Street was smaller in size than it had been in 1880. West of the city, fashionable Windsor Farms had leapfrogged ahead of other residential development as fashionable Ginter Park had done to the city's north. Many of the "score" (Silver: 40) of middle class suburban areas that surrounded Richmond were annexed in 1910, including Barton Heights and Highland Park to the north and Woodland Heights and Forest Hill to the south. Development of these sections was made possible by the trolley because these sections were beyond the walking distance to and from the city's core. The middle class section south of Main Street, between 1st and 5th Streets, appears to have remained

stable. Some transition seems to have occurred east of Capitol Square, between Broad and Main Streets, where wholesaler/manufacturer concerns dominated in 1910. East of the Capitol on Church Hill many residents had joined in the move to the suburbs, but many remained. Historic Church Hill continued to appeal to older inhabitants generally, while the younger ones generally preferred the new housing away from the center city. Yet, this section of middle class residents extends farther east, even though it is smaller.

Working class sections, more than in 1880, occupied considerably more area than did middle class sections in 1910. While working class sections in 1910 were similar in locations and size to 1880 working class sections, considerable expansion occurred primarily to the west. The two working class sections, northwest and northeast of the Capitol reflected growth, as did the working class section east in Rocketts. South of the James River, the former town of Manchester was now part of the city of Richmond and was predominantly a working class area.

Annexation accounted for most of the residential growth that occurred. The lands annexed between 1880-1910 were mainly residential, consciously developed through the use of the streetcar line. Real estate or land development companies had built a trolley bridge over the James River to the southside, viaducts to the east and south, and parks were built in the southside, northside, and westend to

encourage housing growth along streetcar lines. The electric streetcar company also had been involved in the development of amusement parks outside the city limits (and even provided low fares) for the purpose of populating the areas between the city and the parks; and the plan worked. Once these new neighborhoods were established, the homeowners wanted the improvements that only annexation and the city could provide. By middle class sections ringing the city (made possible by the trolley), Richmond in part and temporarily, conformed to CZT's expectation of the locations of such areas.

In comparing residential areas of 1910 with 1880, the following is evident. Both working class and middle class sections increased in physical size, not to mention the total population which had doubled. Through annexation most of this growth took place to the west, but some to the east, as well. For the first time Richmond's city limits included the southern banks of the James River in 1910. The growth of both classes was uniform, especially the western growth. The main middle class section or area in 1910 as in 1880 looked like a wedge or band stretching west from Capitol Square that separated the larger working class sections (see Map 7 and Map 8). While some middle class sections were diminished and others increased, all working class sections enlarged.

When comparing the residential use of 1910 with that of 1880 in the retail area on East Broad Street, the trolley

seems to have separated the work place and home for many inhabitants. In 1910 this retail area listed 111 addresses, 3 of which were vacant. Of the 108 addresses, there were about 156 businesses listed, of which only 27 had its owner living and working at the same address, compared with 1880 in which there were 132 businesses and 93 owners living at the same address. In 1910 there were only 37 non-business related residents living in this area compared with about 115 in 1880.

Wholesalers/Manufacturers; For the most part, wholesalers in 1910 repeat the 1880 pattern of distribution (see Map 8). In 1910 wholesalers were concentrated southwest, south, and southeast of Capitol Square. Considering this area of concentration, wholesalers appear farther west and southwest than in 1880. Manufacturers, while likewise concentrated with wholesalers near the Capitol, in 1910 had increased in number on the main avenues coming into or going out of Richmond (Main, Broad, and 17th Streets and Mechanicsville Turnpike). Some locations of manufacturers may not have been the site of manufacturing but of sales offices. A small area between Broad & Main Streets, near 17th Street apparently had become an area of wholesalers/manufacturers. No wholesalers appeared in Southside, however, about 20 manufacturers did appear mainly on Hull Street, Maury Street and on Stockton Street.

From the 1910 directory the addresses of 264

manufacturers and 73 wholesalers were taken and then posted. The 264 manufacturers were listed under 70 different headings. The 73 wholesalers were listed under 13 different headings. A table showing some of the most numerous wholesalers/manufacturers follows.

Wholesalers

grocers-wholesale (20) provisions-wholesale (10) wine & liquor-wholesale (8) notions & white goods-wholesale (3) bakers-wholesale (2)

Manufacturers

lumber dealers & manufacturers (43)

tobacco manufacturers (13)

ice dealers & manufacturers (11)

cigar manufacturers (10)

brick manufacturers (9)

elevator manufacturers (9)

ice cream manufacturers (8)

bag manufacturers & dealers (4)

woodenware manufacturers (2)

Comparing wholesaler/manufacturer listings of 1910 with 1880, the following emerges: there were far more manufacturer headings in 1910 (70) than in 1880 (37), but not so many more wholesaler headings in 1910 (13) than in 1880 (10). The wholesaler/manufacturer area in both periods remained about the same, however, there was some expansion by 1910 as noted. Tobacco and cigar manufacturers were fewer in number by 1910 than in 1880, but probably produced far more because of the use of machines.

Retailers; East Main Street as a contender for retail dominance was by 1910 yielding to East Broad Street (see Map 2 and Map 8). East Main Street, however, continued as an important retail area for men's clothing. East Broad Street from 1st Street to 7th Street had become the heaviest concentrated retail section (see Appendix B). Although retail density or importance on East Main Street decreased, retail businesses appeared farther west on Main Street and in greater number than did businesses on Broad Street. West Cary Street had a small number of businesses and there was a scattering in other parts of the city. On the southside of the city, the retail section clearly extended on Hull Street from about 9th Street to 22nd Street, with some scattering elsewhere.

Change is reflected in a comparison of 1880 retail areas with the 1910 retail areas. By comparing retail areas, a number of things are obvious. Not only did retail sections expand slightly on Broad and Main (if not in number) Streets, but other smaller retail areas developed beyond the principal centers. It is doubtful that these areas seriously threatened the downtown retail sections economically. Still, offering convenience even on a small scale away from the established retail areas indicates change. On the way to residential sections, streetcar lines passed through or near the new retail areas and helped make them possible.

While the population more than doubled, shoe dealers in 1910 had increased about 50% (from 32 in 1880 to 49 in 1910) and shoemakers & repairers only increased about 15% in This may or may not reflect a decrease in the number. relative cost of manufactured shoes. Boots were not listed in the 1910 directory, indicating perhaps a change in the physical dress for males. The number of dressmakers had quadrupled by 1910 and the bulk were to be found in residential sections, indicating a home business much like shoe repairers and grocers (see Map 2). The number of clothiers was up by only about 14%, although numbers alone do not show the physical size or the size of selection of these businesses. The number of dry goods stores increased by about 25% (from 57 to 71), furniture dealers had tripled in number (from 14 to 42), and milliners almost doubled (from 18 to 33); all of which, perhaps, denotes greater material wealth for the general population. With faster internal and external transportation, it may also indicate

an increase in clientele from nearby towns and countryside.

Restaurants, Eating Houses, Boarding Houses, Hotels; Most of the 18 hotels in 1910, as in 1880, clustered near the Capitol to the south, north and west. The hotel farthest east of Capitol Square in 1880 was near 15th Street, but in 1910 the hotel farthest east was at 17th & Main Streets. Likewise, to the west in 1880 there was a hotel near 5th & Broad Streets and one farther west on Main Street at Jefferson Street in 1910.

The location of boarding houses suggests that their residents continued to walk to nearby employment. However. the convenience of the trolley, as pointed out elsewhere, made possible the concentration of residential use in areas far removed from the work site. Although many occupants of boarding houses may have walked to work, others may have ridden the trolley. Boarding houses had increased in number from 35 to 221 in 1910. The only direction from the Capitol in which there were no boarding houses was south, until one came to the southside of the James River where there were eight. The greatest concentration was in the north to west guadrant from Capitol Square. In proportion, the greater change in number of boarding houses had occurred to the west and northwest of the Capitol.

Eating houses also experienced considerable increase in number, from 12 in 1880 to 84 in 1910. As in 1880, the majority were east of the Capitol, a few were south, southwest, west and north, usually near restaurants. Restaurants increased from 14 in 1880 to 69 in 1910 and appeared farther west. Demand, of course, must be related to the disproportional increase of boarding houses, eating houses and restaurants, but also change is implied. Beyond facts such as a growing population with economic means for such services, one guess is that many more single people were living alone in boarding houses and eating out at least occasionally. Also, given the locations and the increase in the number of eating houses and restaurants, more business people, office personnel and workers were eating out.

<u>Grocers</u>; There were approximately 963 retail grocers in 1910 Richmond; of these one-third or 321 were posted on the map. This compares with a total of approximately 418 grocers in 1880 Richmond and a one-half sample posting of 214. The chief difference between the two periods seems to be the large increase of grocers southwest of the Capitol and west to Oregon Hill. This latter area had been added to the city by annexation and was otherwise mainly residential in nature.

Even though residential areas were being located farther and farther from retail areas and work places in 1910, the humble grocers went where the neighborhoods went. The proximity of grocers to residential sections reflects more than the importance of food to human populations. Not only would it be inconvenient to carry large amounts of food goods home on the trolley, but storage (packaging) and lack of refrigeration prevented buying many items in quantity. Therefore, the frequent, if not daily, trips to the grocer necessitated nearness to home.

As in 1880, grocers in 1910 were chiefly diffused throughout working class neighborhoods, although others were spread out on trolley routes that traveled through retail sections on Broad Street, Main Street and 17th Street. On the southside of the James, unlike Richmond of the north bank, the greatest concentration of grocers was on the trolley line that passed through the retail section on Hull Street.

Summary: The trolley city of 1910 Richmond was twice the size of its 1880 walking town predecessor in physical size and in population count. Richmond had become a city not easily traversed on foot, although walking was no stranger to many. Without doubt, in 1910 electric streetcars were the means of movement for the masses but there was also an upstart on the scene. By 1907, Henry Ford's Model T was available in Richmond for \$850 and by 1913 there were almost 200 privately owned cars. Also in 1910 a three day automobile endurance race was held from Richmond to Washington D.C. to Charlottesville and back to Richmond; and a female won.

All Richmonders, not only the citizens that lived in the newly annexed areas, traveled faster and farther via

trolleys in 1910 than walking citizens of 1880. As the quality of transportation improved, the distance traveled by the average person increased. Living greater distances from the city's core, individuals had to go farther to work, to shop (except for groceries), or to picnic at a crosstown park. Richmond's growth (1880-1910) can best be represented as a growth of sections rather than a growth of concentric zones. The outlying working class residential sections, the linear retail areas (and satellite retail areas), and the lack of confinement for wholesalers/manufacturers all challenge the applicability of CZT for 1910 Richmond. As in 1880, Richmond's land-use patterns in 1910 cannot be reflected accurately by concentric rings. Land-use, instead, was segregated into sections of activities; that is, retail activity was separate, wholesalers/manufacturers were separate, and residential areas were separate.

CHAPTER VI

1940 RICHMOND: AN AUTOMOBILE METROPOLITAN AREA

Richmond in 1940 had a population that was up by more than 50% and a physical size that had doubled since 1910. During the thirty-year period 1910-1940, Richmond, as did America, became even more mobile, primarily through the use of the automobile. Unlike the trolley which can travel only on a prescribed route having tracks and power supply, the internal combustion engine (in automobiles, buses, and trucks) allowed for door-to-door access anywhere there were maintained surfaces. Richmond's physical bounds had expanded literally in almost all directions. Public buses and individual autos moved the city's population not only over physical space, but moved the citizens of Richmond even closer towards a national culture. Increasingly, Richmond, both physically and socially, was becoming more similar to American society as a whole and less regional in appearance. In addition to buses, the electric streetcar system still provided public transportation, although it was used less than buses. As populations continued to move farther from the city's core, satellite communities flourished. The dependent variable of land-use was impacted as never before by the independent variable of means of transportation. Directly tied to how 193,045 human beings and their

activities are distributed over space is how this same population moved over 23 square miles of space.

Not only had the Richmond population changed considerably in quantity, but there had been a great qualitative change in Richmond's population in this sixty-year period. Through the use of the car, commuters from surrounding counties worked, shopped, and relaxed in Richmond as never before.

Residence and Occupation; Plotting of individual addresses/occupations was not necessary due to the availability of 1940 tract data. Of the total 47 tracts that Richmond was divided into, not even one tract can be said to be totally working class or middle class. Not wishing to use too restrictive a definition in classifying tracts. a 55% criterion was used. Of Richmond's 1940 tracts, 22 had 55% (or greater) working class residential use and 22 tracts had 55% middle class residential use (three tracts had approximately 50% working class and 50% middle class). However, only 4 tracts had 85% (or greater) working class residents and 5 tracts had 85% (or greater) middle class residents. Tract data may provide a good mechanism for gauging the residential/occupational pattern of a city, but also tract data points to the difficulty in characterizing a section of a city as either working class or middle class.

Middle class residential areas in 1940 had greatly

expanded compared with earlier periods (see Map 9). The traditional middle class area between Main Street and Broad Street, west of Capitol Square, extended west beyond the Boulevard and south to the James River. A large middle class section existed in north Richmond and a smaller middle class section was in place on the southside of the James. Gone were the middle class sections east of the Capitol between Main Street and Broad Street and the section north of the Capitol and Broad Street. With increasingly faster transportation, there was no longer the need for close proximity to work, and for Richmond the process of suburbanization, which was evident in 1910, was clearly accelerating in 1940.

Working class areas also were enlarged from earlier time periods. Although the working class section west of Capitol Square remained fairly stable in size, working class sections north, east, and south grew.

In comparing time periods, there are numerous facts that emerge. Richmond in 1940 was not only about twice as large physically as in 1910, but had a population that was 50% larger than in 1910. 1940 Richmond was about four times as large physically and had a population that was three times as large as 1880 Richmond. With this growth there emerged some new patterns of land-use and movement, but some older ones persisted. By 1940 many Richmonders still traveled by trolley, however, vehicles powered by internal combustion engines (buses and autos) were increasingly transporting the masses. Streets and roads were much less costly in time and money than rail or trolley lines, which meant that more could be built. A fundamental effect of automobile transportation was that the system of streets and avenues so completely offered access to anywhere and everywhere simultaneously to the individual.

Middle class sections in 1940 were mostly away from Capitol Square compared with 1880 and 1910. In 1880 middle class sections were on three sides of the Capitol, in 1910 on two sides of the Capitol, and in 1940 only west of the Capitol. In fact, the 1940 middle class section west of the Capitol had largely receded. The newer middle class sections on the northside and southside had been fostered by streetcar transportation and had accelerated with the auto. Working class sections in 1940 had grown in more consistent directions than had middle class sections. Working class areas had intruded and had consumed middle class sections north and east of the Capitol.

In the same retail section on East Broad Street that was both work place and home for many in 1880, fewer in 1910, by 1940 had only one individual that was both working and living at the same address.

With greater freedom of movement, residential space not only continued to develop out, away from the city's center, but residential space was going up in the form of apartment buildings. Apartment buildings soared in number from 1910 to 1940. In numbers, apartment buildings increased 1200%,

from 27 to 324. Almost all of them were west of the Capitol; the closest being five blocks to the west. The location of apartment buildings tended to be in western middle class tracts, between Main Street and Broad Street, west of Capitol Square, on or near the Boulevard. It is interesting to note that such a large number of apartment buildings were in this middle class section and so relatively few were in the northern middle class section. Location and desirability, undoubtedly were important factors. Only 3 apartment buildings were on the southside. Apartment houses were probably one reason for the demise of boarding houses. This incredible increase in apartment buildings indicated a change in housing that corresponds to national trends. With the high cost of land in sought-after areas, apartment buildings were the quintessential housing form. Like department stores, apartment houses maximize land space by building up several floors. Transportation systems are a vital component in apartment buildings being located far away from the city's center. Greater distances can be covered faster and more cheaply so that distance becomes less important.

Generally 1940 Richmonders lived in more comfortable quarters than did their pre-indoor plumbing, pre-electrical wiring, pre-radio counterparts in 1880. In 1880 housing tended to be near to and relatively concentrated to the east, west and northwest of the Capitol. These inner city houses, often with only a suggestion of a yard, were

indicators of success in 1880, yet, by 1940 the indicator of success had become the larger, single, detached house on a spacious lot in the outermost parts of the city, away from Capitol Square. Much of the 1880 residential sections had become retail or business areas by 1940. Most of the remaining residential areas either had or were beginning to reflect a downward turn of fortune, which somewhat approximates CZT's zone 3. Zone 3 of Burgess's CZT, also called the zone of transition, denotes a residential area that has seen better days.

Wholesalers/Manufacturers; The greatest density of wholesalers remained south and southeast of Capitol Square, but showed an increase west of the Capitol. A few wholesalers appeared in the southside. A number of wholesalers were to the east of Capitol Square. From the Capitol, west on Broad Street, a marked increase of wholesalers and manufacturers had occurred. Manufacturers in numbers were mainly west of Capitol Square, radiating out. However, manufacturers in numbers were also to the east of the Capitol; few were to the north. The chief manufacturing operations in size, though few in number, were the tobacco companies in the area known as 'tobacco row' (east of Capitol Square along East Main Street and south to the river). On the southside approximately 30 manufacturers were scattered chiefly on Hull Street (see Map 9).

Much of the growth of wholesalers/manufacturers west

may reflect the desirability of locations on West Broad Street and farther west. West Broad Street was well situated in terms of going to and from. Although some light manufacturing took place on or near West Broad Street, most heavy manufacturing took place north of East Broad Street, largely along rail lines in the Shockoe Valley, and southwest of the Capitol, always near railroad lines. Railroad lines were probably a factor in the wholesaler/ manufacturer section of south Richmond.

Aside from some expansion of wholesaler/manufacturer sections, the main area south of Capitol Square was strikingly consistent with the wholesaler/manufacturer sections of 1880 and 1910. Although rail lines played no small part in freight movement, trucks with their greater mobility were no doubt making an impact, but had not yet displaced rail lines in the overwhelming importance to large manufacturing businesses. This area still remained central in location which no doubt influenced its continued use. Being towards the center of the city, many streets crisscrossed this area from different directions and two bridges connected it to the south bank, all of which made approach and exit easy.

<u>Retailers</u>; Numerous retail businesses were located on East Broad Street (northwest of Capitol Square) extending to West Broad Street and dominated the main retail district. In the area of East Main Street from 14th Street to 20th

Street, about 40 retail businesses were located. About 30 other retailers were scattered northeast of Capitol Square. Clusters of 5 or so other retail businesses can be seen north, west, east and northeast (Grace Street) of the Capitol. Retail sections smaller than Broad Street can be seen on West Cary Street, West Main Street (west of Monroe Park), Brookland Park Boulevard (northside), Williamsburg Road (in Fulton formerly known as Rocketts), and Hull Street from Cowardin to 9th Street (southside). These smaller retail clusters located away from downtown had been made possible first by trolley lines and then expanded through bus routes. The masses living away from the city's core found advantage in not having to make longer trips to downtown for every shopping need. This same basic idea of convenience would later lead to the growth of shopping centers/malls as automobiles became the unchallenged dominant transportation mode.

In terms of location the primary retail sections in 1940 had remained consistent with 1910 (Broad & Main Streets), as did smaller retail sections that existed in 1910 north of Broad (between 1st & 5th Streets), near Monroe Park (West Main Street), and the eastend (near Venable & 25th Streets), as well as Hull Street. Two newer retail areas were west of the Boulevard (West Cary Street) and north Richmond (Brookland Park Boulevard). These two newer retail sections were related to the growth of middle class residential areas that had taken place. Retail sales have such a close association with clothing that analysis of selected businesses that sold clothing will follow. From 1880 to 1940 trends in dress changed; also distribution and manufacturing of clothing changed. More than any other force, industrialization had made possible a personal wardrobe in size for the average person that would have been the envy of the average person in 1880, styles notwithstanding. Just as land-use patterns were influenced by transportation systems; transportation systems also influenced clothing styles. For example, the bulky clothing and accessories of the walking public in 1880 became increasingly inconvenient and unnecessary in the close confines and shelter of public transportation and automobile travel.

> Businesses related to the selling of clothing; by count and year

<u>1880</u>	<u>1910</u>	<u>1940</u>
boots & shoes, retail32	shoe dealers49	shoe dealers48
boot, shoemakers & repairers125	shoemakers & repairers128	shoe repairers94
dressmakers43	dressmakers199	dressmakers82
hats, caps, furs & straw goods9	hats & caps, retail6	
	department stores3	department stores.57

Shoe Dealers; Surprisingly similar numbers of shoe stores existed in 1880 (32), in 1910 (49), and in 1940 (48). Boots listed in the 1880 directory were not in either the 1910 or the 1940 directory. This suggests a popularity for boot wear in 1880 that did not exist in 1910 and in 1940. The 1940 directory shows several shoe stores that had more than one location. Branch stores and chain stores denote change in the business community. Considering the number of shoe stores in 1940 compared to 1880 or 1910, there were proportionally fewer stores in 1940. Yet, it appears that a fewer number of stores proportionally in 1940 offered greater variety and guality at a price than did proportionally a larger number of stores in 1880 or 1910. The change in popularity from boots in 1880 to shoes in 1910 may well be related to the change in transportation systems. In a walking town the additional support to ankles and the warmth in cold months that boots offered the traveler were not as necessary to the riding passenger in trolley Richmond of 1910, and even less so in 1940. The locations of retail shoe dealers expanded from East Broad & Main Streets in 1880 to include locations in each satellite retail area in 1910 and in 1940.

<u>Shoe Repairers</u>; This category included boot repairers (1880) and shoemakers (1880 and 1910). The absence of shoemakers in 1940 suggests that only manufactured foot wear was being sold in Richmond. Also, it would seem that 1940

Richmonders still, in large numbers, had shoes repaired, although, perhaps increasingly worn shoes were being replaced instead of being repaired. The locations of shoe repairers (1880-1940) were consistently divided between the central business district and residential areas. As with shoe dealers, shoe repairers were found in the smaller retail areas of 1910 and 1940, as well.

Dressmakers; The number of dressmakers in 1910 was 450% larger than in 1880, but in 1940 there was less than 50% of the number in 1910. Dressmakers continued (1880-1910) to be distributed mainly through neighborhoods, with a few near or around downtown. These locations suggest at least two things; these were smaller businesses unable to afford space in retail areas and they were often operated from home. It is difficult to account for such a large increase from 1880 to 1910 in dressmakers. The availability of mass-produced sewing machines may have encouraged many women to begin their own part-time or full-time dressmaking business. Perhaps in addition, there was a larger selection of cloth and lower prices available, as well as more individuals that could afford to pay someone for dressmaking. With some certainty it can be said that the drop in the number of dressmakers from 1910 to 1940 is related to the selection of manufactured clothing that was offered in retail areas.

Department Stores; Three department stores were in Richmond in 1910 and none in 1880. In 1940 department stores mushroomed in number to 57. Of course, the department stores varied in size, but still the number 57 is impressive. Fifty-seven department stores, filled with a range of manufactured products were open for business! In a way, department stores were like the jewel in the crown of industrialism -- it is there that consumer goods meet the consumers. The various departments in the store functioned somewhat independently of each other while answering to the same central authority. With little doubt, the department store adversely affected all of the clothing businesses mentioned so far and others not mentioned. 'Fancy goods and notions' was a listing that appeared only in 1880, which may have fallen victim, as well as 'gent's furnishing goods' (1880), 'ladies underwear' (1880), and 'ladies garments' (1910). Department stores located in the downtown area where real estate was at a premium can be thought of as the quintessential retail business form. By occupying a physical space that is spread, not only out but up, the use of space itself becomes maximized. Under one roof the buying public is offered a selection that formerly a dozen stores together could not offer. In addition to department stores being located in the primary retail shopping areas of East Broad Street, Hull Street (southside), and lower East Main Street. smaller department stores were also present in the smaller satellite retail sections west, north, and east

of the Capitol.

<u>Boarding Houses, Hotels, Restaurants</u>; Boarding houses, largely reduced in number, were concentrated west of Capitol Square between Broad Street and Main Street. A few were north and a few were east of the Capitol. In 1910 boarding houses were about six times the number as in 1880 and by 1940 there were only about 20% of what there had been in 1910.

Hotels, although spread out, appeared in clusters, mainly between Broad Street and Main Street and west of Capitol Square. The farthest one from the city's core was on West Broad Street a few blocks from the western city limits and across the street from a train station. After increasing about 50% in number from 1880 to 1910, hotels remained the same in number in 1940. Hotels, then, relatively decreased in proportion to the increase in population. It is probable that the hotels (or some of them) in 1940 each offered many more rooms for rent than did the hotels in 1880 or 1910.

The number of restaurants skyrocketed by 1940 and most were outside of the area they had been concentrated in, in 1910. The greatest concentration was west and northwest of the Capitol. East of the Capitol on East Main Street and on 17th Street there were a number of restaurants, as well as a scattering on West Cary Street (west of the Boulevard), but few were north or south of Capitol Square. In 1910 eating houses had increased seven fold over the number in 1880, but none were listed in 1940. Restaurants increased by almost 500% from 1880 to 1910, and increased from 1910 to 1940 again almost 500%. From 1880 to 1940 the number of restaurants increased by almost 2400%! In the 1940 city directory, restaurants were grouped with lunchrooms. Because of this the exact number of establishments that sold only lunch is not known. However, such a large number in 1940 may in part reflect lunchroom growth. Also, since eating houses were not listed in 1940, some lunchrooms may, in fact, have been what in 1910 or 1880 were called eating houses.

<u>Grocers</u>; In 1940 grocers had decreased in numbers and increased in dispersion throughout the city. Grocery stores were uniformly distributed throughout working class sections and almost totally absent from middle class sections as in 1880 and 1910 (see Maps 4, 5, & 6).

The category 'grocers, retail' is indicative of problems that can arise when using only statistics. Grocers in 1880 Richmond numbered 418, in 1910 there were 963, and in 1940 there were 639 grocers. In other words, the number of grocers increased 230% from 1880 to 1910, then from 1910 to 1940 there was a large reduction (34%) of grocers. This appears to suggest that the 1940 population was buying its food items from 34% fewer grocers. This is, no doubt, correct. What is masked, though, can be viewed when placed

in social context. From 1910 to 1940 a multitude of events had taken place to forever alter Richmond, though only one will be stressed here. The internal combustion engine influenced even Richmond's food source, its availability, price and selection. From farm fields and factories, food items rolled into the city by truck faster, more cheaply, and from farther away than ever before. With the arrival of the private automobile, consumers also could travel farther, faster and more cheaply to grocery shop. Auto owners benefited through choice of where and when to shop, as well as more choice in the amounts they could purchase (much more could be carried in a car than in the arms of a walker or carried by a trolley passenger). In part, the lack of ownership of automobiles may account for the greater continuation of grocery stores in working class areas where fewer automobiles were owned than in the middle class areas. By enabling numerous individuals to concentrate their grocery purchases at a single location, the auto may have greatly influenced the beginning and growth of the chain store grocer. In 1940 there were 47 A & P grocery stores in Richmond, managed locally and supervised from afar. Each A & P store, individually, probably put several neighborhood grocers out of business. The efficiency, buying power, and variety of the chain store could not be matched by most local grocers. Even with a 34% reduction in grocers, Richmonders in 1940 had never shopped so well. Prices and selection were aided by improvements in the storage and

canning of foods. As trucks brought the goods to the grocery, increasingly automobiles were bringing individuals to and from the market.

<u>Summary</u>; Richmond's physical growth of 100% compared with a population growth of 50% from 1910 to 1940 suggests a mobility of movement that had increased faster than the population. Twenty-five new car dealers were listed in the 1940 city directory, in addition to eighteen used car dealers and about 332 gasoline & oil service stations!

As important as the auto was becoming, it was not the only means of transportation important to Richmond. In the late 1920's the Richmond, Fredericksburg and Potomac Railroad was advertising that a person could "leave New York after theatre hours, arrive home in time for the day's business" (Sanford: 133), Charles Lindbergh was present in Richmond for the opening of its airport, the first air mail was delivered to Richmond, and in 1930 commercial air service from Richmond to New York began.

In 1940 citizens of Richmond drove or rode the bus to shop at Sears, Roebuck & Co., to relax at the Virginia Museum of Fine Arts, or to work in such diverse places as Richmond's tallest skyscraper (the twenty-two story Central National Bank building) or at the DuPont factory making cellophane and rayon. World War II loomed and no one could have guessed that within a few years 2,500 German prisoners of war would be working in the Richmond area for the American war effort.

As the use of the automobile was increasing and Richmond grew physically, citizens were traveling greater distances to all destinations. Residential sections were farther from the city's core than ever. Although suburban and satellite communities, in a sense, ringed Richmond as CZT predicted, this was not an inclusive fact. Middle class and working class residential sections, in effect, ringed the city. Also, just as retail areas were no longer confined to downtown, wholesaler/manufacturer activities were well beyond the zone 2 limits. As in 1910 ST best reflects Richmond's 1940 experience. From different income residential neighborhoods to retail areas and wholesaler/ manufacturer districts, sections were the form taken and not concentric zones.

CHAPTER VII

CONCLUSION

It is hoped that in this thesis, in addition to identifying which areas were used for what, at three points in time, changes in land-use patterns have been demonstrated. It is also hoped that the relationship that land-use has with transportation systems has been shown as a major factor that accounts for many of these changes.

Other factors such as population growth and increasing standard of living are prominent in altering the consistently segregated sections of land-use. However, the means of transportation makes possible the physical expansion by movement of individuals and goods over space. The change that has been cited and will be cited in land-use is strongly related to transportation. Before summarizing land-use changes as they relate to transportation, broad major changes and non-transportation sources of change in land-use will be discussed within the P.O.E.T. framework.

<u>Major Changes and P.O.E.T.</u>; P.O.E.T. provides a convenient conceptual scheme for reviewing Richmond's sixty year period of change in general, as well as change in land-use, from 1880 to 1940. Although the thrust of this thesis has been singular in citing transportation as the chief cause of land-use variation over time, multiple factors were involved at least indirectly. Each factor of land-use change that can be identified can also be classified as an aspect of either population, organization, ecology or technology; hence, the usability and desirability of P.O.E.T.

The population of Richmond, Virginia increased dramatically from 1880 to 1940. The U.S. Census for 1880, 1910, and 1940 shows a growth from 63,600 to 127,628 to 197,042 respectively. The U.S. Census also shows that while Richmond experienced considerable growth in population from 1880 to 1940, Richmond's relative national size declined from the 25th largest U.S. city in 1880 to the 39th largest U.S. city in 1910 and to the 45th largest U.S. city in 1940. The population increases in Richmond were tied to both organizational and technological aspects. Organizational elements include both the societal shift from agrarianism to industrialism and the perceived opportunity this shift offered to the many immigrants that came to Richmond from rural Virginia and Europe, to mention only two areas. Technology also contributed to population increase with medical advances that prolonged life and advances in food production/storage methods that improved health.

Although viewing organization as either agrarian or industrial is more nebulous than the definite number count of population, concrete examples of organizational change exist. It was no coincidence that as Richmond (and the rest

of American society) was experiencing change in the modes of production, that public executions ended, the whipping post was abolished, the forming of spontaneous mobs ceased, dueling was no longer considered noble, and a stable public school system was established in Richmond. Dabney and Silver noted that during the time period of about 1880 to 1910 a remarkable change occurred in the general attitude towards wealth and profit in Richmond. Formerly, for wealth to have status it had to be inherited; wealth as the result of profit was considered tainted. However, as the effects of industrialization increased the ranks of the middle class in Richmond, wealth by profit ceased being frowned upon and became both acceptable to most and desirable to many. Life was relatively leisurely in Richmond from 1880 to 1910 even though a number of financial panics and a major depression in 1893 struck, leaving numerous bankruptcies and much unemployment in their wake. From 1910 to 1940 the pace of life quickened. Richmonders became even less regional as they experienced World War I and then the depression that followed the 1929 stock market crash. These two macro events gripped Richmond and altered Richmonders' consciousnesses.

Perhaps no change in Richmond from 1880 to 1940 is quite as visible as the physical expansion of environment. From 1880 to 1910 Richmond physically doubled in size, then doubled again from 1910 to 1940. Lands that in 1880 and even 1910 were farm lands or forests, by 1940 were

residential areas. Richmond's changing land-use having been discussed in detail will not be discussed here. The physical location of Richmond deserves some mention because of necessary links with other cities, states, and even countries. Richmond's founding was due to its physical location. Being the physical point farthest up the James River that ships could reach, the site of Richmond was selected as a transportation link. In time such notable Americans as George Washington would argue the need for a canal to connect Richmond with the expanding American west. Too little, too late, doomed the canal connection effort. By the 1880's, railroads were fulfilling the promise of accessibility thought to be offered by the canal system. Six railroads came into Richmond which reflected Richmond's strategic location regionally. At about this same time Richmond's importance as a port city was greatly reduced. As highways and automobiles became increasingly more important, Richmond became an important link for all traffic that ran north-south on the east coast.

By far, technological changes are the easiest to enumerate. Although the position taken in this thesis is that transportation was the primary element in land-use change, from 1880 to 1940 transportation was only one aspect of technology that impacted land-use in Richmond. That in 1880 Richmond was a horse and buggy town (for the fortunate; a walking town for most) should not mask the dynamic technological changes that occurred in that era. During the

1880's, Richmond's first telephone exchange was operating, electricity was used in street lighting for the first time and the city's first passenger elevator was put into service. Each of these three advances would in time play its part in population growth and land-use. With widespread use of the telephone, communication distances were bridged which in a real way reduced physical distances. Electricity came to light not only the streets outside but houses and buildings inside. Electricity was symbolic of progress and the higher standard of living offered by the city. The passenger elevator (and other building advances) made possible the upward growth of buildings and the advantages offered by concentration of space for both office buildings and apartment buildings. The importance of clean water, made possible for the first time in 1909, is self evident for a population expanding over physical space. Some technological changes indirectly altered the awareness of space and distance, which also indirectly impacted land-use. An example, radio, first heard in Richmond in 1911, further fostered a national society with its national personalities and its selling of national products. Radio also in its own way reduced physical distances by bringing together audiences of individuals that were in their own homes throughout the city, state and nation. Richmond's first radio station began in 1925. Distances were further reduced between cities and states when Richmond's airport opened in 1927.

In summary, under the rubric of P.O.E.T., major changes from 1880 to 1940 in Richmond including non-transportation sources of change in land-use can be listed. Land-use patterns alter as the result of many things. Population growth; organization changes that result in the increase of material wealth for a substantial portion of that growing population; suitable and affordable land for expansion; and technology that offers convenience in travel and an increase in the standard of living are all factors in land-use change.

TRANSPORTATION AND LAND-USE IN RICHMOND

<u>1880 Richmond</u>; Citizens of Richmond in 1880, for the most part, walked to their destinations, though there were those who could afford private horse-drawn carriages or the horse-drawn streetcar. The bulk of individuals walked from home to work or to shop and then walked home. Therefore, the richer people lived toward the center where land was more highly valued and the poor lived farther from the core and walked farther.

Beginning with residential areas, the Richmond experience contradicted the concentric zone theory. Not only were middle class residents present at the city's core, but working class residential areas were mainly on or towards the periphery. It is sector theory that most nearly describes residential land-use patterns in 1880 Richmond even though CZT is not totally inapplicable. Some upper middle class, some middle class, and even some working class residential areas were located in CZT predicted zones, but most were not.

Homes for the middle class were to the west, north, and east of the Capitol. For most of the working class, homes were farther out and away from Capitol Square. Boarding houses were mainly north of Broad Street, within a middle class section and convenient to the Capitol. The closeness of boarding houses to the center of town reflects the middle class status of its patrons and the fact that the patrons probably walked to their destinations.

The location of the wholesaler/manufacturer area conforms more than any other area to CZT's hypothesis of land-use, but not totally. This area was not limited to a single zone nor was it the only land-use of a single zone. Rather, wholesaler/manufacturer activities took place within its own section, which was centrally located south of East Main Street and to the James River from about 5th to 25th Streets. Even though what was left of the canal system west of Richmond ceased operation in 1880, the lower locks in east Richmond continued in use. The wholesaler/manufacturer section was accessible not only by foot traffic, horses and wagons, and rail cars, but by ships.

The 1880 location of retail sections partially complies with the CZT model, however, retail areas were spread across three zones instead of being confined to one zone. Nor did the downtown or the central business district dominate land-use in the concentric center zone. In 1880 most people probably shopped on foot in the retail area on East Broad Street and many shopped on East Main and 17th Streets and on Brook Road. Retail sections shared the center zone with, among others, service-oriented businesses such as hotels and restaurants.

To rent a room from a Richmond hotel would mean a stay within four blocks of the Capitol and most likely walking to the end destination. To buy a meal from a restaurant, most likely would also require walking and would place you within four blocks of Capitol Square. To buy a meal from an eating house, another service business, would probably necessitate a trip farther east of the Capitol, on or near Church Hill.

Of all retail businesses, none had the dispersion and saturation in residential sections as did grocers. To purchase groceries, working class individuals would have a short walking trip to a neighborhood store. It is possible that most members of middle class households and certainly some members of working class households shopped at centrally located grocers on Broad, Main and 17th Streets, although members or employees or middle class households were more likely to reach the grocer by carriage than were poorer people.

<u>1910 Richmond</u>; By 1910, trolley lines extended to all parts of the city. Indeed, the trolley lines had enabled

Richmond's boundaries to grow. The automobile, though few in number, could be seen intermittently on Richmond streets. However, it was the trolley that moved Richmond's masses to and from their destinations. With this ease of movement, living at the center and the accessibility it offered was not as highly valued as before. The middle class core dwellers moved to the suburbs and rode in the relative luxury of a streetcar back and forth, to and from, instead of taking the long walks into and out of town.

Middle class residential areas had begun to recede from Capitol Square on the east towards Church Hill. The former middle class area north of the Capitol was reduced in size. Considerable middle class growth, however, had occurred in the area around Monroe Park and farther westward between Broad and Main Streets. All working class areas, all of which were outlying areas, had increased in physical size. The newly annexed town of Manchester, on the southside of the James River, also was predominantly working class.

Boarding houses as a service business provided temporary and permanent residence for many. Boarding houses were located very near downtown or only a short walk from Capitol Square. by 1910, boarding houses in numbers were located in working class neighborhoods and not just in middle class sections as in 1880. They existed in every direction from the Capitol except to the south. Although the greatest number of boarding houses was in middle class sections, approximately 57 were in working class areas

northwest of the Capitol and 7 were on the southside (south of the James River).

As Hoyt predicted, apartments were primarily in high rent areas. While most apartment buildings were fairly near and to the west of the Capitol, a number were farther west in the middle class wedge. Two apartment buildings were on the southside.

The main wholesaler/manufacturer section, as in 1880, was still south of East Main Street to the river, from about 5th to 25th Streets. However, this section had expanded north of East Main Street (east of the Capitol) and was beginning to overlap somewhat on Main and on Broad Streets (west of the Capitol). With the exception of this growth, the wholesaler/manufacturer sections remained the same for 1880 through 1910.

Owing in large part to trolley lines. new (compared with 1880) retail areas were west, northwest and northeast of Capitol Square, not to mention Hull Street on the southside which predated the 1880 period. While the dominant retail areas remained East Main Street (including 17th Street) and East Broad Street, new smaller sections had come into being. CZT predicts satellite communities towards the periphery. This, as a general point, was reflected in 1910 Richmond. Many of Richmond's satellite communities had their own retail sections which accounted for the new growth. Still, the main concentration of retail businesses and service businesses as restaurants and eating houses tended to be near the center of the city as in 1880, just as CZT might predict. Restaurants in 1910 were still concentrated near Capitol Square, but extended farther west than before, while eating houses were far less concentrated to the east than 1880. As in 1880, retail grocers of 1910 Richmond were both concentrated (in certain retail areas) and dispersed (through neighborhoods). Again retail grocers appeared in greatest number in working class sections, as well as in centrally located areas (East Broad and 17th Streets).

Land-use patterns in 1910 were much like the land-use patterns in 1880, yet, also noticeably different in some ways. Retail areas of greatest concentration were at the city's core at both time periods. However, the electric streetcar system spurred satellite communities and satellite retail sections. The wholesaler/manufacturer section was basically unchanged in size. By 1910, wholesalers/ manufacturers had expanded east of the Capitol, between East Broad and East Main Streets, but largely the wholesaler/ manufacturer section was the same physical area as in 1880.

The greatest growth for any one section took place in residential areas (both working class and middle class neighborhoods expanded out). Mass transportation made possible the rapid development of outer areas of the city. Mass transportation helped expand the various sections (retail, wholesaler/manufacturer, residential) from 1880 to 1910 and to alter patterns. With a mass transportation system such as the trolley, it was not nearly as important in terms of convenience, where you lived. Travel distances became greater and the speed of travel accelerated. In 1910, the primary areas of activities as in 1880 took the shape of sections. Not bounded or limited to concentric rings, dominant land-use sections (retail, wholesaler/ manufacturer, residential) tended to have expanded out away from the center.

<u>1940 Richmond</u>; Internal combustion engines (in individual autos or public buses) were transporting the masses of Richmonders in 1940 at speeds and in numbers that could not have been imagined in 1880 or 1910. Trolley cars still plied Richmond's streets, but not as many streets nor as fast as buses.

Middle class residential sections enlarged to the west, on the northside, and on the southside. There were no middle class sections near Capitol square in 1940. The former middle class section immediately north of East Broad Street (and the Capitol) had become part of a mega working class section of sorts, running northwest to southeast. The working class areas on the southside also increased through annexation, while the working class section in west Richmond remained about the same size physically.

Boarding houses were few in number by 1940; however, apartment buildings had experienced tremendous growth, especially away from Capitol Square. Private autos and

public buses had encouraged outward residential land development. Not only had many new neighborhoods developed, but apartment buildings were numerous in 1940. Boarding houses in 1940 were reduced in number to the north and northwest of the Capitol. The few that remained were concentrated west, between Broad and Main Streets. Apartment buildings seemed to be chiefly a middle class housing phenomenon, that is, apartment houses appeared almost exclusively in middle class sections, primarily in high rent west Richmond.

Trucks and their mobility made delivery possible anywhere there was a street address. The main wholesaler/ manufacturer sections in 1910 remained the same in 1940, however, by 1940, wholesalers/manufacturers appeared in number on East Broad and West Broad Streets and other areas northwest of the Capitol. In 1940, automobiles, buses and trucks aided expansion of wholesalers/manufacturers in at least two ways. The delivery or shipment of goods or merchandise in 1940 did not generally require locations near or on rail connections or the canal for many types of light manufacturing. The second way automobiles and bus routes helped to disperse the locations of wholesaler/manufacturers was to provide transportation for workers from home to work site and back home. The main location of wholesaler/ manufacturer activity remained the same as in 1910 and 1880 and remained centrally located and easy to get to and from. The main wholesaler/manufacturer section remained, as in

other periods, south of East Main street to the river, but with a noticeable difference. Not only was there the southside wholesaler/manufacturer area, but wholesaler/ manufacturer concerns were increasingly spreading west on West Broad Street and on Hermitage Road and the Boulevard. CZT, as a general rule, predicts wholesaler/manufacturer activities to take place near the center of the city. This was the case for Richmond generally in 1940, 1910, and 1880. At the same time in 1940, wholesaler/manufacturer areas had developed northwestward of the city's core.

Even though East Broad Street's dominant position as the main retail area was secure, noteworthy changes had taken place. East Main Street had become even more of a men's retail clothing area than before, and the development of smaller satellite retail areas away from the city's core continued. In addition to the newer retail areas of 1910. there were retail areas in the northside (Brookland Park Boulevard) and in the westend (Cary Street area), and Hull Street in southside was still thriving. Fewer hotels were near the capitol in 1940 and most were concentrated west. reaching almost to the Boulevard. There were no eating houses in 1940, but there were plenty of restaurants; mostly to the west, but many on the southside, northside (Chamberlayne Parkway), and to the eastend (Fulton). Retail grocers continued to be dispersed largely in working class sections. Grocers all but disappeared from Broad and Main Streets, but increased in numbers on main avenues or streets

away from the city's core. Customers of retail stores, grocers, hotels and restaurants were increasingly arriving by car. In 1940 the downtown retail area remained the chief retail section of Richmond and satellite retail sections were in many satellite neighborhoods.

Of the changes in land-use patterns from 1880-1940 none can be said to be unrelated to transportation. As public transportation systems for the masses improved, middle class residential locations changed from being near the city's core to being away from the core. Because of mass transportation systems (trolley lines, then bus routes/ autos) the middle class and the working class could live farther and farther from the center of the city and from work. In addition to residential patterns being altered, wholesalers/manufacturers and retailers were both changed. As transportation changed, movement of goods and people became less restrictive, which resulted in a kind of decentralizing for wholesaler/manufacturer sectors and retail sectors away from the core. In the sixty years from 1880 to 1940 in Richmond history, if changing transportation systems did not knock the average person off his feet, then it at least took him off his feet and carried him to unprecedented change. Although transportation systems made possible the vast increases in population and land size for Richmond, mass transportation systems are not necessary to sustain a large population spread over a large space. New York City was a walking city in 1880 and yet it had a

population that was much larger than the automobile city of 1940 Richmond.

CZT strictly interpreted is not reflected in Richmond's land-use for 1880, 1910 or 1940; however, if a loose interpretation of CZT is permitted, the same parallels exist for 1880, 1910 and 1940. The spirit of CZT land-use is supported in all three time periods by the location of dominant retail areas and dominant wholesaler/manufacturer The core of Richmond in 1880, 1910 and 1940 areas. contained the main retail sections and near the center was located the main wholesaler/manufacturer section. Zones of residential use were somewhat similar to CZT; even in 1880 some middle class lived in the outer part of the city. By 1910 satellite cities were in the outer area and had expanded by 1940. A major problem with applying CZT to Richmond (1880, 1910, 1940) is that Richmond's land-use patterns never took the shape of concentric rings. No inclusive concentric zone existed that included all retail activity, wholesaler/manufacturer activity, or residential use; nor did any exclusive concentric zone containing only retail activity, wholesaler/manufacturer activity, or residential use exist.

The ST model of land-use best describes Richmond (1880-1940). Primary sections of land-use (residential, wholesaler/manufacturer, retail) were never confined to a concentric zone of land-use. Instead, these sections crossed over, into, and through several of the prescribed concentric circles. Mainly sections had expanded and contracted only occasionally. Residential sections near the outer part of the city grew the most, spawned by mass transportation. Retail and wholesaler/manufacturer sections decentralized and also went to the suburbs. These three main sections of land-use over time, paradoxically remained much the same and yet continued to change.

LOOKING AHEAD TO FURTHER WORK

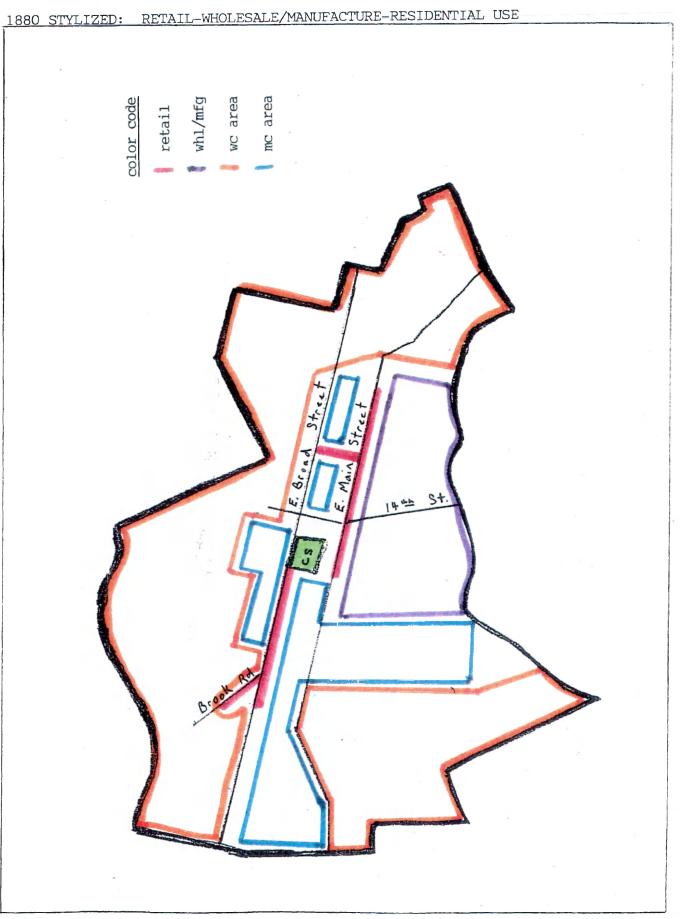
In this thesis, changing land-use patterns over time in Richmond, Virginia have been examined. Although the specific goal of this thesis has been completed, other issues have arisen: namely, land-use patterns in Richmond before and after the 1880-1940 period, and a definitive definition of each element of P.O.E.T.

The 1880 to 1940 period, in effect, covers three different transportation eras (walking, trolley, automobile) but only represents 60 years of Richmond's 246 year history. Richmond was a walking town for 138 years before 1880 and has been an automobile metro area for 48 years since 1940. Therefore, Richmond's entire land-use history would be both interesting and notable. Thirty-year intervals would retain their usefulness even for a complete study of land-use in Richmond's beginning, past, present and future. Starting with 1730, Richmond had its origins as a colonial outpost. Land-use was dominated by a few warehouses and a few other

small structures. By 1760, Richmond was a colonial village with a population of a few hundred. Comparing such a period with the earlier period (1730) should reveal much about village land-use in the colonial period. Likewise, 1790 should reflect much change in land-use as Richmond during this thirty-year period had become the state capital and had increased in population to a few thousand. By 1820, Richmond was a flourishing American town. In 1850, Richmond was prosperous and wealthy, especially compared with thirty years in the future. Additional study into how land was used prior to 1880 would reveal much about Richmond's continuous growth during its predominantly walking era. By 1970, Richmond's land-use would have to be considered in the context of a metro area, taking into account surrounding counties. Suggestions of land-use in the year 2000 would be highly speculative but could be well grounded in the present.

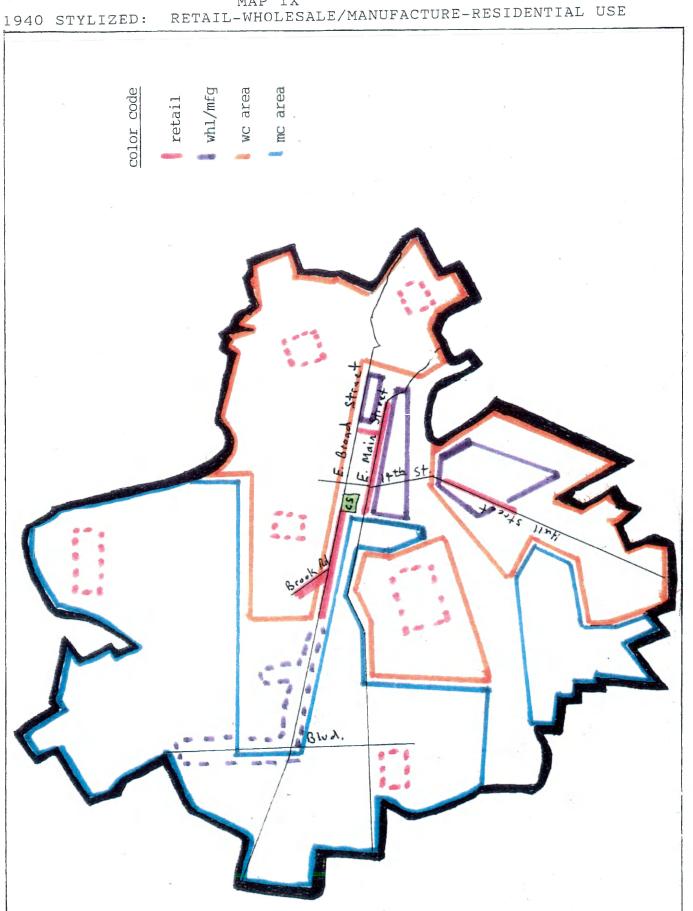
In spite of the highly restrictive and limited definitions of population, organization, ecology and technology that were used in this thesis, the P.O.E.T. model added to the understanding of the changing land-use patterns in Richmond. It has been suggested in this study of a sixty-year span that change in land-use patterns over time is most accurately attributable to the components of the P.O.E.T. scheme and their interaction. Although in this thesis, technology (in the form of transportation) has been sited as the chief contributor to changing land-use in Richmond, the other elements of P.O.E.T. are implied. Still, the underlying premise of P.O.E.T. has been realized. As hinted at, a population exploits its physical space through its organization with the aid of its technology. The P.O.E.T. concept represents a promise unfulfilled. As a model, P.O.E.T. has the potential of application for understanding any social change.

As long as each element of P.O.E.T. remains without clear and precise definitions, P.O.E.T.'S usefulness will remain in a general way rather than specific. It remains to be seen if population, organization, ecology and technology can be defined in clear, concise terms that are both macro, while micro in application. If such definitions could be developed and agreed upon, then P.O.E.T.'s status in sociology would excel as an explanatory model of social change. Even further, it is conceivable that just as there are four elements that combine and interact with each other to produce DNA and therefore all variations in the human body, the four elements of P.O.E.T. combine and interact to produce all variations in human society.



MAP VII

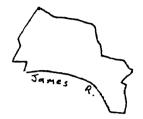
MAP VIII 1910 STYLIZED: RETAIL-WHOLESALE/MANUFACTURE-RESIDENTIAL USE retail wh1/mfg wc area mc area color code St 4=



MAP IX

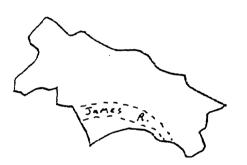
MAP X

RICHMOND CORPORATE LIMITS, POPULATION, LANDSIZE* & DENSITY



1880	
population	63,600
land-size	4.9 sq. miles
persons per square	mile 12,980

RICHMOND CORPORATE LIMITS

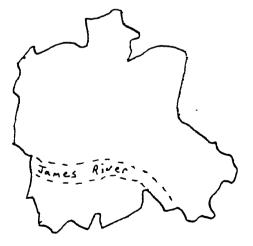


RICHMOND CORPORATE LIMITS

1910

1940

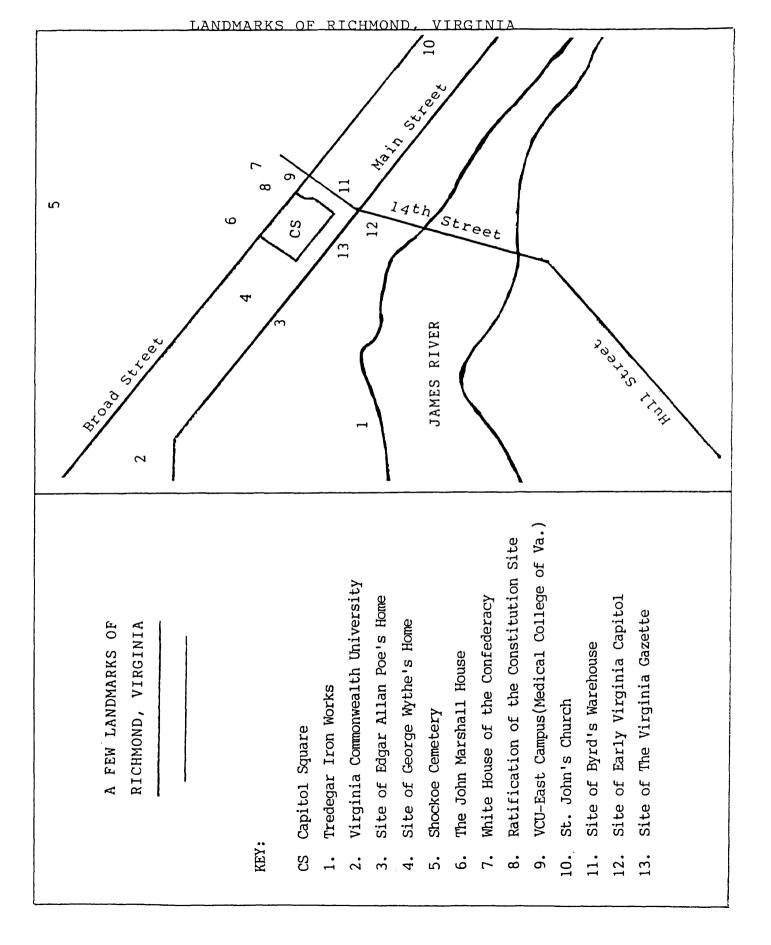
population		127,638
land-size	10.75 s	q. miles
persons per square mile.		11,873



population	193,045
land-size 22.96 sq.	miles
persons per square mile	8,408

RICHMOND CORPORATE LIMITS

* population and land-size figures are from a Richmond News Leader article: 6/10/1959, page 25. I note that a few sources vary on some of these figures.



Appendix A

INDEX OF POSTINGS: 1880, 1910, 1940

Richmond, Virginia was used for this study because, in addition to having a personal affinity for the city, its history and citizens, I was living in Richmond at the time of the study which also made resources convenient. Richmond, being a middle size American city of long endurance, may serve as representative of the American city's experience in land-use pattern change as related to transportation.

To obtain a representation of land-use patterns in Richmond, Virginia the following general procedure was used. Addresses of individuals and their occupations. as well as manufacturers, wholesalers, businesses, etc. (for complete list see index of each map) were obtained from period city directories (1880, 1910, 1940) and plotted on appropriate Richmond city maps (1880, 1910, 1940). A total of 7,671* addresses were plotted on a total of seventeen maps (see map section for detailed descriptions). Residential areas, retail areas and wholesaler/manufacturer areas were classified as such based on the concentration that the plotted maps revealed. For 1940, U.S. Census Tract Data was used to determine residential neighborhood classifications.

Richmond city directories for 1880, 1910, and 1940 were used because of their readily available data; and because city directories are sold to businesses, they must

^{*}All numbers concerning addresses plotted are approximate in that a recount was not always made. However, no more than an error margin of 3% was probably exceeded.

have a high degree of accuracy and completeness of information. To obtain a complete impression of what was where, addresses of specified interest were selected. In certain instances, samples rather than complete listings were used to conserve time and effort.

Residential addresses and the occupation of the occupants were chosen to reflect neighborhood patterns. For the year 1880, 397 individuals, their addresses and their occupations were randomly selected. Approximately every seventy-fifth name and address from the city directory was taken and cross referenced with the addressee's occupation, also with the use of the city directory. Occupations were color coded, then index cards with street names as titles were used to record house numbers and occupational color codes. The 397 individuals represent about .6% of the total 1880 Richmond population or about 1.6% of the total working population in 1880 Richmond. For the year 1910, 1,246 individuals, their addresses and their occupations were randomly selected. Again, approximately every seventy-fifth name and address was cross referenced with occupation using the city directory and then placed on index cards as for the The 1,246 individuals represent about 1% of the 1880 data. total 1910 Richmond population or about 1.6% of the total working population in 1910 Richmond. No sample was needed for the year 1940 due to the availability of U.S. Census Tract data.

Wholesaler/manufacturer addresses were chosen to

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reflect wholesaling and manufacturing areas. Address selection was based upon the word 'wholesaler' or 'manufacturer' appearing in the heading title in the respective city directories. All addresses of wholesalers and manufacturers thus selected were recorded on index cards by street name for each time period.

Retailers were selected to reflect retail shopping areas. Mainly clothing-related businesses were selected (for complete listing see Index for 1880, 1910, 1940). Again, addresses were recorded on index cards bearing street names. In most cases all addresses were recorded, however, in some cases (i.e. shoe makers, grocers) there were so many listings that a sample was used (see appropriate Index for sample size).

Once all addresses were coded and recorded on index cards, this information was transferred to period maps. This was accomplished by marking corresponding maps with color pens to represent street locations. For each year (1880, 1910, 1940) different maps were used to reflect occupational/residential use, wholesaler/manufacturer use, retail use, restaurant/eating house/boarding house/hotel locations, and retail grocer locations. Once posting was complete, the classification of areas began. The concentration in areas dictated the classification. That is, retail dominance resulted in the classification of the retail area, wholesaler/manufacturer dominance of an area resulted in the classification of that area, etc.

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Index of all Postings on Maps by periods; 1880, 1910, 1940

1880: Index of all Postings; Maps A-F

banks & bankers - Map F blacksmiths, wheelwrights, horseshoers - Map F boarding houses - Map D boots & shoes, retail - Map C boots, shoemakers & repairers - Map C butchers - Map E cemeteries - Map F churches - Map F dress & mantua makers - Map C dry goods - Map C eating houses - Map D fancy goods & notions - Map C fruit dealers - Map E furniture dealers - Map C gent's furnishing goods - Map C grocers, retail - Map E halls - Map E hospital - Map F hotels - Map D house furnishing goods - Map C justice of the peace - Map F ladies underwear - Map C library - Map F lunch rooms - Map D makers - Map B manufacturers - Map B millinery & fancy goods - Map C occupation, plotted with residence - Map A residential, with occupational - Map A restaurants - Map D retail - Map C saloon - Map E schools & colleges - Map F tailors, merchant - Map C tailors - Map C wholesalers - Map B

Index for Each 1880 Map

- Map A 397 residence & occupations (51 professional/ manager/administrators, 54 clerical/salesworkers, 128 foremen/craftsmen, 18 operatives, 59 transportation/service workers, 87 laborers/ private household workers)
- Map B 17 makers, 160 manufacturers, 4 warehouse-storage, 10 warehouse-tobacco, 60 wholesalers
- Map C 32 boots & shoes-retail, 125 boots, shoe makers & repairers, 50 clothiers, 44 dress & mantua makers, 57 dry goods, 9 fancy goods & notions, 14 furnituredealers, 6 gents' furnishing goods, 7 house furnishing goods, 2 ladies underwear, 18 millinery & fancy goods, 9 tailors-merchant, 25 tailors, 9 hats, caps, furs & straw goods
- Map D 35 boarding houses, 12 eating houses, 11 hotels, 4 lunch rooms, 14 restaurants
- Map E 54 butchers, 92 confectioners, 2 fruit dealers, 214 grocers-retail (1/2 sample), 97 saloons
- Map F 13 banks & bankers, 42 blacksmiths, wheelwrights, horseshoers, 10 cemeteries, 60 churches, 20 halls, 1 hospital, 17 justices of the peace, 1 library, 28 schools & colleges

map number	number of addresses <u>plotted</u>	<u>maps: general titles</u>
Map A	397	residence and occupation
Map B	251	wholesalers/manufacturers
Map C	398	retailers
Map D	65	boarding houses, restaurants, etc.
Map E	459	grocers, etc.
Map F	192	churches, cemeteries, etc.

1,762 total number of addresses plotted for 1880

<u>1910:</u> Index of all Postings; Maps A-F

apartment houses - Map F auto related - Map F bakers, retail - Map E banks - Map F boarding houses - Map D butchers & meat market - Map E cemeteries - Map F churches - Map F confectioners & fruit dealers - Map E clothiers - Map C dressmakers - Map C dry goods - Map C eating houses - Map D furniture dealers - Map C grocers, retail - Map E halls - Map F horse related - Map F hospitals, homes, asylums - Map F hotels - Map D house furnishing goods - Map C justices of the peace - Map F ladies garments - Map C ladies tailors - Map C libraries - Map F manufacturers - Map B men's furnishing goods - Map C milliners - Map C office buildings - Map F occupations plotted with residence - Map A public schools - Map F residential plotted with occupational - Map A restaurants - Map D retail - Map C saloons - Map E schools & colleges - Map F shoe dealers - Map C shoe makers & repairers - Map C tailors - Map C wholesalers - Map B

Index cont.

Index for Each 1910 Map

- Map A 1,246 occupations & residences (207 professional/ manager/administrators, 314 clerical/salesworkers, 322 foremen/craftsmen, 45 operatives, 227 transportation/service workers, 131 laborers/ private household workers)
- Map B 264 manufacturers, 73 wholesalers
- Map C 57 clothiers, 100 dressmakers (1/2 sample), 71 dry goods, 42 furniture dealers, 11 house furnishing goods, 6 ladies garments, 7 ladies tailors, 12 men's furnishing goods, 33 milliners, 49 shoe dealers, 96 shoemakers & repairers (2/3 sample), 82 tailors, 6 hats & caps
- Map D 221 boarding houses, 84 eating houses, 18 hotels, 69 restaurants
- Map E 25 bakers-retail, 65 butchers & meat markets, 106 confectioners & fruit dealers (1/2 sample), 321 grocers-retail (1/3 sample), 130 saloons
- Map F 27 apartment houses, 18 auto related, 27 banks, 20 cemeteries, 115 churches, 51 halls, 115 horse related, 36 hospitals, homes, asylums, 11 justices of the peace, 12 libraries, 18 office buildings, 34 public schools, 47 schools & colleges

map number	number of addresses <u>plotted</u>	<u>maps: general titles</u>
Map A	1,246	residence and occupation
Map B	337	wholesalers, manufacturers
Map C	566	retailers
Map D	374	boarding houses, restaurants, etc.
Map E	647	grocers, etc.
Map F	531	churches, cemeteries, etc.

3,701 total number of addresses plotted for 1910

<u>1940:</u> Index of all Postings; Map A-F

```
apartment houses - Map F
automobiles-dealers - Map F
bank & trust - Map F
blacksmith - Map F
boarding houses - Map D
cemeteries - Map F
churches - Map F
clothing dealers-child & infant's - Map C
clothing dealers-men's & boys - Map C
clothing dealers-2nd hand - Map C
clothing dealers-women's & misses - Map C
confectionery & ice cream - Map E
department stores - Map C
department stores-5 cents to 10 cents - Map C
dressmakers - Map C
dry goods - Map C
fruit dealers - Map E
furniture dealers-retail - Map C
furniture dealers-2nd hand - Map C
gasoline & oil service stations - Map F
grocers, retail - Map E
halls - Map F
hospitals - Map F
hotels - Map D
libraries - Map F
manufacturers - Map B
restaurants - Map D
retail - Map C
schools, public - Map F
shoe dealers, retail - Map C
shoe repairers - Map C
wholesalers - Map B
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Index cont.

Index for Each 1940 Map

Map B 240 manufacturers, 157 wholesalers

- Map C 102 clothing dealers (4 child & infant's, 50 men's & boys, 9 2nd hand, 39 women's & misses),57 department stores (26 department stores, 31 department stores-5 cents-10 cents), 41 dressmakers (1/2 sample), 25 dry goods, 67 furniture dealers (48 retail, 19 2nd hand), 142 shoe related (48 retail, 94 shoe repairers)
- Map D 40 boarding houses, 18 hotels, 334 restaurants & lunchrooms
- Map E 134 confectionery & ice cream (1/2 sample), 16 fruit dealers, 213 grocers-retail (1/3 sample)
- Map F 162 apartment houses (1/2 sample), 20 automobile dealers, 20 bank & trust co., 10 blacksmiths, 19 cemeteries, 134 churches (1/2 sample), 166 gasoline & dispensaries, 22 libraries, 54 school-public

map number	number of addresses <u>plotted</u>	<u>maps: general titles</u>
Map B	397	manufacturers, wholesalers
Map C	434	retailers
Map D	374	boarding houses, restaurants, etc.
Map E	363	grocers, etc.
Map F	531	churches, cemeteries, etc.

2,208 total number of addresses plotted for 1940

Appendix B

1880, 1910, 1940

RESIDENTIAL-RETAIL JOINT USE

(Southside of the 200 Block of East Broad Street)

This appendix is intended to emphasize the following: first, the high proportion of joint residential-retail use in 1880; second, to emphasize the rapid decline of joint residentialretail use by 1910; and third, the disappearance of joint residential-retail use by 1940. To obtain an accurate representation of joint residential-retail use over time (1880-1940), the southside of the 200 block of East Broad Street was used as a sample. Richmond city directories for 1880, 1910, and 1940 were used to obtain information for each address on the block. This information included the business or profession at each location, as well as who lived at each location (either as householders or renters). This same information follows sequentially, beginning with 201 and ending with 225 East Broad Street.

<u>symbol</u> <u>code</u>

*	=	merchant: worked at address, lived elsewhere
* *	=	merchant: worked at address, lived at address
* * *	=	resident: lived at address, worked elsewhere
****	=	resident: lived at address, worked at address

<u>1880:</u> East Broad Street (southside of the 200 block): addresses & occupants

201	* * * * * *	William Voss, 'doctor' Mrs. E. Voss, 'doctress & midwife' Mrs. Emily Brooks, widow
205	* * * * * * * *	J. E. Bragg, 'furniture' Mrs. Dora Amonett, widow Mrs. Hattie Simms, widow
209	* * * *	L. S. Oldham, 'stoves & tinware' J. H. Connell, 'dry goods & notions'
211	* * * * * * *	R. F. Jones, 'bakery & confectionery' Henry Rhodes, machinist R. E. Jones, laborer Andrew C. Jones, carpenter
215	* * * * * *	Henry C. Boschen, 'boots & shoes' Henry Schade, shoemaker

- 215 **** George Lucianni, shoemaker **** George Leroy, shoemaker
- 217 ** E. W. F. Franck, 'dry goods & notions' *** Augest Kringel, teacher
- 219 ** George Hundertmark, 'saloon'
- 221 ** Christian Unkel, 'merchant tailor' *** Alfred C. Unkel, tailor
- 223 ** Mrs. C. L. Rosene, 'millinery' *** T. O. Rosene, cigarmaker *** Albert Wright, shoemaker
- 225 ** Alexander Werst, 'confectionery'

<u>1910:</u> EAST <u>BROAD</u> <u>STREET</u> (southside of the 200 block): <u>addresses & occupants</u>

201	*	Dreyfus & Co., 'ladies garments'
205	* *	C. M. Stieff, 'pianos'
207	* *	Baylor-Yarbrough Co. (John Yarbrough lived elsewhere) 'ladies outer garments'
209	* *	J. F. Kohler & Sons, 'jewelers, silversmith & opticians'
	*	Miss Jennie Hayes, 'surgical chirodist, manicurist, facial & scalp massage'
211	* *	Stokes & Dunn, 'tailors' A. Malloy & Son, 'ladies tailors' G. L. Hall Optical Co.
04.0	*	
213	<u>^</u>	Cable Piano Co.
215	*	George W. Andersons, 'carpets, rugs, oilcloths, upholstering goods, lace curtains + windowshades'
217	*	D. & E. Mitteldorfer, 'dry goods'
219	* *	August Luebbert, 'ladies hair dresser switches, bangs, wigs and toupes'
221	* *	W. E. Broaddus, 'dentist' R. H. Jefferies, 'dentist' Cobb's Restaurant

223 * S. Galeski Optical Co.

225 * Quarles & Wheatfield, 'clothing'

<u>1940: EAST BROAD STREET (southside of the 200 block):</u> addresses & occupants

- 201 * The Linen Mart Inc.
- 205 * Samilson's Women's Wear
- 207 * Maxine's minrs
- 209 * J. F. Kohler & Sons, Inc., 'jeweler' * Saml. A. McAnally, 'dentist'
- 211 * Singer Sewing Mach. Co. -- chain store
- 213 * Federal Bake Shops Inc.
- 215 * Broad-Grace Arcade, 32 listings on 3 floors, plus bsmt. Offices occupied largely by insurance companies, medical services, Western Union Telg., the Social Security Board and others. Businesses located on the main floor include; jewelers, a hearing aids dealer, a therapeutic masseuse and a photographer. A beauty shop was on the 2nd floor.
- 217-219 * Central National Bank Building, 76 listings on 23 floors. Offices used largely by lawyers, insurance companies, state agencies, and a number of 'one of a kind' offices including the Swedish Tobacco Monopoly, General Foods Sales Co., and the Virginia Comm. on Inter Racial Co-Operation.

223 * Betty Maid Shop, 'woman's wear'

- 225 * Natl. Shirt Shops
 - * W. L. Douglas Shoe Co. of Va.

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