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# Baltimore City decentralizing a study of urban growth in the late nineteenth century.

Gerard Reichenberg

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BALTIMORE CITY DECENTRALIZING  
A Study of Urban Growth in the Late Nineteenth Century

by  
Gerard Reichenberg

A Thesis  
Presented to the Graduate Committee  
of Lehigh University  
in Candidacy for the Degree of  
Master of Arts  
in  
History

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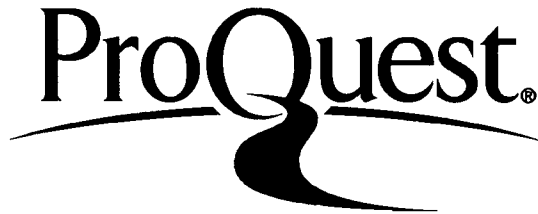
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A Thesis  
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This thesis is accepted and approved in partial fulfillment  
of the requirements for the degree of Master of Arts..

12/8/77  
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## ABSTRACT

A lack of precision in the use of the terms "deconcentration" and "decentralization" has contributed to misconceptions regarding urban growth in the United States. In this study, deconcentration is defined as the decline in population density of the urban center, and decentralization is defined as the process in which the outer areas of the city grow in population at a rate faster than that exhibited by the urban center. The urban center is identified strictly in terms of population, namely, that central area which contained at a given point of time at least forty percent of the city's population and which exhibited a significantly different rate of growth in population over the subsequent twenty years compared to the remainder of the city. According to these definitions, Baltimore City deconcentrated and decentralized between 1870 and 1890. These processes were the results of the expansion of the central business district, the growth of industry at outer areas of the city, the attraction of the rural ideal, and improvements in urban transportation. A study of the mobility by occupation, based upon a sample drawn from the Baltimore City Directory of 1880, together with related research, indicates that the unequal distribution of the ability to commute and the concentration of certain ethnic groups among particular occupations contributed to the resultant economic and ethnic residential segregation of the city.

## Chapter I. Introduction

"To a certain extent, we are all creatures of the conditions that surround us, physically and morally. But is the knowledge reassuring?"  
Jacob Riis, How the Other Half Lives, 1890<sup>1</sup>

The nineteenth century witnessed a series of challenges and innovations that ultimately transformed the American urban way of life. The small, crowded, mercantile walking cities evolved into big mid-century cities that supported a growing manufacturing base. Industrialization then gradually destroyed the livelihoods of artisans by fostering factories that utilized machines and encouraged the division of labor. Distinct industrial, commercial, and residential zones replaced the uniform land use pattern of earlier years. The cities expanded and separated rich from poor, native from foreign-born, black from white. The sprawling industrial metropolis of 1900 bore little resemblance to the big city of 1850, much less to the walking city of 1800.

Of the many processes that determined the shape and content of the city at the end of the century, industrialization was the most important. Before the advent of mass production and the division of labor, the primary economic function of the cities was trade and commerce. At the dawn of the nineteenth century, New York, Boston, Philadelphia, and Baltimore carried on most of the urban manufacturing

<sup>1</sup>Jacob Riis, How the Other Half Lives (New York: Hill and Wang, Inc., American-Century Series, 1957; originally published in 1890), p. 201.

activity; and most, if not all, of this was linked to the mercantile aspects of the economy. Merchants, the sources of capital in pre-industrial cities, were more inclined to promote trade and real estate than to invest in manufacturing enterprises. Until the perfection of the steam engine and the improvement of transportation facilities for the movement of coal, water power remained the chief source of energy for large-scale manufacturing. Consequently, as late as the 1830's, most textile establishments were located in rural areas near waterfall sites, rather than in the cities. Finally, the absence of an efficient inland transportation network deprived many cities of markets large enough to sustain a significant scale of manufacturing.<sup>2</sup>

During the second half of the nineteenth century, however, these impediments to industrialization were swept away. Heavy investments in railroads by private parties, municipalities, and state and federal governments created a transcontinental network that opened new markets, reduced the cost of shipping raw materials, fuel, and finished products, and directly induced the production of iron, steel, and machinery. Investors were attracted to enterprises that could profit from the consolidation of the national economy that connected

<sup>2</sup>Allan Pred, "Manufacturing in the American Mercantile City, 1800-1840" in Kenneth T. Jackson and Stanley K. Schultz, Editors, Cities in American History (New York: Alfred A. Knopf, Inc., 1972). pp. 111-42.

huge regions, numerous cities, and prosperous hinterlands. No longer subordinate to trade and commerce, manufacturing increased rapidly and assumed a major role within the urban economy.<sup>3</sup>

These expanding opportunities enlarged the total urban population. Between 1850 and 1899, 16.4 million immigrants entered the United States, most of these settling in the cities. The cities also absorbed an increasing native migration from the rural areas. Housing only 15.3 percent of the total population in 1850, American cities were the homes of 39.7 percent of the nation in 1900. Within twenty years, the majority of Americans would live in urban places.<sup>4</sup>

The industrialization supported by this growing urban labor force was changing the life styles of city-dwellers. Prior to the Civil War, manufacturing was performed for the most part by craftsmen who carried on all the operations required for the finished product and who worked in small shops in or very near their dwellings. The increasing use of machinery in manufacturing, however, gradually all but eliminated the artisan and his small shop from the economy.

<sup>3</sup>Blake McKelvey, The Urbanization of America, 1860-1915 (New Brunswick, New Jersey: Rutgers University Press, 1963), pp.35-46 and Howard P. Chudacoff, The Evolution of American Urban Society (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971), pp.84-8.

<sup>4</sup>David Ward, Cities and Immigrants: A Geography of Change in Nineteenth Century America (New York: Oxford University Press, 1971), p.6.

The cost of the machinery, plant, and raw materials required for mass production contributed to the rise of the corporation, which could assemble the necessary capital. Machinery dictated the division of labor into specialized, elementary operations, which were performed by many, rather than a few. New relationships between employer and employee, new mechanisms for the delegation of authority and the coordination of larger units, and new types of business and plant organization were slowly, and often painfully, developed. Urban Americans applied, enjoyed, and suffered innovations in business and technology with increasing frequency toward the end of the decade.<sup>5</sup>

As factories grew larger and more numerous, they eliminated much housing from the centers of the cities. The simultaneous improvement of urban mass transportation contributed to a revolution in the urban landscape within a few generations. In the 1860's, street railways began replacing the slow and expensive omnibusses. The horse-drawn cars were followed by the electric streetcar in the 1890's in most metropolises. The walking city, with its dense, heterogeneous mixture of dwellings, businesses, and occupants, was doomed; for with the passing of each decade, more and more persons were able to commute from home to work.<sup>6</sup>

<sup>5</sup>Sam Bass Warner, Jr., The Private City: Philadelphia in Three Periods of Its Growth (Philadelphia: University of Pennsylvania Press, 1968), pp. 63-78.

<sup>6</sup>Chudacoff, The Evolution of American Urban Society, pp. 64-84.

Toward the end of the century, half the population of urban America was able to commute daily. Consequently, the walking cities, which had been forced to absorb their growing populations in small, congested areas immediately surrounding their centers, gave way to huge metropolises whose suburbs grew increasingly faster than their centers. Driven away from the center by the expansion of business and industry, the middle class sought the comfort and convenience of new housing on the outskirts made accessible by the street railways. Many members of the working class also spilled into the outskirts as industries were established at strategic outer locations.<sup>7</sup> An impressionistic measure of the geographic expansion of American metropolises lies in the amount of territory they annexed. In 1870, the cities that had populations in excess of 100,000 occupied a total of 480 square miles; these same cities annexed a total of 386 square miles during the subsequent two decades.<sup>8</sup>

This expansion, however, was significant not so much because of the greater size of the city, but because of the radically

<sup>7</sup>Sam Bass Warner, Jr., Streetcar Suburbs: The Process of Growth in Boston, 1870-1900 (New York: Atheneum, 1970), pp. 1-45. See also Kenneth T. Jackson, "Urban Deconcentration in the Nineteenth Century: A Statistical Inquiry," in Leo F. Schnore, Editor, The New Urban History (Princeton, New Jersey: Princeton University Press, 1972, pp.110-42.

<sup>8</sup>Kenneth T. Jackson, "Metropolitan Government Versus Suburban Autonomy: Politics on the Crabgrass Frontier," in Jackson and Schultz, Editors, Cities in American History, pp. 442-62.

different spatial organization. The industrial metropolis of 1900 was not merely a larger version of the big city of 1850. The relative absence of large workshops together with the lack of swift, inexpensive transportation made the 1850 community essentially a uniform one. Shops coexisted with residences from street to street; and persons with different occupations, wealth, and ethnic backgrounds shared the same neighborhoods. There were few districts that were exclusively residential, commercial, or industrial; there were few neighborhoods that were exclusively for the rich or for the poor. The American city throughout the first half of the nineteenth century was a crowded, confusing mixture of dwellings, businesses, shops, occupations, wealth, and ethnicities throughout its extent.<sup>9</sup>

The forces that brought forth the industrial metropolis militated against such uniformity. Heavy industries and warehouses reduced the housing in the center, along the waterfront, and around the railroads and created exclusive industrial zones. Working class residential neighborhoods occupied adjacent areas, while middle class residential neighborhoods arose farther out. Because European immigrants and blacks were concentrated in unskilled and semi-skilled occupations, the redistribution of the population on the basis of

<sup>9</sup> Sam Bass Warner, Jr., The Urban Wilderness: A History of The American City (New York: Harper and Row, Publishers, 1972), pp. 81-4.

wealth tended to separate persons of different ethnic backgrounds. The industrial metropolis was a segregated city.<sup>10</sup>

The city at the end of the nineteenth century was therefore shaped by many processes. Industrialization, demographic growth, and the improvement of mass transportation converged during the last three decades to bring about fundamental changes in urban America. This study is an attempt to describe how these processes influenced the growth of Baltimore City during the second half of the century. Particular emphasis is placed upon how they contributed to urban expansion, changes in land use, and the evolution of the socio-economic residential pattern.

Many urban historians and geographers have made similar investigations of the growth of American cities in terms of changing patterns of land use. They have mapped areas of residential, commercial, and industrial use. Streetcar routes, water supply, sewage systems, and other municipal improvements have been painstakingly delineated for various metropolitan regions at different periods. Numerous studies have demonstrated the relationships among improvements in

<sup>10</sup>Warner, The Urban Wilderness, pp. 85-112.



transportation, industrialization, and suburbanization. They have implied that the present differentiation of American cities is rooted in changes that began during the second half of the nineteenth century.<sup>11</sup>

Although no historian denies the importance of such inquiries, few have attempted to standardize the methods of investigation. Various terms have been used to denote - or confuse - the same processes. Critical definitions - "suburbanization, decentralization, core, expansion" - have varied from author to author.<sup>12</sup> This conceptual confusion has led to misconceptions and mistiming of major events in urban growth.

Kasarada and Redfearn, for example, have demonstrated that the failure to allow for demographic changes brought about by municipal annexations "constitutes a serious shortcoming because municipal acquisitions of suburban territory and population introduce a systematic bias which artificially inflates central city growth and understates suburban growth."<sup>13</sup> Their allowance for annexations

<sup>11</sup>Perhaps the best of such studies is Warner's Streetcar Suburbs. By concentrating upon the development of Roxbury, West Roxbury, and Dorchester, Warner gained valuable insights into the transportation, building, and migration patterns of late nineteenth-century Boston. In another of his works, The Private City, he relates the past to the present in a chapter entitled "The Industrial Metropolis as an Inheritance."

<sup>12</sup>Jackson, "Urban Deconcentration."

<sup>13</sup>John D. Kasarda and George V. Redfearn, "Differential Patterns of City and Suburban Growth in the United States," Journal of Urban History, Vol. 2, No. 1 (November 1975), p. 44. See also Leo F. Schnore, "Municipal Annexations and the Growth of Metropolitan Suburbs, 1950-60," in The American Journal of Sociology, 67 (1962), pp. 406-17.

indicates that faster rates of growth in the suburban rings occurred in every decade since 1900, at least two decades before the benchmark for decentralization cited by other investigators.<sup>14</sup> Greater conceptual precision makes such refinements possible.

The terms used in the present study are generally consistent with Kasarda's and Redfearn's definitions. "Decentralization" is specifically used to denote the process whereby a suburban ring grows faster than the central area of the city. Such growth is measured in terms of the percent change of the population of a given district with respect to the district's population at the beginning of the specified period. "Deconcentration" refers to the decline of residential (population) density within the urban center.

The designations of the urban center and suburban ring are, of course, essential to the above definitions. Perhaps because they were studying a large number of cities, Kasarda and Redfearn defined the central area and suburban ring in terms of political jurisdictions. Insofar as they were primarily interested in considering the impact of municipal annexations upon decentralization and deconcentration, there is much justification for equating the urban center with the entire central city. In general, however, such an

<sup>14</sup>Kasarda and Redfearn, "Differential Patterns", p. 53.

equation distorts the process of growth within the metropolitan region, especially if the central city includes a large amount of underutilized land, as was the case with Baltimore City in 1870. In such cases, there may be a significant shift in population and land use within the central city which is totally obscured by the designation of an unrealistically large area as the urban center. Indeed, it is possible that deconcentration, defined as the decline of residential density within the urban center, occurred earlier than the years suggested by Redfearn and Kasarda if the urban center is defined in such a way as to be independent of political boundaries.

Knights' approach to the study of deconcentration and decentralization avoided the above pitfalls. In his study of nineteenth century Boston, he defined the center to be the area comprising the ward enclosing the central business district together with all adjacent wards.<sup>15</sup> This procedure relates population to land in terms of economic functions, thereby compensating for the frequently arbitrary and artificial nature of politically defined areas. Although Knights' method may be superior, it still retains several shortcomings. Knights' definition of the center provides for the gradual expansion of the central business district. This center, therefore, is not a constant area, a fact which introduces new difficulties into applying a definition of deconcentration based upon

<sup>15</sup>Peter R. Knights, The Plain People of Boston, 1830-1860: A Study in City Growth (New York: Oxford University Press, 1971), p. 26.

residential density. Furthermore, if either decentralization or deconcentration is hypothesized to be a function of the impact of industrialization upon residential districts, then equating the urban center with the central business district draws the investigator's attention away from the possible influence exerted by the introduction and expansion of industrial and commercial activities outside of the central business district. Finally, equating the urban center with the expanding central business district when defining deconcentration and decentralization in terms of the urban center practically guarantees the discovery of a relationship among the two demographic processes and the technological process of industrialization within the central business district. The three processes may well be interrelated, but the relationships should not be shown merely as the consequence of how the urban center is defined.

If decentralization is defined to be the faster growth in population residing in outer urban areas compared to that residing in the center, then the limits of the urban center should be identified strictly on the basis of changes in population over time. Neither political boundaries nor economic variables need be used in measuring population. If the investigator must be cautioned against the dangers inherent in ignoring municipal annexations, he should likewise be warned against equating demographic redistribution, per se, with the

expansion of the central business districts.<sup>16</sup>

Therefore the procedure used in the present study is to designate the urban center, or core, as a significantly large inner area which exhibited a significantly different rate of growth in resident population compared to the rate of growth of the remainder of the city, which is identified as the ring. In applying this definition, several precautions are noted. The core should have contained, at the beginning of the period over which rates of growth are computed, at least forty percent of the city's population. It is possible to select smaller areas at earlier times that showed a significantly different rate of growth; but their growth or decline do not necessarily exert a major impact upon the overall development of the city. Also, rates of growth are computed over twenty-year periods (1850-70 and 1870-90) in order to rule out possible short-range variations. Finally, only those areas whose rates of growth are at least five times greater than those toward the center are included within the ring; the remaining areas are included within the core. The core

<sup>16</sup>The position presented here reflects that of Hope Tisdale, who maintained that interpreting city growth as an "increase in intensity of problems or traits or characteristics that are essentially urban" results in a "confusion of cause and effect, the presupposition of cities before urbanization," in "The Process of Urbanization," Social Forces, XX (March 1942), p. 315. Tisdale recommended that urbanization be defined strictly as the process of population concentration. Defining deconcentration as the decline of population density within the urban center, and decentralization as the process in which outer areas grow faster in population than inner areas, result in processes that can be specifically and easily measured in terms of population, area, and time. Contributing causes, such as the expansion of the central business district, should be studied, but should not be incorporated into processes defined strictly in terms of demographic measures.

and the ring therefore consist of areas exhibiting significant differences in rates of growth.

Census figures employed for the identification of the core and the ring, which in turn are used as the basis for a discussion of deconcentration and decentralization, exclude population and territory added to the city by annexation during the interval.

Data analyzed in light of the above definitions indicate that Baltimore City was rapidly decentralizing between 1870 and 1890. Moreover, of the city's twenty wards, at least three inner wards were deconcentrating. Having housed 46 percent of the city's population in 1850, the core housed only 28 percent of the residents living within the core and ring combined in 1890. Most of the shift in population occurred after 1870.

Although the census data indicate that the city did in fact decentralize after 1870, these measures shed little light upon how the various portions of the population contributed to the redistribution. Studies of other cities indicate that movement to the outer areas was a function of social class. Because the United States Census publications for the period studied do not report occupations on a ward basis, it was necessary to obtain a sample of names, occupations, and addresses from the city directories to determine whether intraurban mobility in Baltimore was a function of social class. Therefore, 1,395 whites, comprising a 1.5 percent sample (every sixty-eighth name), were identified in the City Directory of 1880. This year was chosen because it was the mid-point of the

second period, 1870-90, studied in this investigation. Of the 1,395 persons, 96.7 percent were identified by occupation and ward. The twenty wards were then allocated among five geographic zones within the city in order to ascertain the distribution of occupations. These persons were also traced in the City Directory of 1885 in order to determine the pattern of mobility over a five-year period.<sup>17</sup>

The results of this analysis, together with the use of census data giving the ethnicities of the ward population, indicate that intraurban mobility was a function of social class. Occupations became less evenly distributed across the landscape as industrialization proceeded. Persons employed in various manufacturing activities concentrated near the zones experiencing intense industrial activity, while white-collar employees tended to cluster in a more favorable residential district in the northwestern quadrant of the city. Furthermore, the foreign-born and the blacks, concentrated in unskilled or semi-skilled occupations, became more segregated with each passing decade.

Baltimore City was therefore very much in the mainstream of urban development during the second half of the nineteenth century. Those same forces - industrialization, demographic growth, the

<sup>17</sup>The Baltimore City Directory of 1880 lists "colored persons" separately from whites. Because the census reports clearly show the extreme concentration of blacks within personal service occupations and because they also report ward populations by race, it was not felt necessary to take an additional sample of blacks from the City Directory.

improvement of mass transportation - that shaped her larger contemporaries also operated within the city on the Chesapeake. Baltimore's responses - decentralization and segregation - were the same as elsewhere. Such similarities in urban growth in diverse sections of the country suggest that decentralization and segregation were consequences of the urban, rather than the regional, experience. More importantly, the fact that these processes were largely consequences of industrialization, the unequal distribution of occupations among ethnic groups, and the unequal access to new housing and transportation, suggests that a change in any one of these situations would once again change the spatial organization of the American city.<sup>18</sup>

<sup>18</sup>See Warner, The Urban Wilderness, p. 101.



Chapter II. The Amplest Field:  
The Dimensions of Growth in Baltimore

"No man can expect to become distinguished in any sphere unless he has the amplest field for the exercise of his powers."

H. L. Reade, Success in Business, 1875<sup>1</sup>

"Pass the word down the line: Dreamers and croakers to the rear; live men to the front."

Charles E. Phelps, Oration on the 150th Anniversary of the Settlement of Baltimore, 1880<sup>2</sup>

In 1800, Baltimore was a mercantile city whose population of 26,000 inhabited less than two square miles around the mouth of the Patapsco River. By the end of the century, she housed more than 500,000 persons and covered thirty square miles. Her favorable location for coastal and sea-going trade, together with the railroads stretching westward, had made her a major exporter of western grain to Europe and the "Gateway to the South" for a wide variety of products. She had become a financial center for Southern enterprise. Most importantly, she had developed a stable, diversified manufacturing base whose various industries employed nearly two-fifths of her entire labor force.

<sup>1</sup>Quoted in Irvin G. Wyllie, The Self-Made Man in America: The Myth of Rags to Riches (New York: The Free Press, 1954), pp. 28-9.

<sup>2</sup>Edward Spencer, Editor, Memorial Volume: An Account of the Municipal Celebration (Baltimore: King Brothers, 1881), p. 139.

The differentiation of her economy and the growth of her population transformed the face of the city. The last three decades of the century, when industrialization got under way, witnessed the most significant changes. Industrialization stimulated demographic growth by creating additional employment, particularly for semi-skilled and unskilled labor. It revised and expanded manufacturing by replacing craftwork carried on in small shops with mechanized production in large, crowded establishments. Its introduction of mass production separated the residence from the place of employment, stimulated commuting, and created distinct commercial, industrial, and residential zones within the city. Without industrialization, decentralization would not have produced the segregated metropolis of 1900.

This study of the decentralization of Baltimore therefore begins with a brief discussion of the growth and differentiation of her economy. A sketch of her economic activity at the beginning, middle, and end of the century illustrates the influence of commerce, and manufacturing upon the landscape of the city. A study of the course of industrialization over the last three decades of the century illustrates how the expansion of manufacturing and the separation of workplace from residence required the decentralization of the city.

The nation's third largest city in 1800, Baltimore was primarily a mercantile city thriving on exports of tobacco, wheat, and flour to war-torn and famine-ridden markets in Europe. Manufacturing played a very subordinate role in her economy; indeed, as late as

1840, less than 19 percent of all capital was invested in manufacturing, while fully three-fourths of all capital was invested in commission houses and retailing. Such manufacturing that existed - flour milling, shipbuilding, printing, cooperage, to name a few - served primarily as an adjunct to the commercial functions of the city. Aside from shipbuilding and flour milling, most production was carried on by<sup>3</sup> artisans in small workshops located within their own dwellings.<sup>3</sup>

The emphasis on commerce molded the pattern of land use within the city. Nearly 150 warehouses were clustered along the waterfront north of the basin and east of Jones Falls. The embryonic financial district, together with the town's law offices, lay just north of the warehouses; the youthful central business district was therefore a very small, constricted space between Baltimore Street and the basin. The various workshops were scattered throughout the city. Although there was a slight tendency toward a concentration of the wealthy households near the center and the poorest at the outskirts, the overall distribution of residents in terms of wealth, race, and occupation was fairly uniform. The absence of cheap transportation

<sup>3</sup>Allan Pred, "Manufacturing in the American Mercantile City, 1800-1840" in Kenneth T. Jackson and Stanley K. Schultz, Editors, Cities in American History (New York: Alfred A. Knopf, Inc., 1972), pp. 111-42 and G. Terry Sharrer, "Flour Milling in the Growth of Baltimore, 1750-1830," Maryland Historical Magazine, Vol. 71, No. 3 (Fall 1976), pp. 322-33.

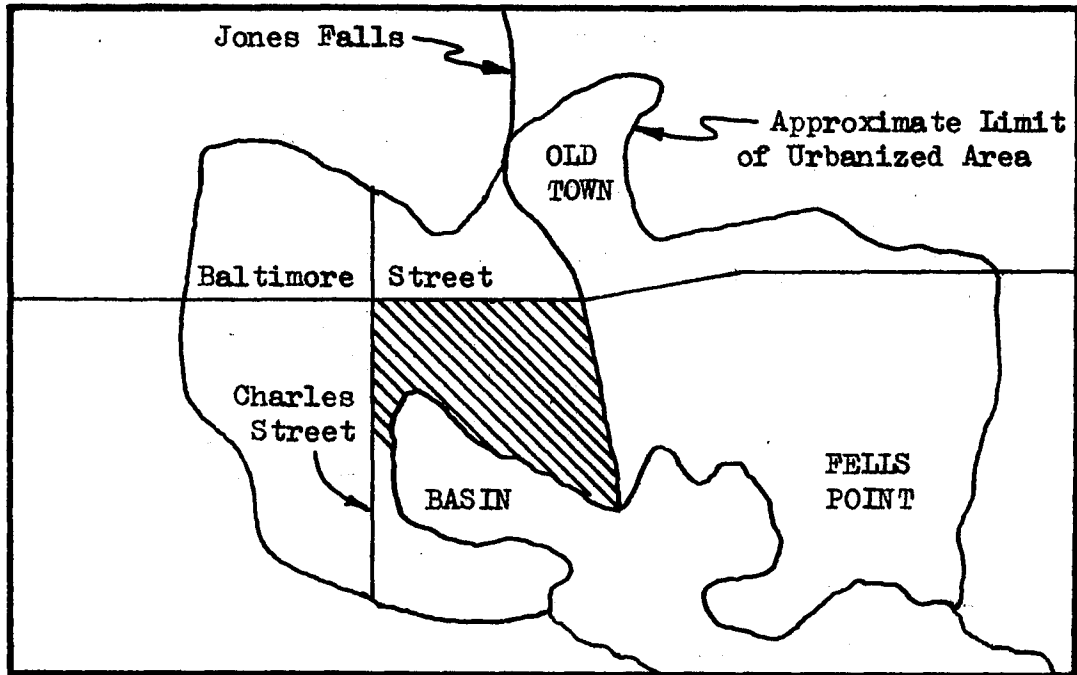



Figure II-1. Baltimore City, circa 1800

Key:

 Central Business District

Source: Bernard, "A Portrait of Baltimore in 1800," pp. 344-7.

and the proximity of workplace with residence made the small walking city of 1800 a relatively homogeneous community whose residences and workshops surrounded the diminutive central business district, the heart of her all-important commercial enterprises.<sup>4</sup>

Baltimore's economy and geography at the middle of the century represented a transitional stage between the mercantile walking city of 1800 and the industrial metropolis of 1900. By the eve of the Civil War, the Baltimore and Ohio Railroad had reached St. Louis and had dramatically increased Baltimore's trade with the interior.<sup>5</sup> The expanding markets, together with improvements in technology and a growing labor force drawn from a population in excess of 200,000, contributed to a growth in manufacturing as well as commerce. The production of clothing, boots, and shoes; the packing of oysters, meats, and fruits; and the refining of sugar and copper dominated the manufacturing activity of the city in 1860. Although the men's clothing and the canning industries employed averages of 49 and 61 hands per establishment respectively, most manufacturing was still carried on in small shops employing fewer than ten workers.<sup>6</sup>

<sup>4</sup>Richard M. Bernard, "A Portrait of Baltimore in 1800," Maryland Historical Magazine, Vol. 69, No. 4 (Winter 1974), pp. 341-60.

<sup>5</sup>Joseph Garonzik, "The Racial and Ethnic Makeup of Baltimore Neighborhoods, 1850-70," Maryland Historical Magazine, Vol. 71, No. 3 (Fall 1976), pp. 392-3.

<sup>6</sup>U. S., Census Office, Eighth Census, 1860, III, pp. 220-2.

The increasing scale of manufacturing had altered the pattern of land use at mid-century from that which had prevailed in 1800. Although commerce still dominated the city's economy, manufacturing had contributed to the expansion of the central business district north and west from its former confines below Baltimore Street. The forges, foundries, rolling mills, and engine works of heavy industry were clustered along the waterfront, on the banks of Jones Falls, and around the railroad yards. Clothiers were distributed throughout the central business district as well as to the east, at Fells Point. Light manufacturing, however, was still distributed throughout the city.<sup>7</sup>

The elimination of housing resulting from the expansion of the central business district, together with the growth in population, contributed to the expansion of the city to the north and west. Many, but not all, of the more prosperous households moved to the northwest and commuted in buggies and omnibuses. However, a mixture of persons in terms of wealth, occupation, and ethnicity still prevailed throughout most of the city. This enduring homogeneity of the city, together with the contemporary scattering of light manufacturing and other businesses throughout most of the city, made

<sup>7</sup>Garonzik, p. 398 and Edward K. Muller and Paul A. Groves, "The Changing Location of the Clothing Industry: A Link to the Social Geography of Baltimore in the Nineteenth Century," Maryland Historical Magazine, Vol. 71, No. 3 (Fall 1976), p. 404 and pp. 408-10.

Baltimore on the eve of the Civil War merely a larger version of the homogeneous walking city of 1800.<sup>8</sup>

During the last three decades of the century, however, industrialization proceeded at a pace sufficient to introduce permanent and radical changes upon the pattern of land use. Defined as "the coordinated development of economic specialization, mass mechanized production, mass consumption, and mass distribution of goods and services," this process was made possible by a fortuitous blend of circumstances.<sup>9</sup> Three factors in particular played major roles in Baltimore's evolution into a modern industrial metropolis: the expansion of her market, the accumulation of capital which could be invested in machinery, and the steady growth of her labor force.

Although the Civil War temporarily disrupted her trade with the South, the post-bellum years saw Baltimore develop an access to markets greater than she had ever before enjoyed. By 1880, she was served by five different railroads, two of which, the Baltimore and Ohio and the Pennsylvania, gave her direct links to the nation's other metropolises as well as the prosperous West. With the second largest bay and coastal fleet on the Atlantic coast in 1900, she led New York, Philadelphia, and Boston in supplying the South with dry

<sup>8</sup>Garonzik, pp. 396-402.

<sup>9</sup>Howard P. Chudacoff, The Evolution of American Urban Society (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975), p. 84.

goods and notions, wearing apparel, and provisions and groceries.

The nation's fifth leading port in 1870, the "Gateway to the South" became the third in 1900, when foreign and domestic trade reached 130 and 175 millions of dollars respectively.<sup>10</sup>

The prosperity of her commerce was accompanied by the increased activity of her financial institutions, which played a role in the reconstruction of the South. As her merchants and financiers reinstated her ties with the South, manufacturers discovered great opportunities for the sale of their products. Dry goods, clothing, provisions and groceries, millinery, canned goods, notions, hats and drugs predominated in the Southern jobbing trade, while some products were marketed on a national or international scale. The concentration of capital, together with the expansion of her markets, therefore stimulated investment in manufacturing.<sup>11</sup> Between 1860 and 1900, the capital invested in manufacturing increased thirteen-fold and the number of manufacturing establishments increased six-fold.<sup>12</sup>

<sup>10</sup>Charles Hirschfeld, Baltimore, 1870-1900: Studies in Social History, (Baltimore: The Johns Hopkins University Studies in Historical and Political Science, Series LIX, No. 2, 1941), pp. 136-71.

<sup>11</sup>Hirschfeld, pp. 170-6 and Eleanor S. Bruchey, "The Development of Baltimore Business, 1880-1914," Maryland Historical Magazine, Vol. 64 (1969), pp. 18-28.

<sup>12</sup>U.S. Census Office, Eighth Census, 1860, III, pp. 220-2; Twelfth Census, 1900, VIII, Part II, pp. 340-5.



This growth in Baltimore's economy after the Civil War resulted in substantial increases in employment in every sector of her economy. The number of persons employed in trade and transportation, as well as in manufacturing, rose more than 40 percent in the 1870's and again in the 1880's. Employing more than one-third of the total labor force throughout the last three decades of the century, manufacturing had assumed a major role in the economy of a city whose function had once been strictly mercantile. Manufacturing contributed much to the doubling of the total number of jobs between 1870 and 1900.

As so many other cities, Baltimore therefore represented the amplest field for many seeking opportunities in trading, retailing, professional and personal service, and manufacturing. She nearly doubled her population during this period, from approximately 267,000 in 1870 to more than 500,000 in 1900. While nearly 40,000 were probably added to the population in 1888 by the annexation of the "Belt" north and west of the city, most of the increase was a consequence of migration.<sup>13</sup> Responding to opportunities created largely by industrialization, these newcomers provided the labor force required by a growing economy and contributed to the industrialization and decentralization of the city.

Baltimore differed from most of her contemporaries with respect to the origins of her growing population. Of the fifty

<sup>13</sup>Hirschfeld, pp. 148-56. 2

Table II - Y. Occupations in Baltimore, 1870 - 1900.

	<u>Number of People</u>	<u>Percentage Distribution</u>	<u>Percentage Increase by Decade</u>
<b>Professional and Personal Services</b>			
1870	35,250	37.2	
1880	46,879	36.0	32.9
1890	61,561	33.4	31.3
1900	74,797	34.4	21.5
<b>Trade and Transportation</b>			
1870	23,214	24.5	
1880	32,669	25.1	40.7
1890	49,158	26.7	50.4
1900	61,809	28.4	25.7
<b>Manufacturing and Mechanical Industries</b>			
1870	35,338	37.5	
1880	49,949	38.3	40.6
1890	71,097	38.6	42.3
1900	79,314	36.5	11.5

Source: Charles Hirschfeld, Baltimore, 1870-1900: Studies in Social History (Baltimore: The Johns Hopkins University Studies in Historical and Political Science, Series LIX, No. 2, 1941), p. 40.

Table II - 2. Population and Rate of Growth of Baltimore City, 1840 - 1910

Year	All Residents		Native Whites		Blacks		Foreign-Born Whites	
	Number	Percent Change	Number	Percent of Total Change	Number	Percent of Total Change	Number	Percent of Total Change
1840	102,313							
1850	169,050	+65			28,388	17		
1860	212,418	+26	132,105	62	27,898	13	52,497	25
1870	267,354	+26	171,312	64	39,558	15	56,484	21
1880	332,313	+24	222,448	67	53,716	16	56,136	17
1890	434,439	+31	298,567	69	67,296	15	68,576	16
1900	508,957	+17	361,278	71	79,739	16	67,940	13

Sources: U.S. Census Office: Seventh Census, 1850, p. 220; Eighth Census, 1860, I, Ninth Census, 1870, I, p. 163; Tenth Census, 1880, I, p. 513; Eleventh Census, 1890, I, p. 533; Twelfth Census, 1900, I, pp. 657-8.

largest cities in 1870, she ranked fortieth in the proportion of foreign-born.<sup>14</sup> The absolute number of foreign-born actually declined between 1870 and 1890, in contrast to the national trend. Eastern Europeans in Baltimore increased substantially toward the end of the century but throughout the last three decades, the overwhelming majority of foreign-born residents were German or Irish. Few of the 600,000 foreign immigrants who landed in the port between 1870 and 1900 remained long in the city.<sup>15</sup>

Although the foreign-born constituted only about 13 percent of the population, they played a major role in the growth of manufacturing. In 1900, half of all the foreign-born were employed in manufacturing, while only 43 percent of the native whites and 7 percent of the blacks were so employed. More than two-fifths of the city's bakers, boot and shoemakers, cabinet makers, and clothing workers in 1900 were born in Europe.

The relatively low rate of foreign immigration was a consequence of the presence of a large number of blacks within the city. Between 1870 and 1880, the latter comprised the fastest growing segment of the population. Eliminated from manufacturing by the whites, they dominated the domestic and personal services provided to the city.<sup>16</sup>

<sup>14</sup>David Ward, Cities and Immigrants: A Geography of Change in Nineteenth Century America (New York: Oxford University Press, 1971). p. 76.

<sup>15</sup>Hirschfeld, pp. 159-64.

<sup>16</sup>M. Ray Della, Jr., "An Analysis of Baltimore's Population in the 1850's," Maryland Historical Magazine, Vol. 68 (1973).

Table II - 3. Nativity of Foreign-Born Residents as Percent of All Foreign-Born Residents, 1860 - 1910

<u>Year</u>	<u>Number</u>	<u>German States</u>	<u>Ireland</u>	<u>Western Europe</u>	<u>Eastern Europe</u>
1860	52,497	62	30	99	1
1870	56,484	62	30	96	2
1880	56,136	61	25	94	5
1890	69,003	59	19	86	12
1900	68,600	48	14	69	28

Sources: United States Census Office: Eighth Census, 1860, I., p. 611; Ninth Census, 1870, I, p. 777; Tenth Census, 1880, I, p. 513; Eleventh Census, 1890, I, pp 533-4; Twelfth Census, 1900, I, pp. 657-8. Calculations by the author.

Table II - 4. Nativity of Baltimore City Residents, 1880

<u>Place of Birth</u>	<u>Number</u>	<u>Percent of Population</u>	<u>Change as Percent of Number in 1860</u>
<u>United States</u>	276,177	83.1	+ 75.1
Maryland	242,050	72.8	+ 68.0
Other Southern States	18,895	5.7	+339.8
Virginia	14,152	4.3	+369.1
Northern States	14,312	4.3	+ 77.0
New York	2,992	0.9	+111.0
Pennsylvania	6,994	2.1	+ 69.6
Western States	898	0.3	+575.2
<u>Foreign Countries</u>	56,136	16.9	+ 7.1
Western Hemisphere	703	0.2	+144.9
British Isles	17,211	5.2	- 5.9
Scandinavia	307	0.1	+169.2
Western Europe	35,199	10.6	+ 5.2
Eastern Europe	2,320	0.7	+813.4

Sources: U.S. Census Office: Eighth Census, 1860, I, p. 611; Tenth Census, 1880, I, pp. 536-7, 513. Calculations by the author.

Table II - 5. Distribution of Foreign-Born, 1870 and 1900, and of Native Whites and Blacks, 1900, in Baltimore City's Labor Force

	Percent of All Foreign-Born		Percent of Native Whites	Percent of All Blacks
	<u>1870</u>	<u>1900</u>	<u>1900</u>	<u>1900</u>
Professional Service	1	3	6	1
Domestic and Personal Service	35	26	15	77
Trade and Transportation	19	20	35	14
Manufacturing and Mechanical Industries	44	50	43	7

Source: U.S. Census Office, Ninth Census, 1870, I, p. 777 and Twelfth Census, 1900, Occupations, pp. 488-95.

Table II - 6. Foreign-Born as Percent of Labor Force in Selected Industries in Baltimore City, 1870 and 1900

	<u>1870</u>	<u>1900</u>
Bakers	63	45
Boot and Shoemakers	60	57
Butchers	41	35
Cabinet Makers	56	60
Seamstresses, Tailors, Tailoresses	44	43
Tobacco and Cigar Factory Operatives	37	29

Source: ibid.

In 1900, 77 percent of the blacks were so employed, mostly as laborers, laundresses, servants, waiters, and waitresses. Menial occupations held by European immigrants elsewhere were shouldered by the unusually large community of blacks in Baltimore.

Black Americans comprised a portion of the regional migration that filled the city. Nearly half of the total increase in population between 1870 and 1900 consisted of native Americans born outside of Baltimore. Although Virginia, Pennsylvania, and New York made significant contributions to this growth, the city's immediate hinterland provided the greatest number of native immigrants. Altogether, perhaps 70 percent of the native immigrants came from elsewhere in Maryland.<sup>17</sup>

This steadily increasing population provided the third component needed for the industrialization of the city. As entrepreneurs funneled capital accumulated from commerce into manufacturing products that could be sold throughout the city's expanding markets, they could be confident in the availability of a growing supply of labor. Their success in inaugurating mass production within the city can be measured by the growth in the sizes of certain establishments, a growth made possible by the increasing use of machinery and the division of labor.

Such measures indicate that, for the city as a whole, industrialization was a gradual process. Although the amount of capital invested per establishment more than doubled between 1860 and 1900,

<sup>17</sup>Hirschfeld, p. 157.

Table II - 7. Ten Leading Industries in Baltimore, ranked according to the Value of Product in 1900

	Number of Establishments			Hands per Establishment			Capital per Establishment (\$1,000's)		
	1860	1880	1900	1860	1880	1900	1860	1880	1900
Clothing, men's	119	188	137 <sup>a</sup>	49	59	71	10.2	20.5	61.6
Fruits & Vegetables canning & preserving	29 <sup>b</sup>	41	23	61	266	190	23.4	47.8	124.5
Tobacco, chewing, smoking and snuff		10	5		106	400		60.3	361.1
Foundry and Machine Shop products	5 <sup>c</sup>	63	74	17	42	46	15.2	35.6	67.2
Tin, Copper, Sheet- Iron ware	37	154	218	6	11	10	2.4	7.0	12.0
Slaughtering and Meatpacking	5 <sup>d</sup>	6	40	13	32	11	37.5	117.5	28.0
Carpentering		114	319		11	7		9.7	5.2
Masonry, brick and stone		47	96		14	13		4.3	7.7
Bread and other bakery products	68	316	389	3	2	4	1.1	2.6	4.5
Fertilizer		18	17		37	41		180.1	261.8
ALL MANUFACTURING	1100	3638	6359	15.5	15.3	12.4	8.2	10.5	18.4

Notes:

- a. Clothing, men's, factory product
- b. includes "Provisions - Oysters, packed; Preserved Fruits"
- c. Brass founding
- d. Provisions - Pork and Beef

Source: U.S. Census Office, Eighth Census, 1860, III, pp. 220-2; Tenth Census, 1880, II, pp. 383-4; Twelfth Census, 1900, VIII, Part II, pp. 340-5.



the number of hands employed per establishment declined from 15.5 to 12.4. Only five of the city's ten leading industries, as determined by the total value of product in 1900, showed a growth in the number of hands per establishment over the preceding forty years. These conflicting measures reflect the fact that manufacturing was in a transitional phase between the traditional craftwork and the modern mass production. While some industries were experimenting with mass production, the number of firms engaged in hand trades and employing a handful of persons was increasing.

A close look at the clothing industry, which in 1900 employed approximately one-third of the labor force engaged in manufacturing, shows how industrialization was taking hold in spite of a decline in the average size of all firms for the city as a whole. In Table II - 8, the components of the clothing industry are ranked according to the amount of capital invested in machinery, tools, and implements per establishment in 1900. Note that the firms investing heavily in machinery had substantially larger numbers of employees. The 920 dressmaking and custom work establishments invested little in machinery and employed averages of two to four hands per establishment.

A number of industries experienced similar situations in which artisans, organized into small firms, competed with large mechanized establishments. That the former were losing the economic struggle is shown dramatically in Table II - 9. For the production of four

Table II - 8. The Clothing Industry in Baltimore, 1900, ranked according to the amount of capital invested in machinery, tools, and implements per establishment

	Number of Establishments	Investment in Machinery, tools, implements/est.	Hands Value of per est.	Product per est. (\$1,000's)
Shirts	34	\$4,824	73	\$108.4
Clothing, men's factory product	137	3,051	71	126.2
Clothing, women's, factory product	58	1,370	32	43.2
Clothing, men's factory product, buttonholes	18	614	5	3.3
Clothing, men's custom work and repairing	350	122	4	8.7
Clothing, women's dressmaking	570	82	2	1.9

Source: U.S. Census Office, Twelfth Census, 1900, VIII, Part II, pp. 340-5.

Table II - 9. Comparison of Selected Characteristics of Mass Production versus Handwork for Selected Industries, Baltimore, 1900

	<u>Number of Establishments</u>	<u>Number of Hands</u>	<u>Officials and Clerks</u>	<u>Value of Product (\$1,000's)</u>
Men's Clothing Factory Product	137	9,690	759	17,291
Customwork and repairing	350	1,287	176	3,061
Women's Clothing Factory Product	58	1,879	150	2,507
Dressmaking	570	1,240	17	1,093
Furniture Factory Product	36	1,627	129	2,691
Cabinetmaking, repairing, upholstering	114	189	18	411
Boots and Shoes Factory Product	18	846	37	1,066
Customwork and repairing	612	318	7	741
Total Factory Product	249	14,042	1,075	23,555
Hand Product	1,646	3,034	218	5,306

Source: U.S. Census Office, Twelfth Census, 1900, VIII, Part II, pp. 340-5.

major items, the larger, mechanized factories dominated the more numerous small, handworking shops in terms of the total value of product. In all industries combined, 52 percent of the establishments in 1900 were engaged in hand trades; but they employed only 13 percent of all industrial workers and produced only one-eighth of the total value of product.<sup>18</sup>

The increasing application of machinery to manufacturing had a variety of effects throughout the different industries. In the canning industry, technological breakthroughs enabled firms to increase the value of product while simultaneously reducing the numbers of employees. In the production of boots and shoes, the use of the McKay Heeler enabled one man and one boy to perform tasks that once required five men.

Such developments heralded the role of machinery in creating the division of labor. Persons trained in only one or two mechanical operations began to produce furniture that formerly required the expertise of skilled cabinet makers. Sewing machines and new techniques of production permitted the clothing industry to replace tailors with semi-skilled and unskilled labor.<sup>19</sup> Even the bureaucratic infrastructure of officials and clerks required for the management of larger firms was evident in 1900, as shown in Table II-9.

<sup>18</sup>Hirschfeld, pp. 180-2.

<sup>19</sup>Hirschfeld, pp. 183-8

The division of labor into coordinated, elementary tasks enabled firms to employ more women and children with each passing decade. In 1870, women and children together comprised only 15 percent of the labor force engaged in manufacturing. In 1900, one out of three persons employed in manufacturing was either a woman or a child. Insofar as the wages earned by women and children were lower than those earned by men, the increasing employment of the former tended to increase the profit margins of the large firms and therefore accelerated the growth in the sizes of such firms.

The growth of manufacturing and the expansion of many individual firms exerted significant changes upon the geography of the city. The changing location of the clothing industry, for example, illustrates the increasing use of land for manufacturing. In 1860, there was a concentration of clothiers and merchant tailors in a workshop and warehouse zone on the western edge of the central business district, with a much smaller concentration at Fells Point. By 1900, the traditional cluster of clothing establishments had expanded eastward to the far side of Jones Falls. In addition, middle-sized firms employing twenty to fifty employees each, together with smaller workshops and more than one thousand sweatshops were located in and northeast of Old Town.<sup>20</sup>

<sup>20</sup>Muller and Groves, pp. 410-20.

Table II - 10. Women and Children in Labor Force in Baltimore City, 1870 - 1900

A. Numbers engaged in each occupation

	All Persons		Women 16 yrs. & older		Children 10 - 15 yrs.	
	<u>1870</u>	<u>1900</u>	<u>1870</u>	<u>1900</u>	<u>1870</u>	<u>1900</u>
All Occupations	94,737	217,350	20,632	60,901	2,927	10,247
Professional Service	1,937	10,289	436	3,092	1	39
Domestic and Personal Service	33,313	64,508	14,757	28,417	1,837	2,187
Trade and Transportation	23,214	61,809	767	7,666	363	2,936
Manufacturing and Mechanical	35,538	79,314	4,659	21,599	719	5,014

B. Women and Children as Percent of All Persons Engaged in Each Occupation

	Women 16 yrs & older		Children 10 - 15 yrs.	
	<u>1870</u>	<u>1900</u>	<u>1870</u>	<u>1900</u>
All Occupations	22	28	3	8
Professional Service	23	30	0	0
Domestic & Personal Service	44	44	6	3
Trade & Transportation	3	12	2	5
Manufacturing & Mechanical Industries	13	27	2	6

Source: U.S. Census Office, Ninth Census, 1870, I, p. 777, and Twelfth Census, 1900, Occupations, pp. 488-95.

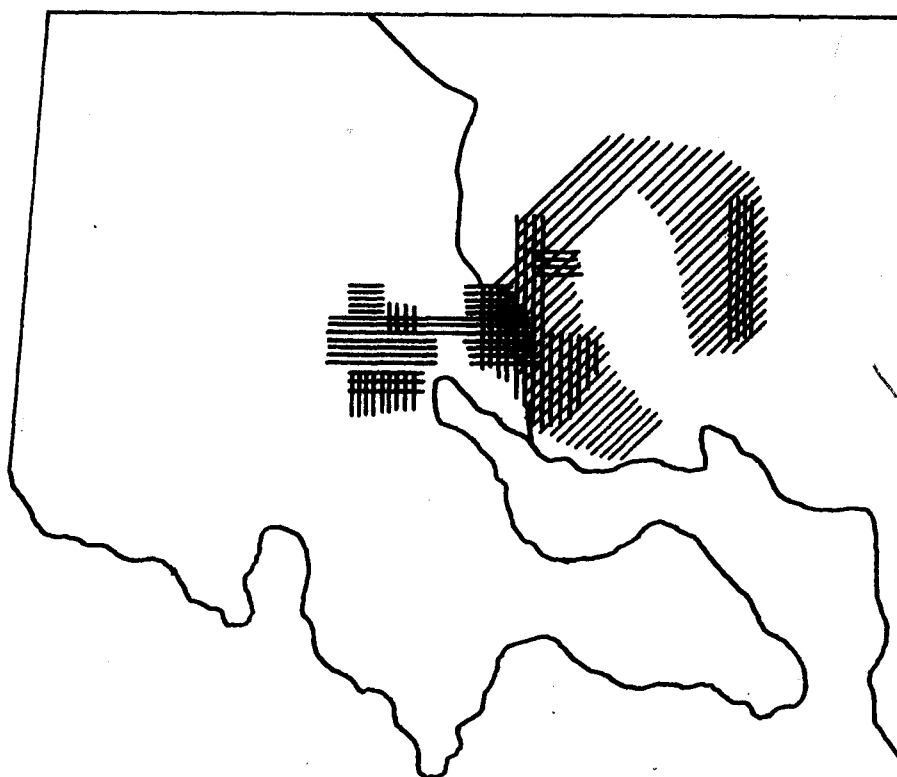


Figure II-2. Approximate Location of Clothing Industry  
in Baltimore City, 1901-2

Key:

≡≡≡ Clothing Factories, 50 or more hands

||||| Clothing Workshops, 20 to 50 hands

////// Sweatshops

Source: Edward K. Miller and Paul A. Groves, "The Changing Location of the Clothing Industry: A Link to the Social Geography of Baltimore in the Nineteenth Century," Maryland Historical Magazine, Vol. 71, No. 3 (Fall 1976), pp. 403-20. This figure is based upon three maps on pp. 418-9.

The locations of firms in the city's other leading industries in 1900 also indicate the expansion of the central business district as well as the growth of industrial activity in outlying areas. Although there was a concentration of canning establishments in the central and waterfront areas of the central business district, this industry was by no means confined to the center. There was a large concentration of packers along the waterfront of East Baltimore, as well as a scattering of such establishments west and south of the basin. The locations of machinists also demonstrate the expansion of the central business district and the scale of industrial activity carried on in East, South, and Southwest Baltimore in 1900.

Industrialization therefore significantly altered the pattern of land use in Baltimore City. The ante-bellum walking city, with its small central business district given over largely to commercial functions, had carried on light manufacturing in small shops distributed throughout its neighborhoods. Industrialization, however, enlarged the role of manufacturing within the economy and expanded the sizes of firms in the leading industries. The central business district grew enormously and, in 1900, consisted of a large warehouse and jobbing district, commercial and retail districts, and multi-storied factories. Railroad terminals, grain elevators, warehouses, and coal piers shared the long waterfront with fertilizer plants, oil and copper refineries, lumber-yards, furniture factories, cooper-age and woodworking plants, and canneries. Manufacturing establishments rose north along the power source of Jones Falls. Much of



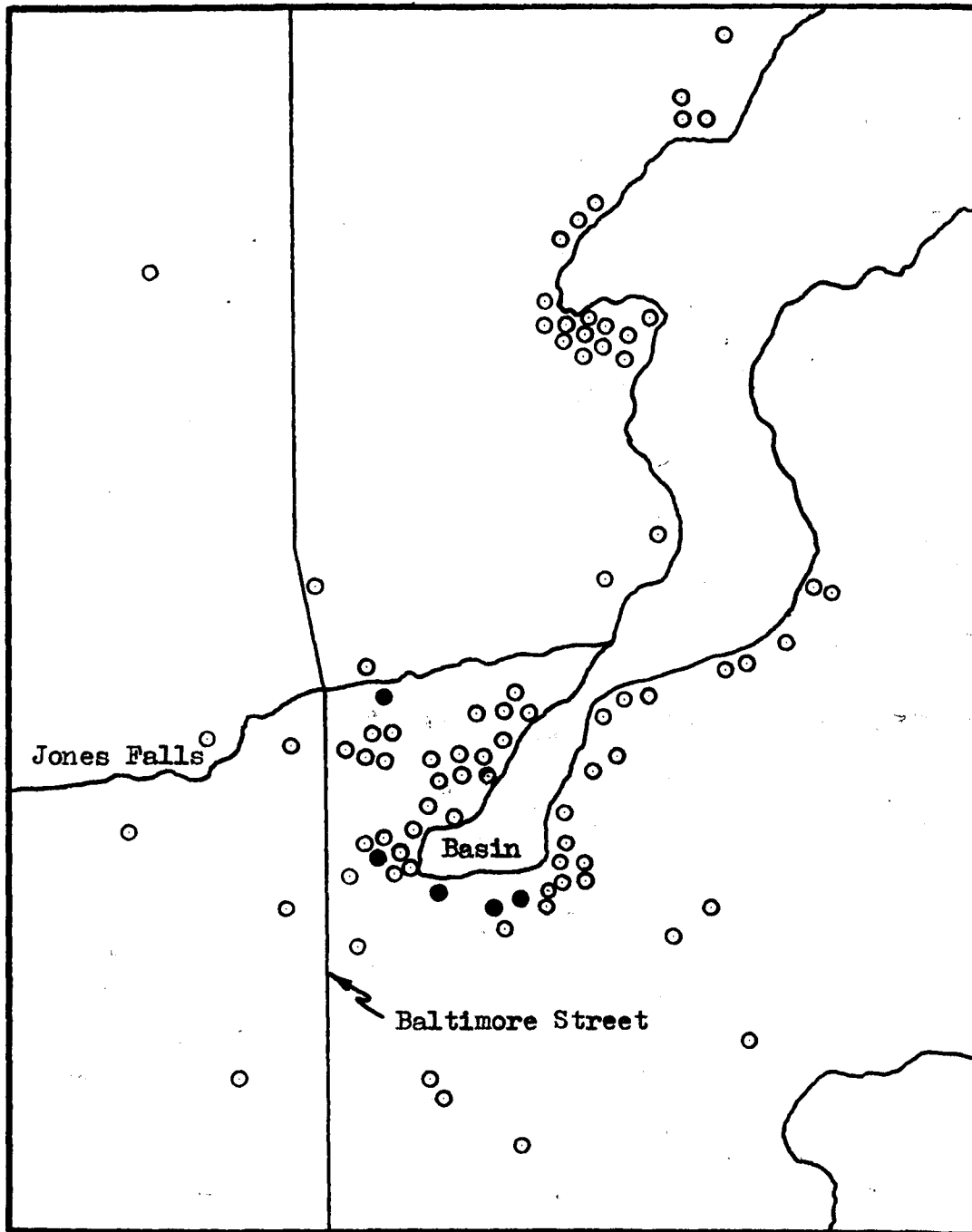


Figure II-3. Distribution of Oyster and Fruit Packers and Tobacco Manufacturers, Baltimore City, 1900.  
 ○ Oyster and Fruit Packers      ● Tobacco Manufacturers

Source: Baltimore City Directory, 1900, pp. 1832-3 and 1923.

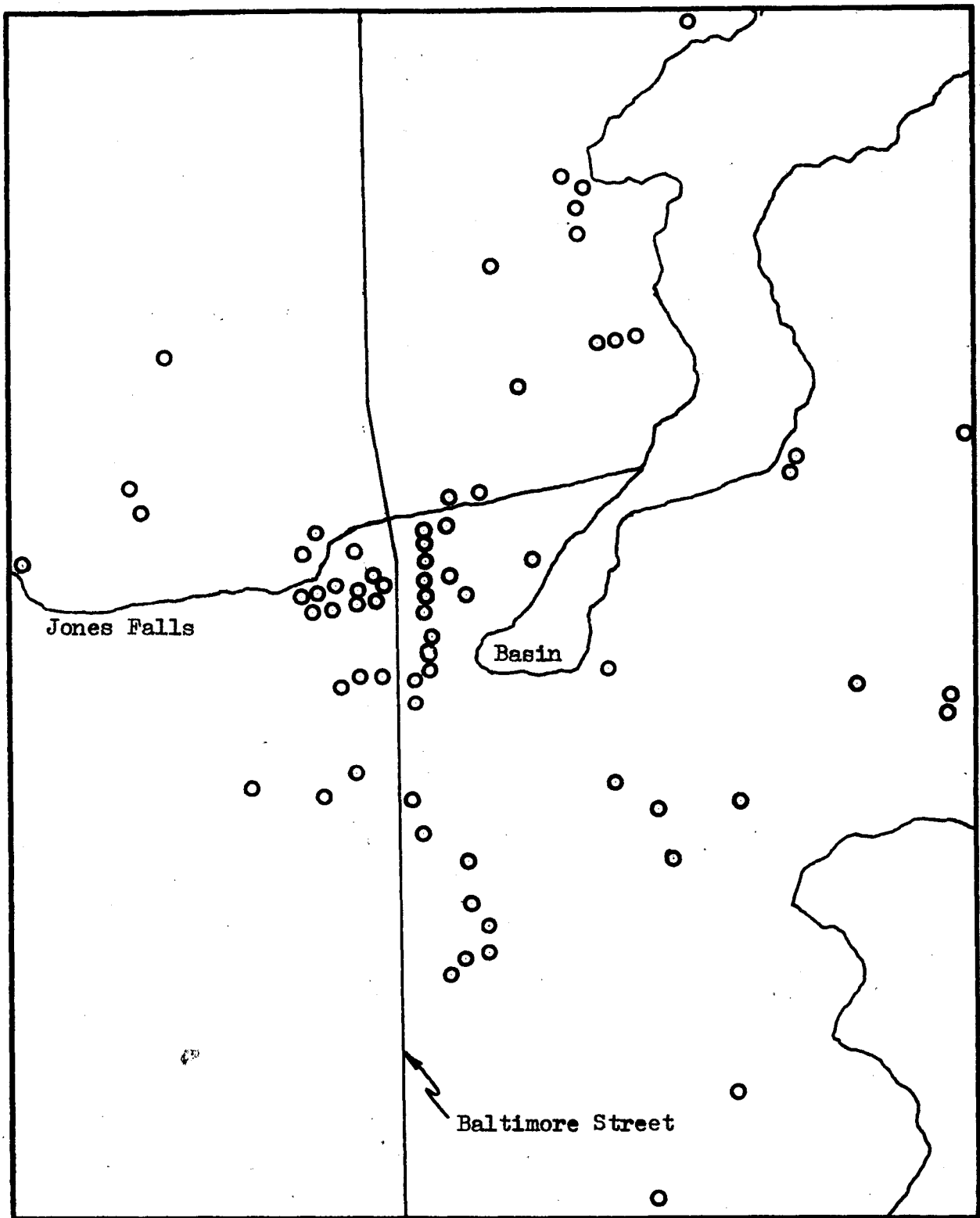


Figure II-4. Distribution of Machinists in Baltimore City, 1900.  
Source: Baltimore City Directory, 1900, pp. 1806-7.



Figure II-5. Approximate Areas of Industrial Development, circa 1900

Key:

- 1 - Central Business District, Hopkins Place
- 2 - Mount Clare
- 3 - Jones Falls
- 4 - Fells Point
- 5 - Old Town

Sources: Edward K. Muller and Paul A. Groves, "The Changing Location of the Clothing Industry"; George Washington Bromley, Atlas of the City of Baltimore (1896); Eleanor S. Bruchey, "The Development of Baltimore Business, 1880-1914," Maryland Historical Magazine, Vol. 64 (1969); and Figures II-2 through 4.

the area once occupied by the whole of the former walking city was now given over exclusively to industrial activity.<sup>21</sup>

Baltimore during the last three decades of the century was therefore confronted with novel and demanding challenges. Enlarging the number of opportunities available in manufacturing, industrialization both contributed to and profited from the growth in population. Yet the same factories that were inducing this demographic growth were displacing block after block of dwellings with each passing decade. Furthermore, the emphasis on mass production, which assembled scores and sometimes hundreds of workers together into one plant, dictated the separation of workplace from residence. Under these conditions, the population had no choice but to spill with increasing speed into the outskirts and suburbs of the city. Decentralization was a consequence of industrialization.

<sup>21</sup>Hirschfeld, pp. 218-9.

Chapter III. The Imperial City: Decentralization and  
Deconcentration

"We congratulate our fellow-citizens upon the share of good things which has fallen to their lot, and they have our heartiest wishes for a splendid imperial destiny."

The New York Herald, Oct. 12, 1880  
Editorial on the 150th Anniversary  
of the Settlement of Baltimore City

"Large and Commodious House...Location very healthy, with city conveniences and country advantages."

Real estate advertisement,  
The Sun, Baltimore, June 4, 1880

The expansion of the central business district and the growth of industry at other strategic focal points, as described in the preceding chapter, required the displacement of large portions of the population. The introduction of a comprehensive street railway system made this displacement possible. The pursuit of the rural ideal - new homes with bigger lots, away from the overcrowded core with its expanding businesses - also contributed to the redistribution of the population. The impact of these factors became visible after 1870, when Baltimore City began to decentralize and deconcentrate.

The rapid expansion of the transportation network provided the means for decentralization. Prior to the Civil War, city transportation consisted solely of private hackneys and omnibuses. Expensive, slow, and uncomfortable, they could not fulfill the growing need for comprehensive service. City politics delayed the passage of a bill

providing a franchise for a horse car line until 1859. Beginning construction of its tracks immediately, the City Passenger Line enjoyed a virtual monopoly of street railways until 1871. Reaching out from the central business district, its various lines served the outer areas of the city, the northwestern quadrant enjoying the most trackage.<sup>1</sup>

After 1870, a number of competitors constructed additional line lines throughout the city. As of 1882, the various railways still emphasized the links between the northwest and the central business district. Although the capacity of the cars probably varied from line to line, one may roughly deduce the distribution of the traffic during this period on the basis of a schedule of street railways printed in an 1878 guide. During each peak hour, 38 cars ran into the central business district from the northwest; 11, from the north; 20, from the northeast; 21, from the east; and 14, from the south. If these schedules are representative of the traffic pattern, there was more commuting into the center from the northwestern area than from elsewhere during the 1880's.<sup>2</sup>

<sup>1</sup>Michael R. Farrell, Who Made All Our Streetcars Go? The Story of Rail Transit in Baltimore (Baltimore: Baltimore NRHS Publications, 1973), pp. 15-25.

<sup>2</sup>These estimates are based upon a study of a schedule of street railway lines and routes published in The Visitor's Guide to Baltimore (Baltimore, 1878), p. 23.

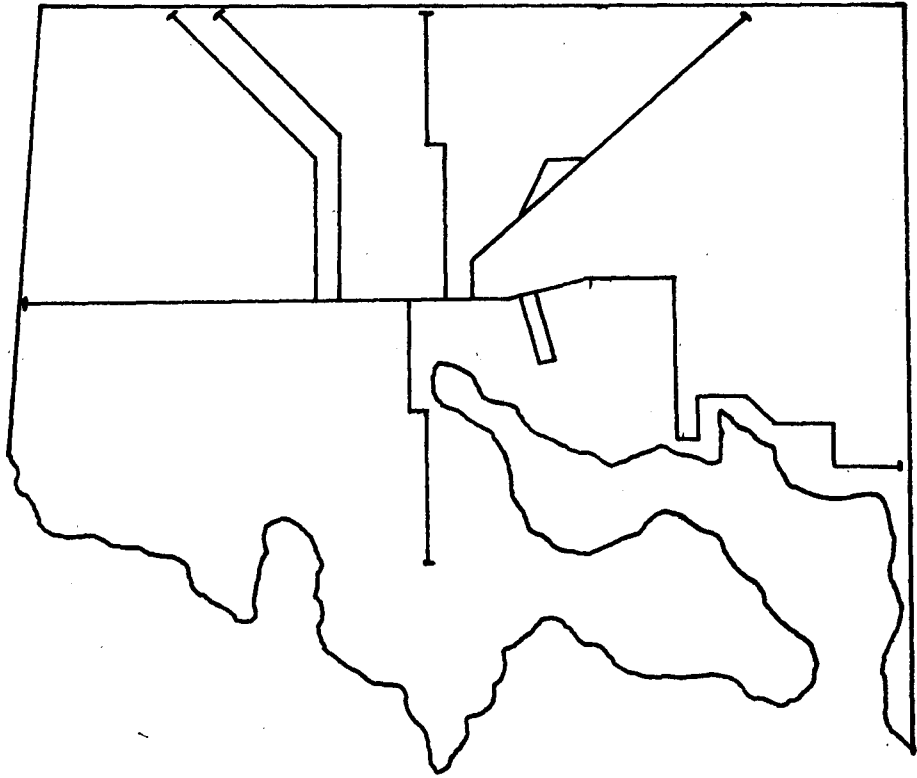


Figure III-1. Street Railways in 1871

Source: Michael R. Farrell, Who Made All Our Streetcars Go?,  
(Baltimore: NRHS Publications, 1973), p. 25.

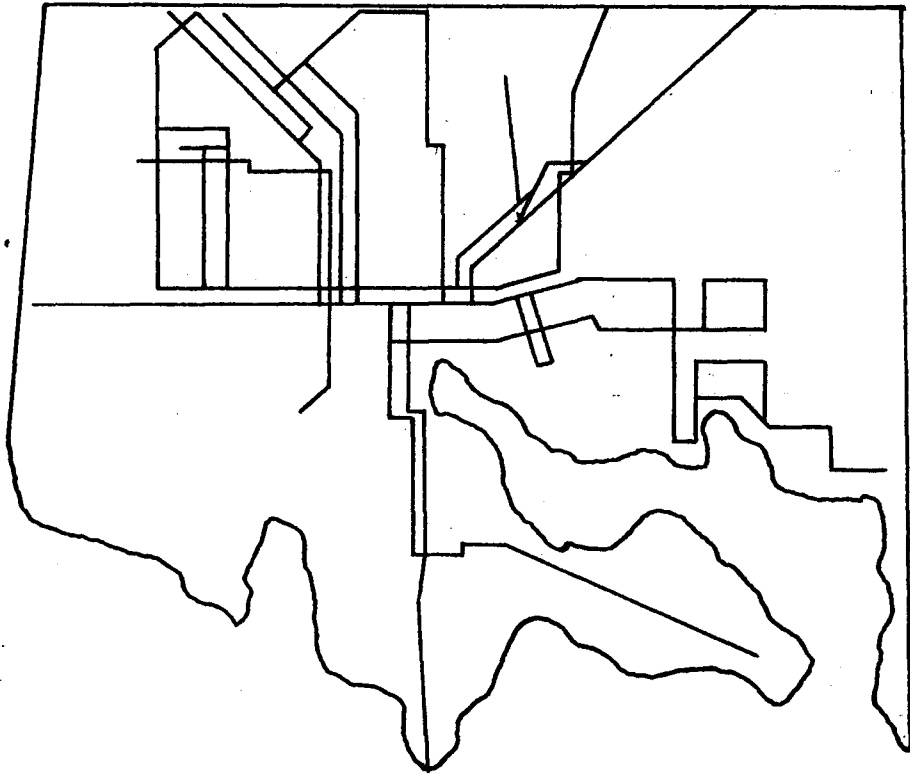


Figure III-2. Street Railways in 1882

Source: William P. Twamley, Map of the City of Baltimore (1882)



During the following decade, most of the lines were converted to electricity as a means of propulsion.<sup>3</sup> By 1896, a few additional radial lines and number of crosstown lines had been constructed within the former city limits. Rails also extended through newly annexed territory into the neighboring county. Within a generation, the city had acquired an efficient means of transportation which was within the means of middle-income families, although few workingmen could afford to ride the cars daily until electrification.<sup>4</sup>

The more fortunate citizens who could afford to commute daily were now able to pursue the rural ideal. In these early stages of industrialization, the inner city residents were witnessing the expansion of factories, warehouses, and sweatshops that detracted from the quality of life within the center. As industrial development took hold of block after block, the convenience of living in a central location began to pale before the peace and quiet offered by an idealized rural homestead. The street railways offered the hope of providing a suburban villa - or, at least, a new and larger dwelling in the outer areas of the city, away from the smoke and noise of industry.

The rural ideal was reflected in the marketing of real estate. As the century drew to an end, newspaper advertisements and real estate brochures increasingly played upon a common theme: Leave

<sup>3</sup>Farrell, Streetcars, pp. 59-83.

<sup>4</sup>Muller and Groves, pp. 403-4.

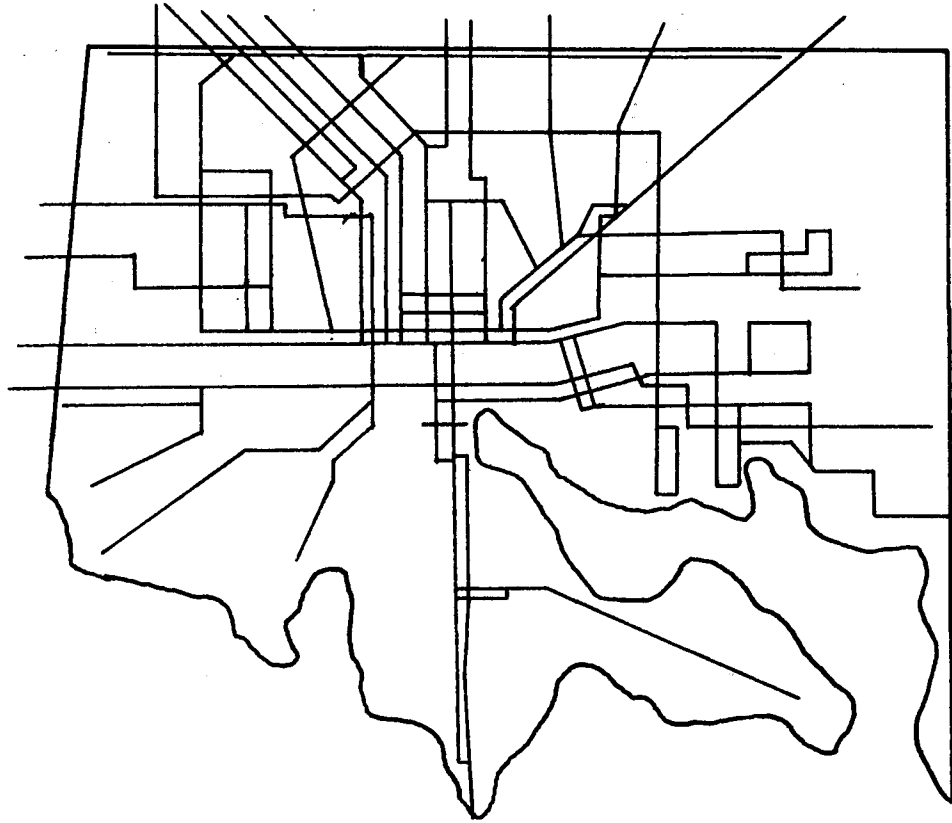


Figure III-3. Street Railways in 1896

Source: George Washington Bromley, Atlas of the City of Baltimore  
(1896)

the congested, smoke-filled, crime-ridden core in order to live in a spacious home with a fine view, a healthy environment, a garden, a square, and a nearby street railway. The lure of the outer suburbs - "Wanted: a good-size cottage, in the suburbs near the city; must be within five minutes from horsecar" - expressed the rural ideal perfectly.<sup>5</sup> The outlying areas within the city proper, however, offered a diluted, though still satisfying, fulfillment of the ideal. Newspapers advertised homes in these areas with modern improvements in desirable neighborhoods with public squares and streetcars. Yards filled with fruits, flowers, and shade trees were major selling points. Conjured forth by industrialization and promoted by the street railways, the rural ideal played a major role in the decentralization of Baltimore City.

In order to determine the extent and the timing of a decentralization, one must first designate the core and the ring. The populations of eleven urban areas as reported in the U.S. Censuses of 1850, 1870, and 1890 were tabulated in order to determine the patterns of growth and decline. Changes in ward boundaries during the periods studied made it necessary to combine the populations of several wards and to approximate the populations of wards as reported in 1890. Excluding two new wards which comprised the area to the north and west, which was annexed in 1888, there were twenty wards during the periods studied. Eleven areas, based on ward boundaries

<sup>5</sup>The Sun, Baltimore, March 16, 1880, p.3.

established in 1870, were identified and held constant throughout the analysis. The approximations used are presented in the Appendix. Figure III - 4 shows the areas, designated by their 1870 ward numbers.

Table III - 1 shows the population of each area in 1850, 1870, and 1890, together with the percent change in population between 1850 and 1870 and between 1870 and 1890. The areas have been divided into two categories: the core and the ring. Between 1870 and 1890, the five areas comprising the core experienced rates of growth that were significantly lower than those exhibited by the six areas that have been classified as the ring, the latter being the outer areas of the city. During this period, the highest rate of growth by one of the core areas was 9 percent; this was far less than even the lowest rate of growth (53 percent) demonstrated within the ring. Note also that the core, defined strictly through demographic measures, housed nearly half the city's population in 1850.

Within each major region, there were variations in the rates of growth. Wards 9 and 10 together, which enclosed the central business district, were losing population between 1850 and 1870 while adjacent core areas were growing dramatically. After 1870, the central business district lost population nearly six times as fast as the first two decades, a decline also being exhibited by Wards 3 and 4 combined. As a whole, the core grew at a rate of 48 percent between 1850 and 1870; losses in population by two of its five areas thereafter resulted in a net loss of 3 percent.

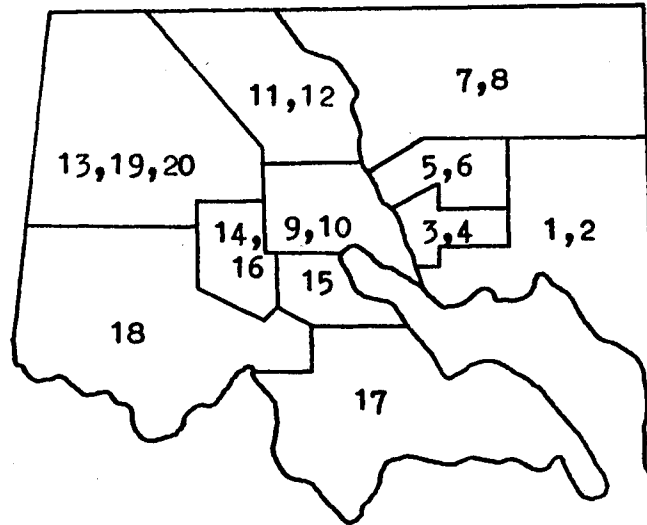


Figure III -4. Eleven Selected Areas Consisting of Combinations of 1870-80 Wards

The areas are identified by the 1870-80 Ward designations.

Source: J.W. Woods, Baltimore City Directory (1865, 1872, and 1880). The ward boundaries were constant throughout these years.

Table III - 1. Population of Baltimore City, 1850 - 1890, by Areas Identified by 1870 Ward Groups

Area, identified by 1870 Ward Nos.	Population 1850	Population 1870	Percent Change 1850-70	Population 1890	Percent Change 1870-90
Core:					
3,4	19,448	24,865	+ 28%	20,953	-16%
5,6	15,493	28,508	+ 84%	30,081	+ 6%
9,10	20,128	19,334	- 4%	14,896	-23%
14,16	11,994	28,173	+136%	30,927	+ 9%
15	10,302	13,854	+ 34%	14,437	+ 4%
Core Combined	77,365	114,834	+ 48%	111,924	- 3%
Ring:					
1,2	25,677	31,785	+ 24%	48,520	+ 53%
7,8	14,315	28,631	+100%	57,617	+101%
11,12	18,774	22,797	+ 21%	36,439	+ 60%
13,19,20	13,692	38,916	+184%	79,887	+105%
17	8,851	11,404	+ 29%	27,432	+141%
18	10,380	18,987	+ 83%	33,858	+ 78%
Ring Combined	91,689	152,520	+ 66%	283,753	+ 86%
Core and Ring Combined:	169,054	267,354	+ 58%	395,047	+ 48%

Sources: U.S. Census Office, The Seventh Census of the United States (1850), The Ninth Census of the United States (1870), The Eleventh Census of the United States (1890). The above populations for 1850 and 1890 are estimates based upon Table A-1.

In contrast, the ring, taken as a whole, demonstrated an accelerating rate of growth. Its growth during the first two decades exceeded that of the core; it grew even faster after 1870. The city was rapidly decentralizing.

These contrasting trends are illustrated in Figure III - 5. The reader is reminded that the ring does not include territory to the north and west which was annexed in 1888; the absence of accurate demographic data for this area precluded its inclusion in the present study. The core and the ring are held constant during the remainder of this study, although changes in the ward boundaries after 1880 sometimes requires presenting information in areas that do not exactly coincide with these two major regions.

The decline in the density of the population living in the core is illustrated in Figure III - 6. Note that by 1890, the central business district had declined to a population density comparable to areas in the ring. Strictly speaking, only two of the five core areas had lost population by 1890; but insofar as the losses experienced by these two areas exceeded the gains shown by the other core areas, the core as a whole had declined in population density. As defined in the Introduction, deconcentration was simultaneous with decentralization.

The impact of these two processes upon the geography of the city is further shown in Figure III - 7. In 1850, 46 percent of the total population resided in the core. This proportion had decreased only slightly by 1870. But by 1890, the core housed only 28 percent

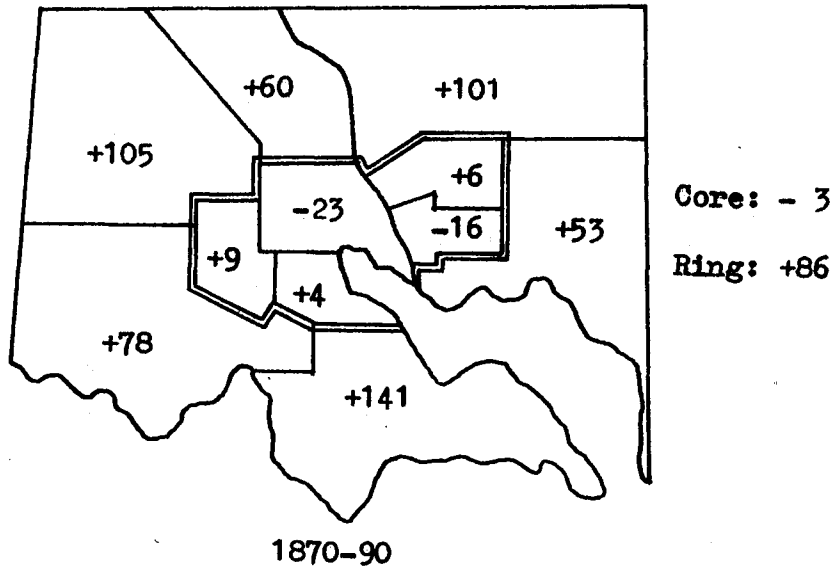
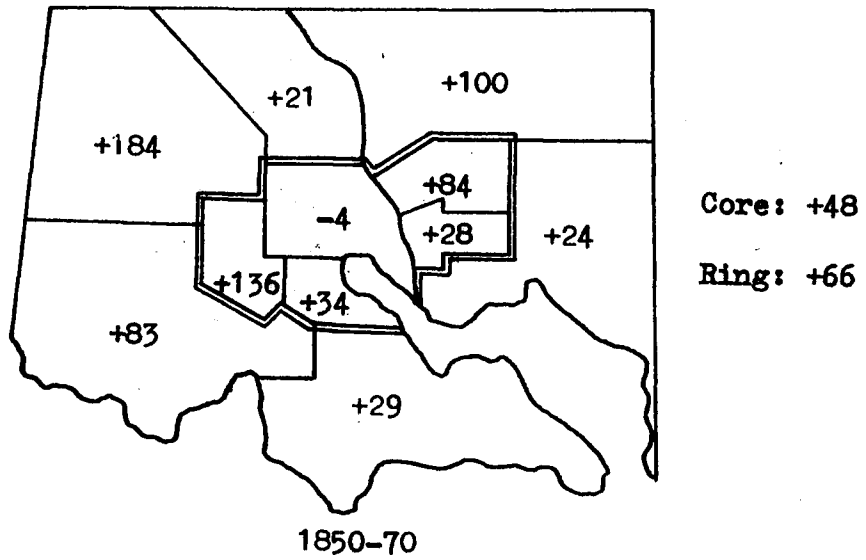
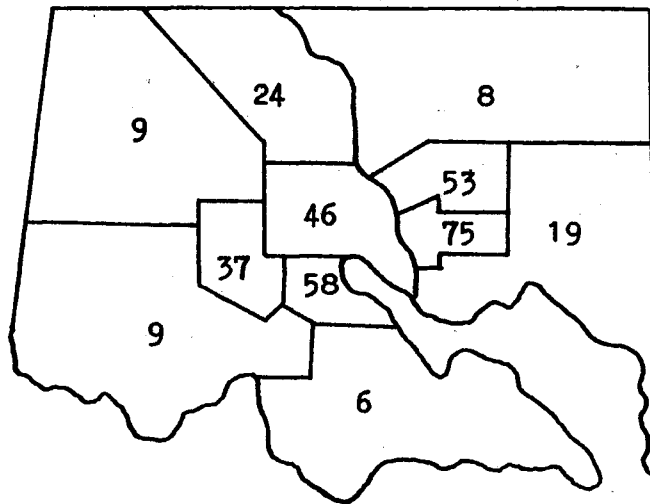


Figure III-5. Percent Changes in Population, 1850-70 and 1870-90. The core is enclosed by double lines.

Source: Table III-1 and Figure III-4.

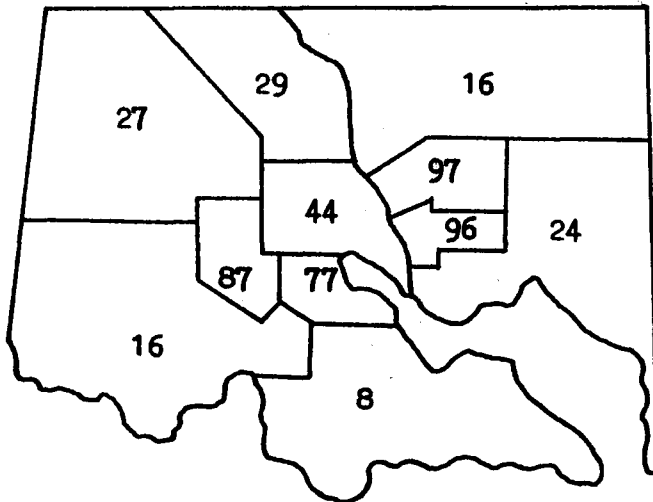




1850

Core Combined: 52

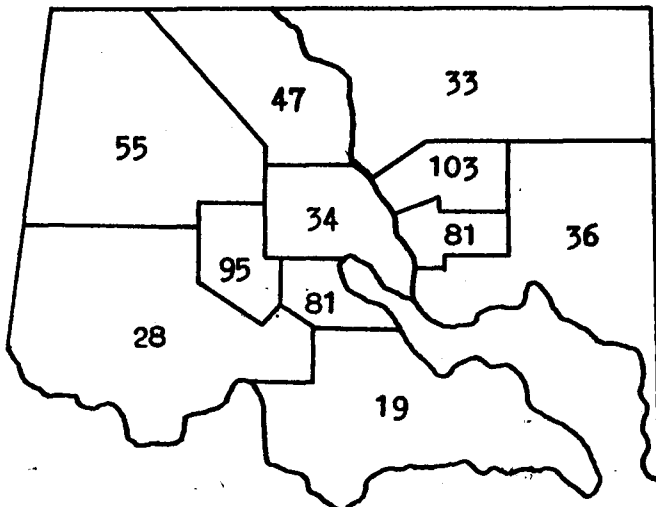
Ring Combined: 11



1870

Core Combined: 77

Ring Combined: 19

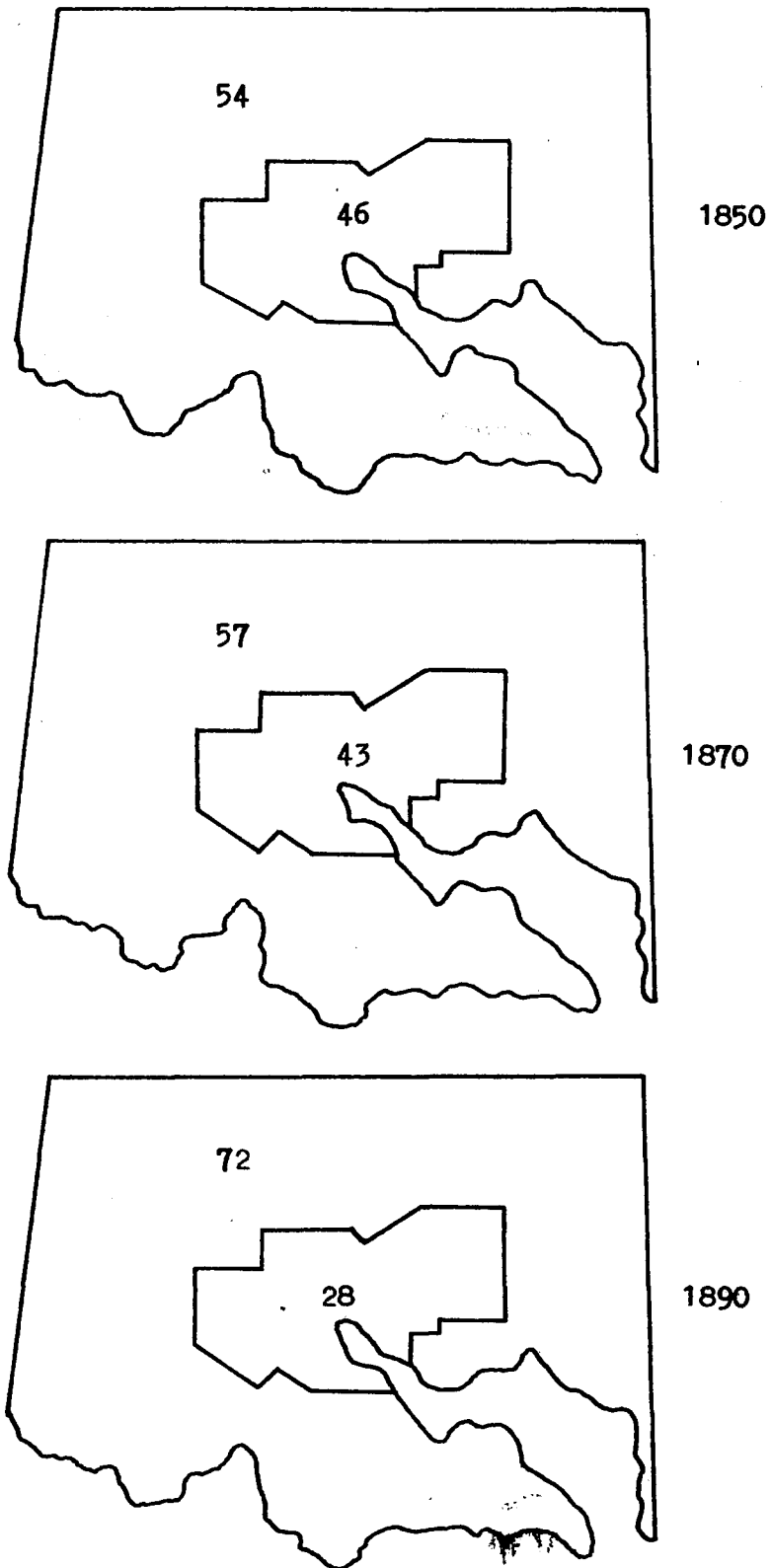


1890

Core Combined: 75

Ring Combined: 35

Figure III-6. Density of Selected Areas in 1850, 1870, and 1890, as Persons per Acre. Source: Table III-1, Figure III-4.



**Figure III-7. Distribution of Population in Core and Ring, 1850, 1870, and 1890, as Percent of Combined Population.**  
**Source: Table III-1, Figure III-4.**

of all the persons residing within the city boundaries as defined prior to the annexation of 1888. For three out of four Baltimoreans, living downtown was a thing of the past.

The relationship between these processes and business expansion may be surmised by comparing areas of demographic growth and decline with those of industrial and commercial expansion. As noted in the previous chapter, the central business district expanded after 1850. The core, which had the higher residential density, could not absorb the further expansion of business activities without reducing the number of dwellings in some of its wards. The reduction of housing in the core, specifically in the central business district, is shown in Figure III - 8. The soaring property values within the core, indicated by indices of the cost of dwellings mortgaged as of 1890 (Figure III- 9), further suggests the impact of business expansion in the urban center. Deconcentration was therefore largely a consequence of the expansion of the central business district.

The growth of trade and industry contributed to deconcentration and decentralization in yet another way. A comparison of Figure III - 8 with Figure II - 1 indicates that there was an increase of housing in the ring where outlying industries were being established. The introduction and expansion of heavy industry along Jones Falls, along the waterfront, and around the railroad yards at Mount Clare were taking place in areas that contained more vacant land than the core. Consequently, these outer areas were able to absorb industrial

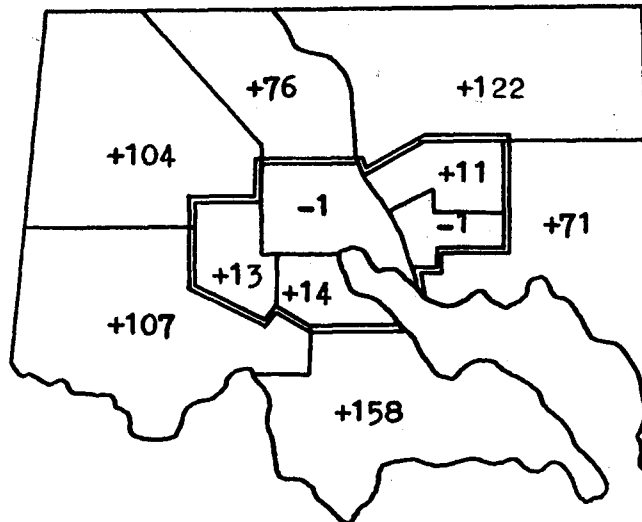


Figure III-8. Percent Changes in the Number of Dwellings in Eleven Selected Areas, 1870-90. The core is enclosed by double lines.

Source: U.S. Census Office, Ninth Census, 1870, I, p. 599; Eleventh Census, 1890, I, p. 936; and Figure III-4. The procedure used to estimate the number of dwellings in each area in 1890 is described in the Appendix.

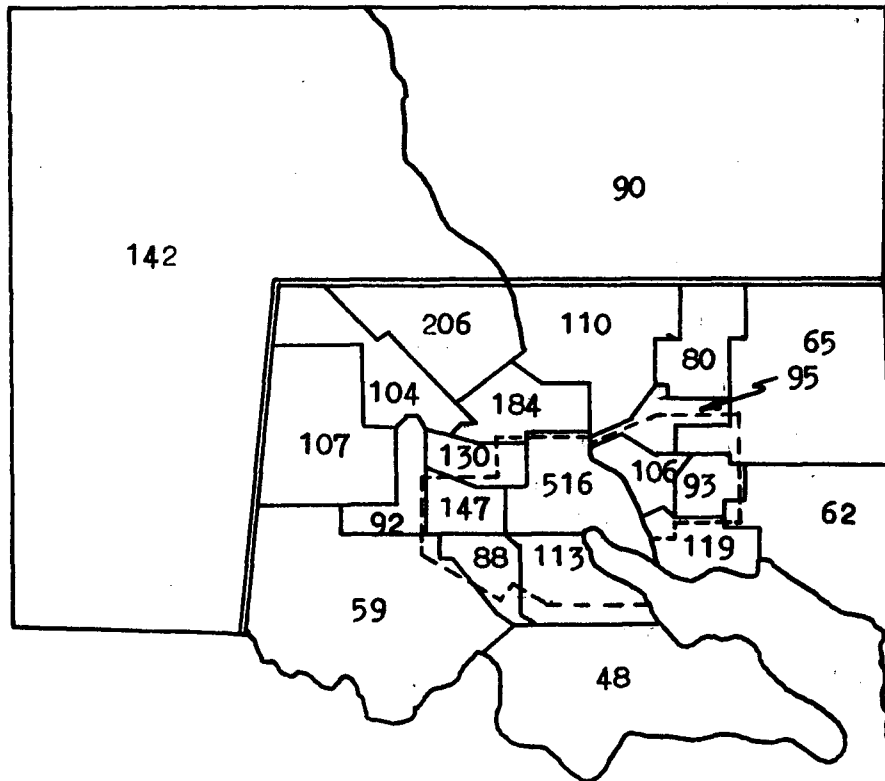


Figure III-9. Indices of the Average Values of Incumbered Homes, 1890, by Ward. The core is enclosed by broken lines; the ring, by double lines.

Source: U.S. Census Office, Eleventh Census, 1890  
 Ward boundaries are based upon a map published in John S. Billings, Vital Statistics of the District of Columbia and Baltimore, 1890  
 (Washington: U.S. Census Office).

as well as residential development. The simultaneous growth of places of employment and residences at these places in the ring suggests that persons may have been moving to the outer industrial areas in order to be close to their places of employment. The next chapter presents evidence that this motive was true of many of those who moved into the ring.

Clearly the geography of the city was changing at a dizzying pace. Banks, warehouses, clothing establishments, machine shops, and retail stores were transforming the center, while residences and industries were filling vacant land in the ring. But the data presented above does not give a complete picture of the mobility of the population. Consisting solely of net changes over the forty years, the census reports give no indication as to the number of persons moving into or out of the various wards. The 1,349 whites whose addresses could be located on the basis of information given in the Baltimore City Directory of 1880 permits one to study the mobility of Baltimoreans more closely by checking their addresses in the Baltimore City Directory of 1885.

The residences of these persons were established in terms of the 1880 wards, which were identical to the 1870 wards, or the County. The wards were then grouped into five zones, as shown in Figure III - 10. The character of each zone in terms of its relation to industry is found by comparing Figure III - 10 with Figure II - 1. The core, which is the same area identified by the above analysis of census

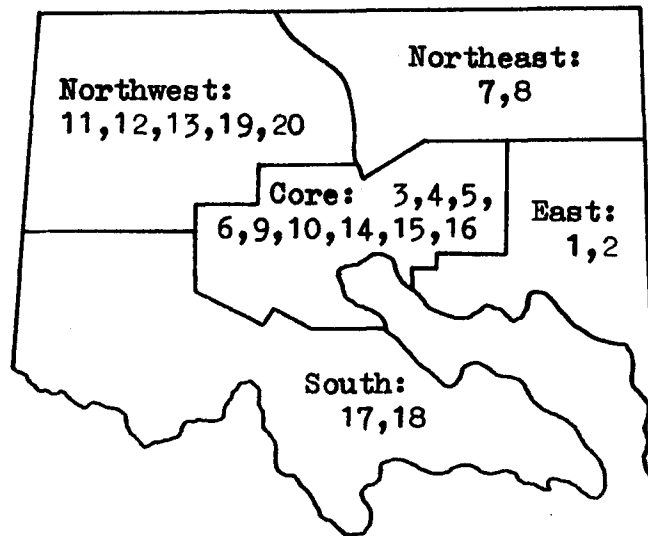


Figure III-10. Five Zones, identified by 1880 Ward Numbers

Source: Figure III-4.

data, enclosed the growing central business district. The north-western zone combine industry along its western edge with residences throughout its center and brickyards along its northern and eastern boundaries. The eastern and southern zones included residences and heavy industries, warehouses, and associated maritime establishments along the waterfront, together with the southern zone's industrial sector centered around the Baltimore and Ohio Railroad's Mount Clare yards. All of the above zones were within the city limits that existed prior to the 1888 annexation. Of the five, the northwest had the fewest industrial establishments.

Table III - 2 summarizes the mobility of the persons in the sample. Of the 1, 349 persons whose residences were located among the five zones and the County, 218 had moved within their original zones and 173 had moved into other zones, the County being regarded as a sixth "zone." The distribution of these moves among the six zones enables one to determine roughly the ebb and flow of the population that remained within the metropolitan area between 1880 and 1885. Figures III - 11 through III - 15 illustrate the kinds of moves as percents of the number of persons in the sample who resided in each zone in 1880.

The mobility of persons who resided in the core was nearly identical with that of those in the east. Half of the persons who moved during the five years remained within the same zone. Both zones were losing their original residents twice as fast as they were



Table III - 2. Mobility by Zone of 1,349 Persons in Sample Drawn from Baltimore City Directory of 1880 and Traced in Baltimore City Directory of 1885

	All Zones					
	<u>Core</u>	<u>East</u>	<u>Northeast</u>	<u>Northwest</u>	<u>South</u>	<u>County</u>
Number of Residents, 1880	1,349	459	176	146	359	141
Moves originated in each zone that ended in City or County	390	143	48	36	118	32
Moves within each zone	218	71	25	18	83	13
Moves out of each zone into another zone	173	72	23	18	35	19
Moves into zone from other zone	173	38	10	17	52	34
Net change of intra-urban* moves	0	-34	-13	-1	+17	+15
						+17

\*"Intraurban" denotes the metropolitan area, which includes Directory addresses listed as "Baltimore County."

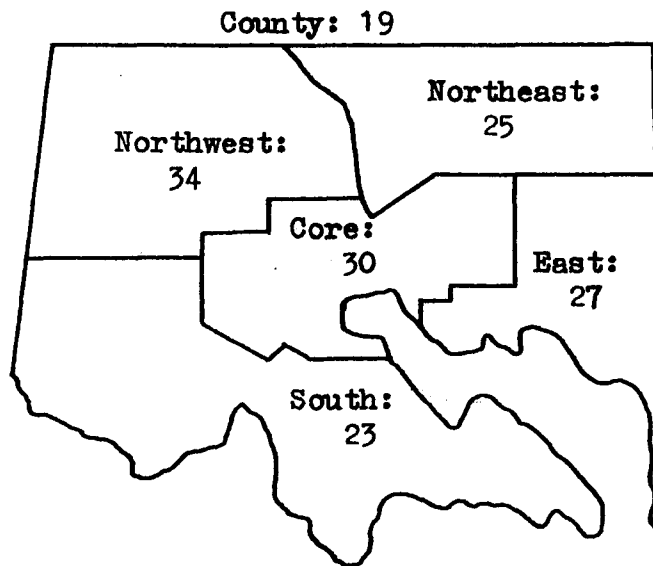


Figure III-11. Intraurban Moves Originated in Each Zone between 1880 and 1885, as percent of the number of residents in 1880 sampled in each zone.

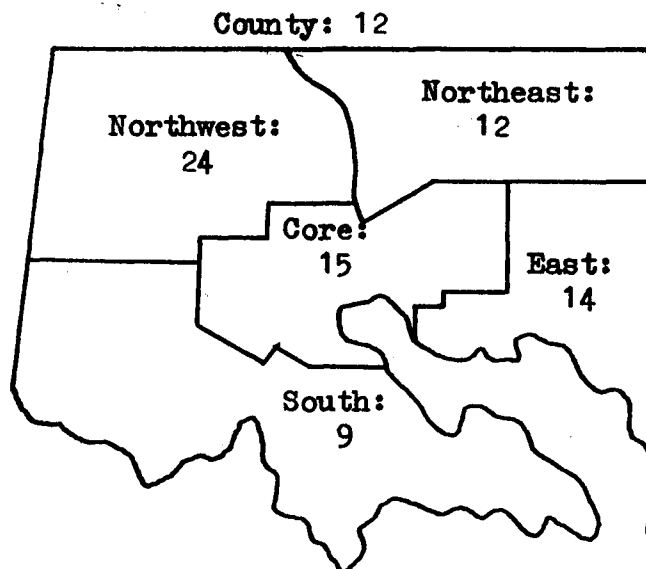


Figure III-12. Intraurban Moves within Each Zone between 1880 and 1885, as percent of the number of residents in 1880 sampled in each zone.

Source for Figures III-11 and 12: Figure III-10 and Table III-2. "Intraurban" denotes the metropolitan area, which includes Directory addresses listed as "Baltimore County."

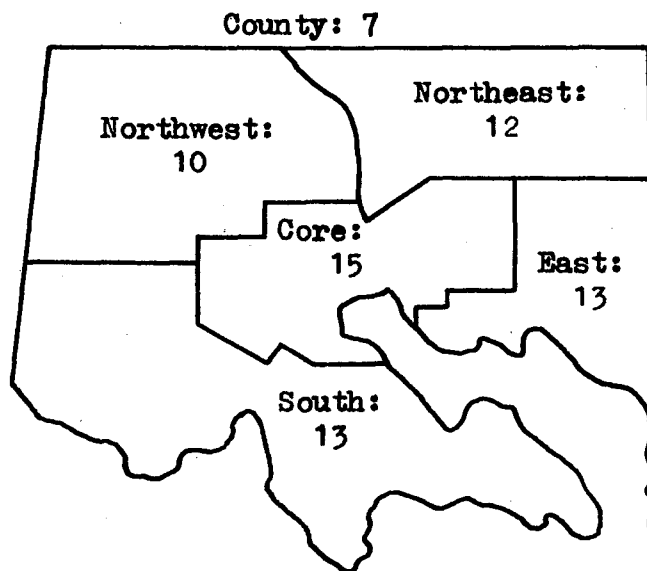


Figure III-13. Intraurban Moves out of Each Zone between 1880 and 1885, as percent of the number of residents in 1880 sampled in each zone.

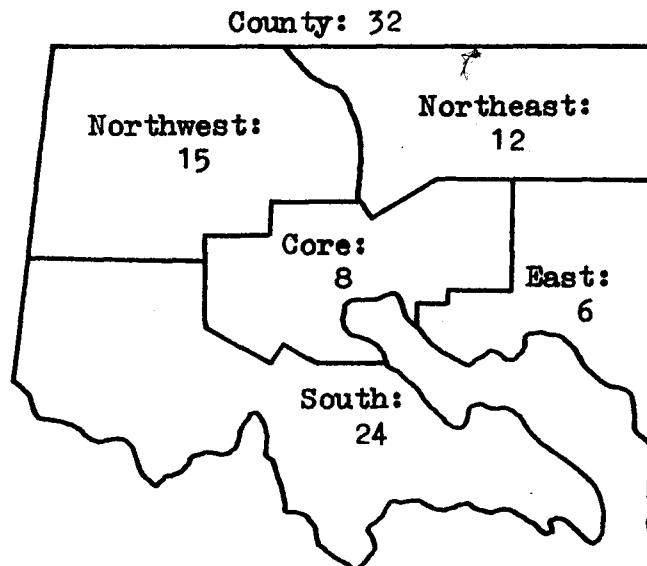


Figure III-14. Intraurban Moves into Each Zone from other Zones between 1880 and 1885, as percent of the number of residents in 1880 sampled in each zone.

Source for Figures III-13 and 14: Figure III-10 and Table III-2. "Intraurban" denotes the metropolitan area, which includes Directory addresses listed as "Baltimore County."

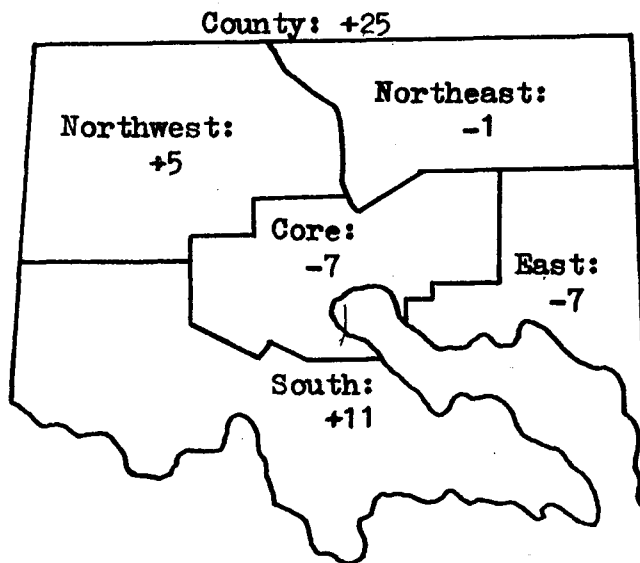


Figure III-15. Net Change due to Intraurban Moves Into and Out of Each Zone between 1880 and 1885, as percent of the number of residents in 1880 sampled in each zone.

Source: Figures III-13 and 14. "Intraurban" denotes the metropolitan area, which includes Directory addresses listed as "Baltimore County."

gaining residents from other zones. The net loss of 7 percent by the core reflects the deconcentration established by the preceding analysis of census materials. The fact that the east also experienced a net loss of 7 percent of its original residents to other zones, while at the same time gaining overall population, as established by the preceding analysis of census materials, suggests that the east experienced an influx of persons who had not resided in the city in 1880 that was greater than that experienced by other zones; a study of the location of the foreign-born in the next chapter further supports this hypothesis.

The northeast remained relatively stable in its population of persons who had resided in the metropolitan area in 1880. Although 12 percent of its white residents in 1880 had moved to other zones, the loss was balanced by newcomers from the other zones.

The northwest and the south were characterized by extremes in mobility. One-third of all the white heads of households who lived in the northwest in 1880 had moved within the metropolitan area by 1885; however, most of these remained in the same zone. The northwest lost some of its residents to other zones, but it more than compensated for this loss by immigration from the other zones.

The south showed the greatest gain in the number of whites who had resided within the metropolitan area for five years. It originated the lowest rate of moves. Immigration into the south from other zones was nearly twice its emigration to other zones. The

south led all the city zones in terms of absorbing persons who had been residents of the metropolitan region for at least five years.

The County showed a higher net increase than even the south. It gained residents from the city nearly five times faster than it lost to the city. It is quite probable that most of the sample group whose residences were listed as the County resided in the "Belt," the area directly north and west of the city, annexed in 1888.

A closer study of the core, which experienced the greatest decline in the number of residents who had lived in the metropolitan area in 1880, and the northwest, which exhibited the greatest gain within the city, reveals several additional facets of deconcentration and decentralization. Figures III - 16 and 17 show the sources of persons by zone who moved into or within the core and the northwest, respectively, as percents of the total number of moves into or within each of the two zones. Newcomers to the core from elsewhere in the metropolitan region were fairly evenly distributed throughout the region. Most of the immigrants to the northwest from other zones, however, had formerly resided in the core. Compared to the northwest, the core was becoming more cosmopolitan in terms of previous residents of Baltimore.

Figure III - 18 shows the destinations of persons who lived in the core in 1880 and who had moved among the zones as percents of the total number of moves originating in the core. The same information for the northwest is shown in Figure III - 19. While the

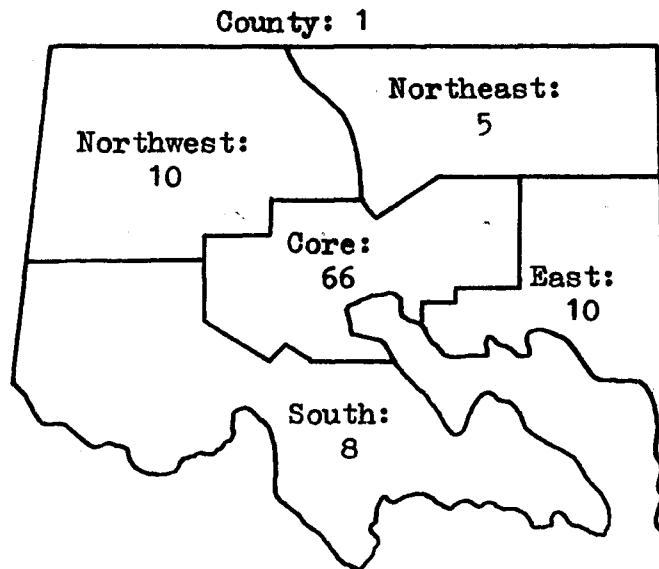


Figure III-16. Sources of Persons by Zone Who Moved Into or Within the Core between 1880 and 1885, as percent of all persons who moved into or within the core between 1880 and 1885 in the sample.

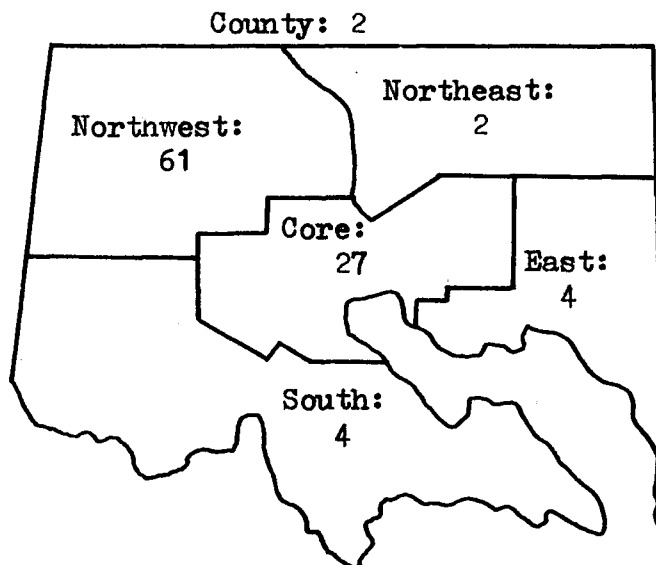


Figure III-17. Sources of Persons by Zone Who Moved Into or Within the Northwest between 1880 and 1885, as percent of all persons who moved into or within the northwest between 1880 and 1885 in the sample.

Source for Figures III-16 and 17: Figure III-10 and Table III-2.

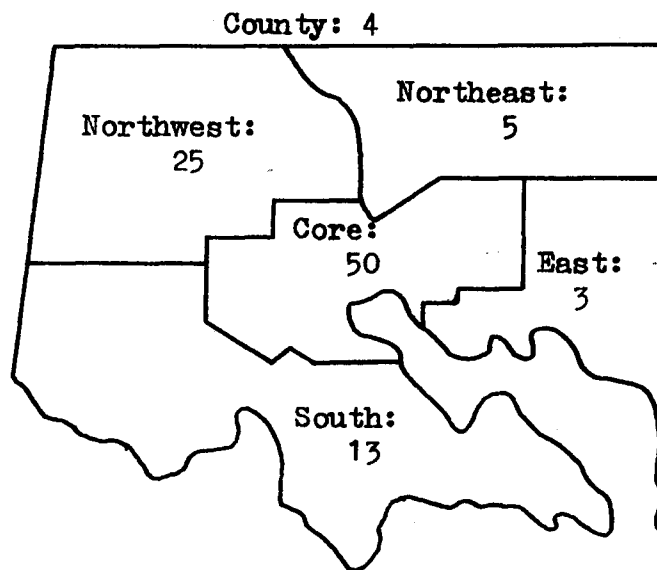


Figure III-18. Destination by Zone of Persons in Sample Who Lived in the Core in 1880 and Who Had Moved Within the Core or Into Another Zone by 1885, as percent of the total number of such moves.

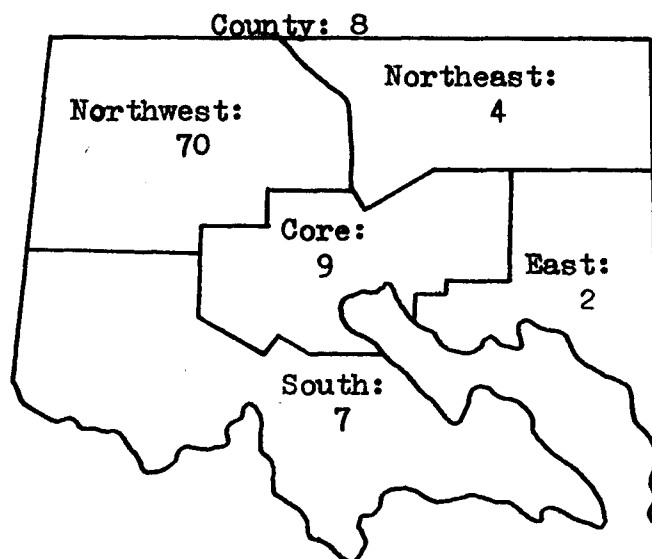


Figure III-19. Destination by Zone of Persons in Sample Who Lived in the Northwest in 1880 and Who Had Moved Within the Northwest or Into Another Zone by 1885, as percent of the total number of such moves.

Source for Figures III-18 and 19: Figure III-10 and Table III-2.



core retained only half of its residents who moved, the northwest retained seven out of ten of its migrants. Most of those who left the core for other zones settled in the northwest. More than any other single zone, it was the northwest that was responsible for the deconcentration of persons who had been residents of the core at least five years. The relative abundance of street railway service between the core and the northwest, together with the latter's relative absence of heavy industry, apparently stimulated many residents of the core to move into the northwest. The next chapter, in which mobility is examined in terms of occupation supports this hypothesis.

The above evidence suggests several broad themes to describe the location of Baltimoreans between 1850 and 1890. During the first two decades of this period, the ring was growing a little faster than the core, although some areas within the core exhibited rates of growth higher than some of those in the ring. However, between 1870 and 1890, commercial and industrial expansion were exerting greater constraints upon residential growth in the core. The introduction of more efficient transportation in the form of the street railways coincided with the increasing nonresidential use of land within and immediately surrounding the central business district. These tangible factors, combined with the desire for larger lots, new dwellings, and other attributes of the rural ideal, resulted in the decentralization and deconcentration of the city.

The mobility of the population in response to these pressures and opportunities was rather complex. Persons who moved from one part of the metropolitan area to another did not always engage in a deconcentration or decentralizing move. At a time when the city was growing more quickly in the ring than in the core, there were some persons from all sections moving into the core. Nevertheless, the greater rate of movement into the ring resulted in decentralization and deconcentration. The mode of urban growth had been revolutionized.

#### Chapter IV. The Origins of the Segregated City

"Baltimore has come of age and enters into the possession of her inheritance."

J. Thomas Scharf, Oration on the 150th Anniversary of the Settlement of Baltimore, 1880.<sup>1</sup>

The true impact of decentralization upon the growth of Baltimore City was largely due to the precise form in which it occurred. Had the population that departed the core settled the ring in an indiscriminate, random, uniform fashion, then the significance of deconcentration would have been mitigated. Had the newcomers from neighboring cities, the countryside, and overseas settled within the city in an equally random fashion, then the overall character of existing intergroup relations may have remained unchanged. But deconcentration and decentralization were not random. A variety of factors, the most compelling of which were economic, affected the mobility of the population. Most persons apparently had clearly defined reasons, either by choice or by pressure, to settle within particular neighborhoods. The unequal distribution of income, transportation, housing, and employment opportunities resulted in an increasingly socioeconomically segregated metropolis. Nonuniform decentralization transformed a city of generally heterogeneous neighborhoods into one of increasingly distinctive neighborhoods. As American cities elsewhere, Baltimore grew after 1870 into what Warner succinctly calls "The Segregated City."<sup>2</sup>

<sup>1</sup>Spencer, Memorial Volume, p. 105.

<sup>2</sup>Sam Bass Warner, Jr., The Urban Wilderness: A History of the American City (New York: Harper and Row, Inc., 1972). pp. 85-112.

Decentralization led to segregation because of varying needs to maintain the proximity of residence with place of employment. Although the street railway lines made it possible for persons in occupations that were stable and relatively remunerative to commute daily, most persons remained unable to commute great distances until the electrification of intracity transport in the 1890's. Most workingmen were forced to live either in outlying industrial districts of the city or in the core, which was central to many employment opportunities.<sup>3</sup>

The pattern of residential mobility for each occupation therefore increasingly reflected the location of industry after 1870. Because the censuses published from 1870 to 1890 did not include the distribution of occupations by ward, it was necessary to gather such information from the City Directory of 1880. Of the 1,395 persons in the 1.5 percent sample of the white heads of households, the author was able to identify 1,349 by occupation and residence. These occupations were then classified as follows: Category A, professionals and businessmen; Category B, white collar employees and government personnel; Category C, skilled craftsmen and small-scaled proprietors; and Category D, semi-skilled and unskilled persons. Table IV - 1 shows the specific occupations as well as the distribution of each category throughout the zones and the County.

<sup>3</sup>The tendency of street railways to promote class segregation is described in Sam Bass Warner, Jr., Streetcar Suburbs, pp. 46-66.

Table IV - 1. Distribution of Residents by Occupation, 1880.

	All						
	<u>Zones</u>	<u>Core</u>	<u>East</u>	<u>Northeast</u>	<u>Northwest</u>	<u>South</u>	<u>County</u>
<u>Category A</u>	189	69	10	5	91	3	11
Attorneys							
Doctors							
Druggists							
Merchants							
Misc. Proprietors and Manufacturers							
<u>Category B</u>	303	112	18	32	113	17	11
Agents							
Clerks							
Policemen							
Firemen							
Salesmen							
<u>Category C</u>	483	178	67	61	93	64	20
Bakers							
Butchers							
Grocers							
Cabinet Makers							
Carpenters							
Misc. Craftsmen							
Shoemakers							
Smiths							
Tailors							
Tavern Owners							
Tobacconists							
<u>Category D</u>	374	100	81	48	62	57	26
Drivers							
Laborers							
Mariners							
Metal Workers							
Misc. Construction Workers							
Painters							
Stoneworkers							
<u>All Persons in Sample</u>	1,349	459	176	146	359	141	68

Source: The sample of white heads of households listed in the City Directory of 1880, arranged according to zones defined in Figure III - 10.

For each occupational category, an index of residency for each zone was found by dividing the occupational percent of each zone by the occupational percent of the city and multiplying this quotient by 100. These indices, therefore, reflect the representation of a given occupational category in each zone compared to its representation throughout the city as a whole. An index below 100 indicates that the group was underrepresented within a given zone; an index greater than 100 indicates that the group was overrepresented within the zone.

Figures IV - 1 through IV - 5 illustrate the distribution of white heads of households by occupation throughout the city in 1880, as suggested by the sample and the indices discussed above. They clearly show the concentration of persons in categories A and B, the white-collar occupations, within the northwestern section, a zone which experienced the highest rate of residential construction between 1870 and 1890 (Figure III - 8). Persons engaged in occupations in categories C and D, on the other hand, tended to concentrate within the southern, eastern, and northeastern zones, which contained the outer focal points at which industry was being developed. Figure IV - 5, which illustrates the residency of the persons sampled for categories A and B combined, shows even more clearly the concentration of professional and semi-professional personnel within the northwestern zone.

The relative exclusiveness of the residential northwest was reinforced by intra-urban migration during the following years.

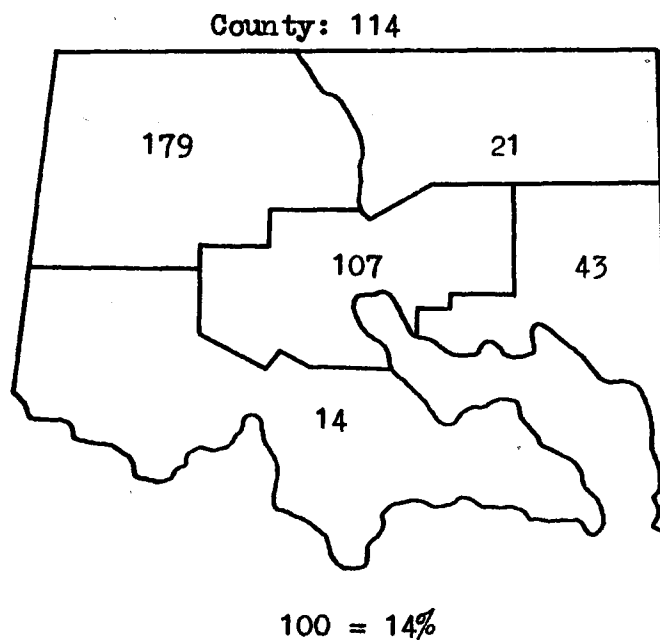


Figure IV-1. Distribution of Category A Occupations (professionals and businessmen) in 1880, by Index.

Source: Table IV-1.

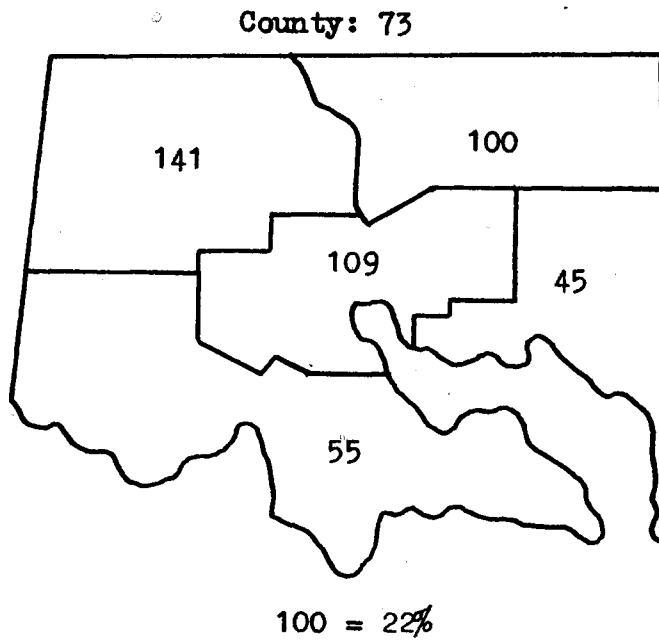
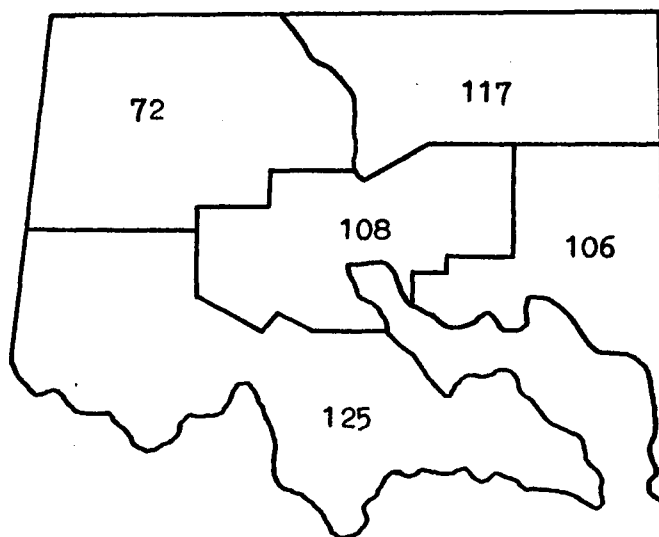


Figure IV-2. Distribution of Category B Occupations (white collar employees and government personnel) in 1880, by Index.

Source: Table IV-1.



County: 81



100 = 36%

Figure IV-3. Distribution of Category C Occupations (skilled craftsmen and minor proprietors) in 1880, by Index.

Source: Table IV-1.

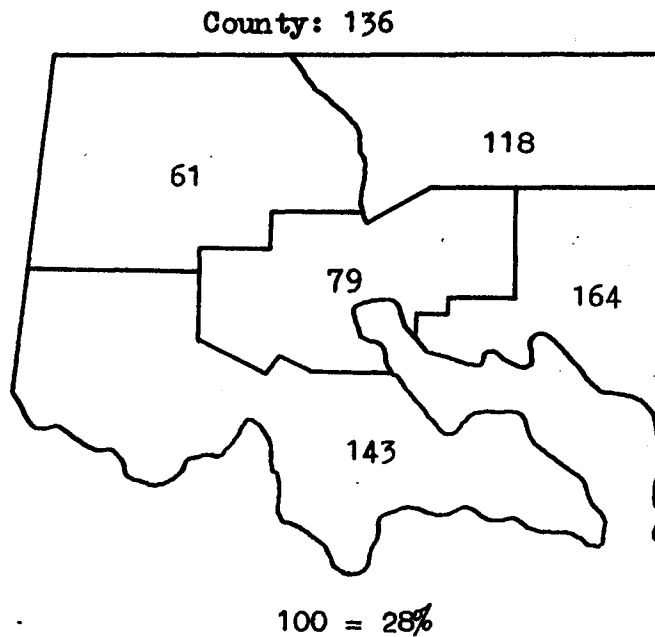


Figure IV-4. Distribution of Category D Occupations (semi-skilled and unskilled occupations) in 1880, by Index.

Source: Table IV-1.

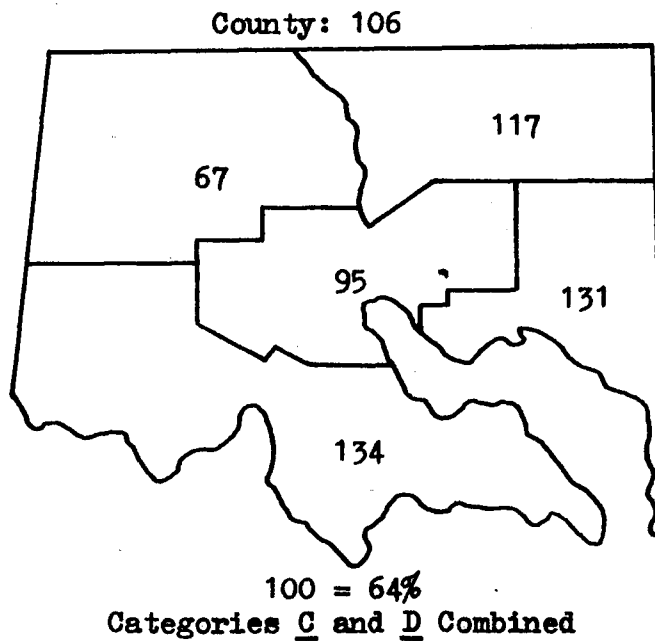
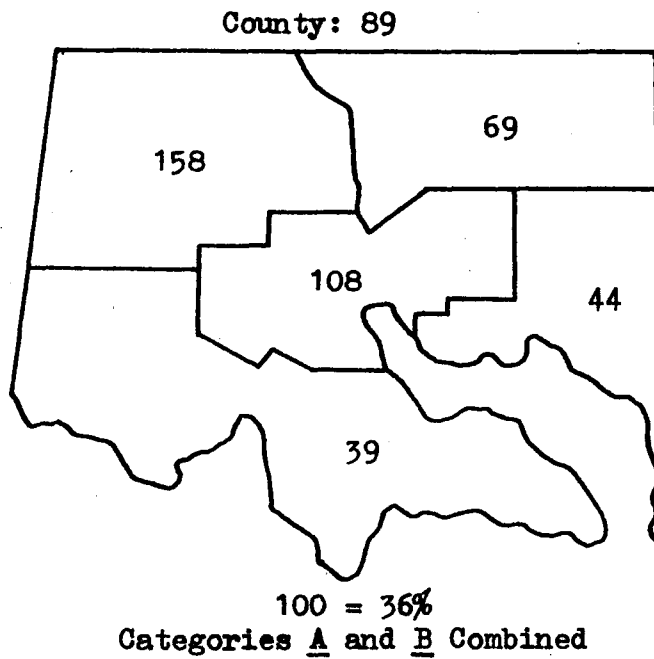


Figure IV-5. Distribution of Occupations, Categories A and B Combined and Categories C and D Combined, in 1880, by Index.

Source: Table IV-1.

400 of the 1,349 persons in the 1880 sample had moved to other locations in the metropolitan area by 1885. 172 of these moves were across zone boundaries. As shown in Table IV - 2, only 24 percent of all moves by whites in categories C and D were within or into the northwest; however, 50 percent of all moves by whites in categories A and B were within or into the northwest. Excluding from these proportions moves within the northwest leaves 25 percent of all moves across zone boundaries by whites in categories C and D into the northwest, as opposed to 38 percent for those in categories A and B.

Table IV - 2. Mobility and the Northwest, 1880 - 5

	Number of Intraurban Moves 1880 - 5 <u>1880 - 5</u>	Moves within or into Northwest as Percent of Intraurban Moves
Categories A, B	165	50
Categories C, D	225	24
	Intraurban Moves across Zone Boundaries <u>1880 - 5</u>	Intraurban Moves into North- west as Percent of Moves <u>across Zone Boundaries</u>
Categories A, B	68	38
Categories C, D	104	25

Source: Sample of 1,349 whites in Baltimore City Directory, 1880.

\*"Intraurban" denotes the metropolitan area, which includes Directory addresses listed as "Baltimore County."

The relocation of their churches provided further evidence of the tendency of upper-income whites to move into the northwest. The exodus of "genteel society" from the core into the ring deprived many of the more exclusive congregational churches in the downtown area of an adequate number of pew-holders. Faced with diminishing congregations and lingering debts, many of these churches followed their congregations and relocated, mostly in the northwest. Indeed, the fact that this process began in 1858 and was largely concluded by the mid-1870's suggests that upper-income whites were the vanguard in the deconcentration whose net impact was not visible until after 1870.<sup>4</sup>

"The brightness of Baltimore is especially a characteristic of the northwestern section, ... built for the most part since 1865," wrote the author of a guidebook in 1876.<sup>5</sup> In contrast to the crowded, busy core, this zone represented a compromise between the pleasure of residing in the outer suburbs and the convenience of urban life. Of all the inner suburbs, the northwestern quadrant was finest monument to the improved technology that had created the street railways.

<sup>4</sup>Michael S. Franch, "The Congregational Community in the Changing City, 1840-70," Maryland Historical Magazine, Volume 71, Number 3 (Fall 1976), pp. 367-80.

<sup>5</sup>The Stranger's Guide to Baltimore and Its Environs (Baltimore: John Murphy and Company, 1876), p. 6.

While the northwest was gradually becoming the reserve of whites in white-collar occupations, the core was acquiring a far different character. The heart of expanding business activity, its center was rapidly losing its population, as demonstrated in the previous chapter. The decline, however, was not evenly distributed among the occupations. As shown in Table IV - 3, it was losing its white-collar residents much faster than its workingclass whites.

Table IV - 3. Intraurban\* Mobility of the Core as Percent of Its Residents in 1880

	<u>Residents in 1880</u>	<u>Moved within Core by 1885</u>	<u>Moved into Other Zones by 1885</u>	<u>Moves into Core by 1885</u>	<u>Net Change 1880-5</u>
Job Categories A and B	181	15%	19%	5%	-14%
Job Categories C and D	278	16%	13%	10%	- 3%

Source: Sample of 1,349 whites in Baltimore City Directory, 1880

\*"Intraurban" denotes the metropolitan area, which includes Directory addresses listed as "Baltimore County."

The changing location of the clothing industry, which in 1880 employed one-fifth of the total industrial work force, provides a dramatic explanation for the increasing concentration of semi-skilled and unskilled workers in the east and northeast. With over half of its employees consisting of women whose low wages required walking, rather than commuting to work, the clothing establishments,

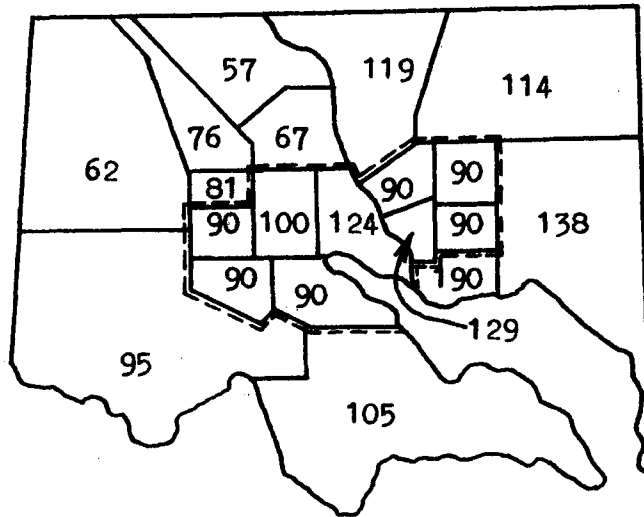
induced the growth of industrial neighborhoods in their vicinities. As the industry spread northeast and southeast from the central business district, the parallel growth of such neighborhoods became inevitable.<sup>6</sup> Indeed, so alarming was the spread of these establishments, which often were nothing more than sweatshops, and of the impoverished working class neighborhoods that followed them, that a government official in 1901 called for steps to be taken to confine them to existing business localities. "Wherever this class of people settle," he wrote in a sentiment not unfamiliar to later generations, "property is apt to deteriorate."<sup>7</sup>

Such tendencies of certain occupational groups to cluster around industrial nuclei may provide some insight into the locational patterns of the foreign-born after 1870. As noted earlier, this group was concentrated in labor and manufacturing occupations, especially as bakers, boot and shoemakers, cabinet makers, upholsterers, and coopers. If there was a correlation between residence and place of employment for such occupations after 1870, one would expect to find an increasing concentration of the foreign-born in places that were industrializing.

An increasing concentration did occur after 1870. Figure IV - 6, which illustrates the distribution of foreign-born residents

<sup>6</sup>Edward K. Muller and Paul A. Groves, "The Changing Location of the Clothing Industry; A Link to the Social Geography of Baltimore in the Nineteenth Century," Maryland Historical Magazine,

<sup>7</sup>Maryland Bureau of Industrial Statistics and Information, Annual Report, 1901, p. 148



100 = 21%

Figure IV-6. Distribution of the Foreign-born in 1870, by ward and index. The core is enclosed by broken lines.

Source: U.S. Census Office, Ninth Census, 1870, I, p. 163.



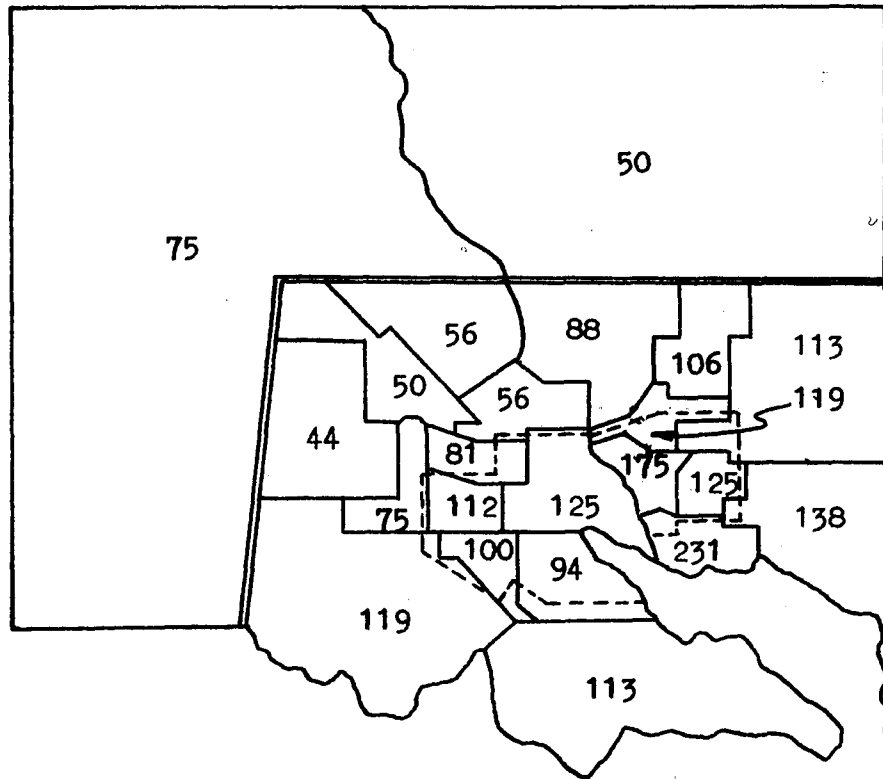
residents by indices computed as for occupations earlier in the chapter, shows that there was a slight concentration of this group on both sides of the lower Jones Falls. During the ensuing decades (Figures IV - 7, 8, and 9), the concentration of the foreign-born at these places increased, places that were heavily industrialized. In contrast, the predominantly residential northwestern zone housed in 1910 a proportion of foreign-born that was less than half the proportion of all foreign-born in the city as a whole.

Concentrating in one industrial area of the city, the foreign-born became more segregated within the metropolis each decade. In 1870, only 10 percent of all foreign-born lived in wards in which their proportion was greater than one and one-half times their proportion in the city as a whole; this percentage had increased to 16 percent by 1890, and to 27 percent by 1900.<sup>8</sup>

The patterns of growth after 1870 similarly intensified the concentration of blacks within certain areas. Foremost among these was an area astride the boundary between the core and the northwest, as shown in Figures IV - 10 through 13. By 1900, 30 percent of the blacks lived in only three of the city's twenty-four wards. In one of these, the Fourteenth, 52 percent of the residents were black, while only 16 percent of the entire city was black.<sup>9</sup>

<sup>8</sup>U.S. Census Office, Ninth Census, 1870; Eleventh Census, 1890; I, p. 533-4; Twelfth Census, 1900; I, pp. 657-8.

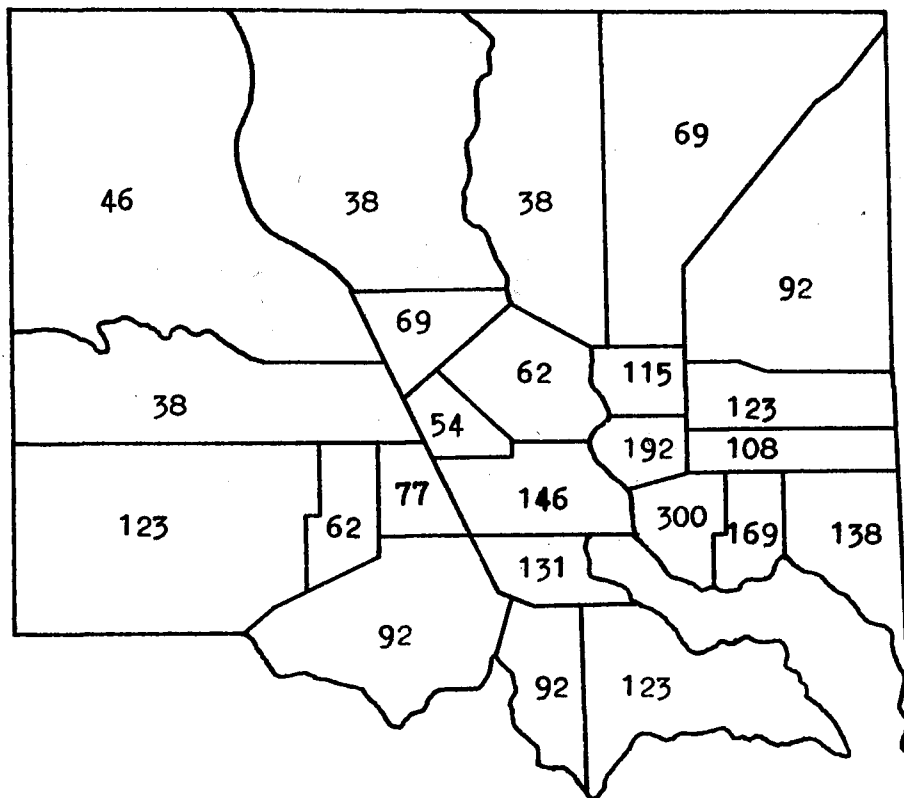
<sup>9</sup>U.S. Census Office, Twelfth Census, 1900; I, pp. 657-8.



100 = 16%

Figure IV-7. Distribution of the Foreign-born in 1890, by ward and index. The core is enclosed by broken lines; the ring, by double lines.

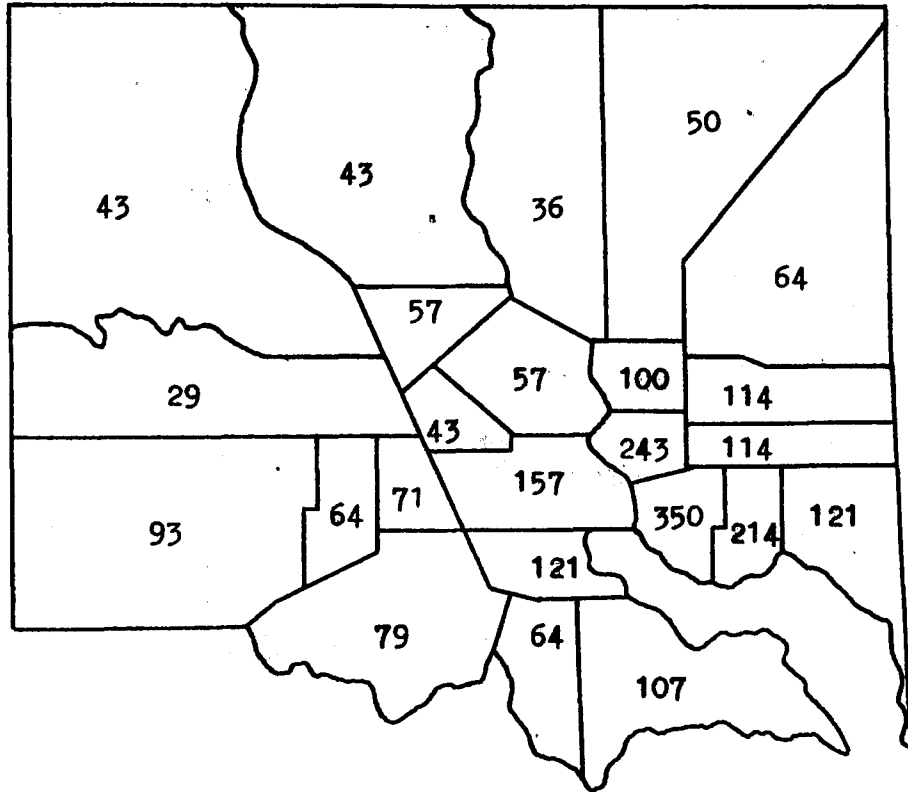
Source: U.S. Census Office, Eleventh Census, 1890, I, pp. 533-4.



100 = 13%

Figure IV-8. Distribution of the Foreign-born in 1900, by ward and index.

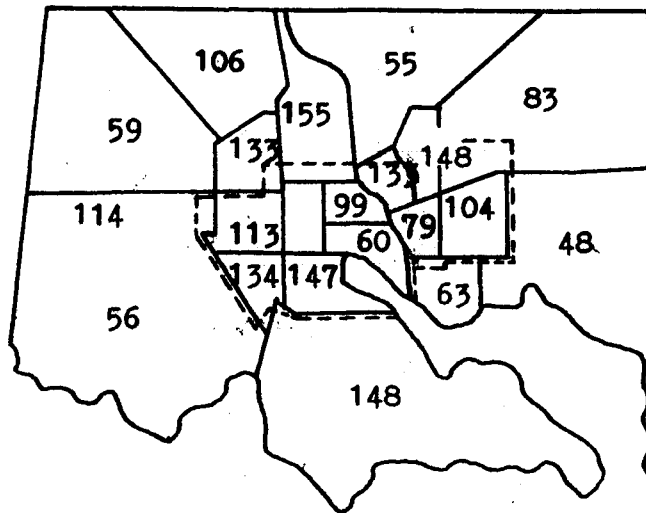
Source: U.S. Census Office, Twelfth Census, 1900, I, pp. 657-8.



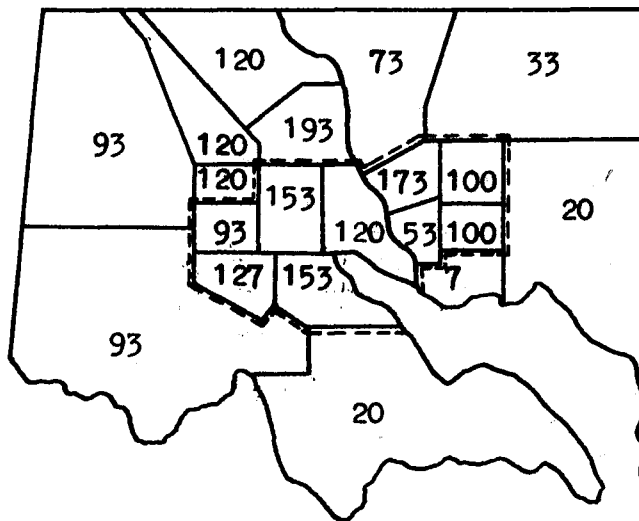
100 = 14%

Figure IV-9. Distribution of the Foreign-born in 1910, by ward and index.

Source: U.S. Census Office, Thirteenth Census, 1910, II, p. 850.



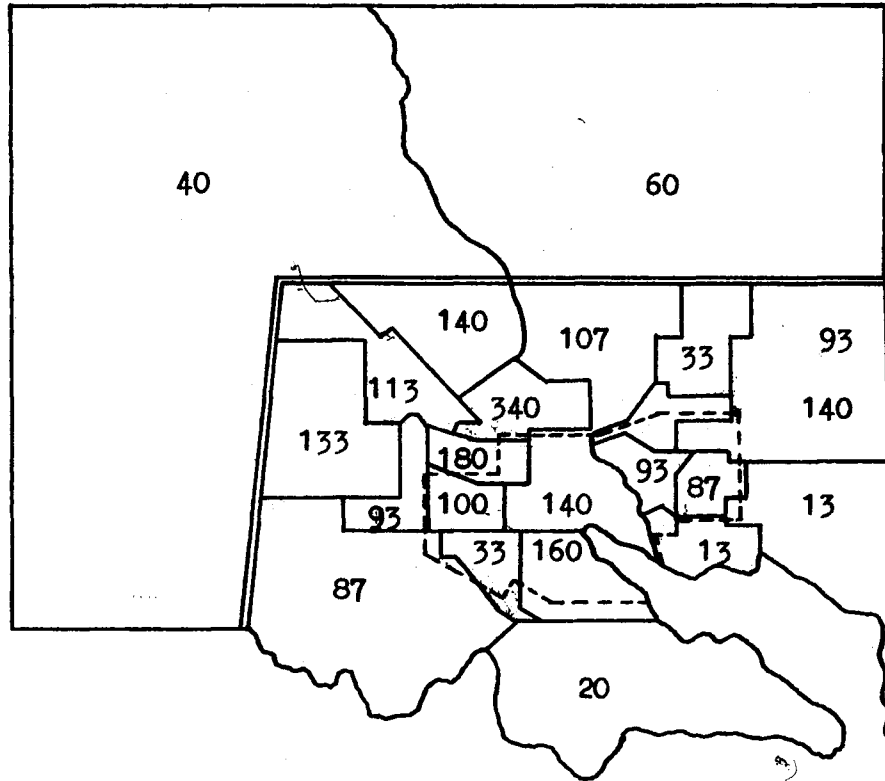
1850  
100 = 17%



1870  
100 = 15%

Figure IV-10. Distribution of Blacks in 1850 and 1870, by ward and index. The core is enclosed by broken lines.

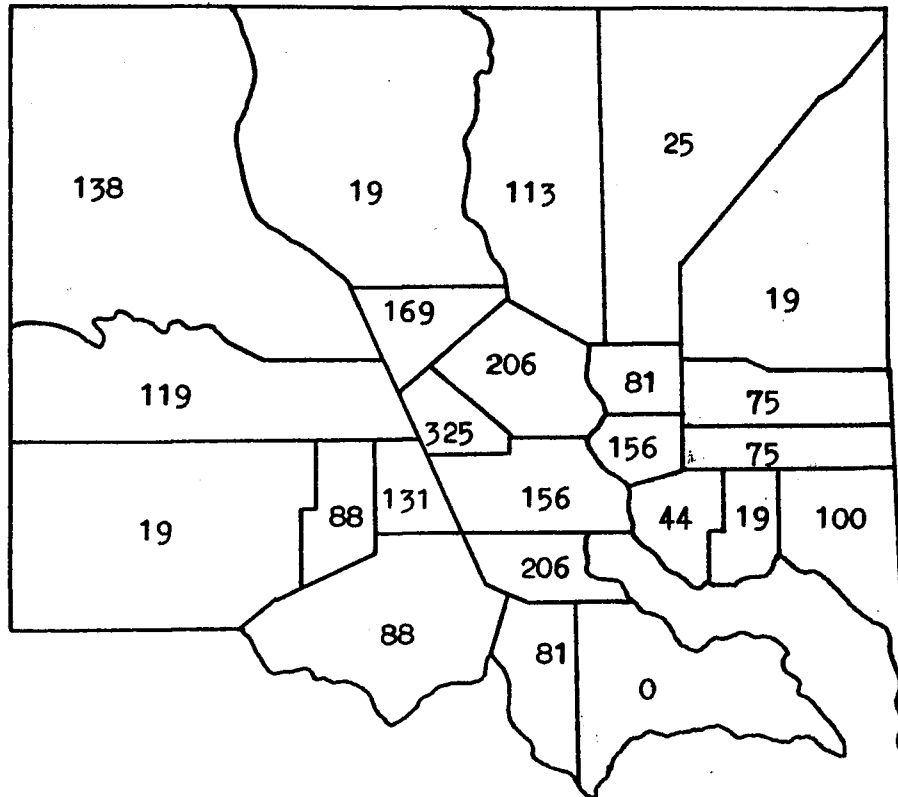
Source: U.S. Census Office, Seventh Census, 1850, p. 221; Ninth Census, 1870, I, p. 163.



100 = 15%

Figure IV-11. Distribution of Blacks in 1890, by ward and index. The core is enclosed by broken lines; the ring, by double lines.

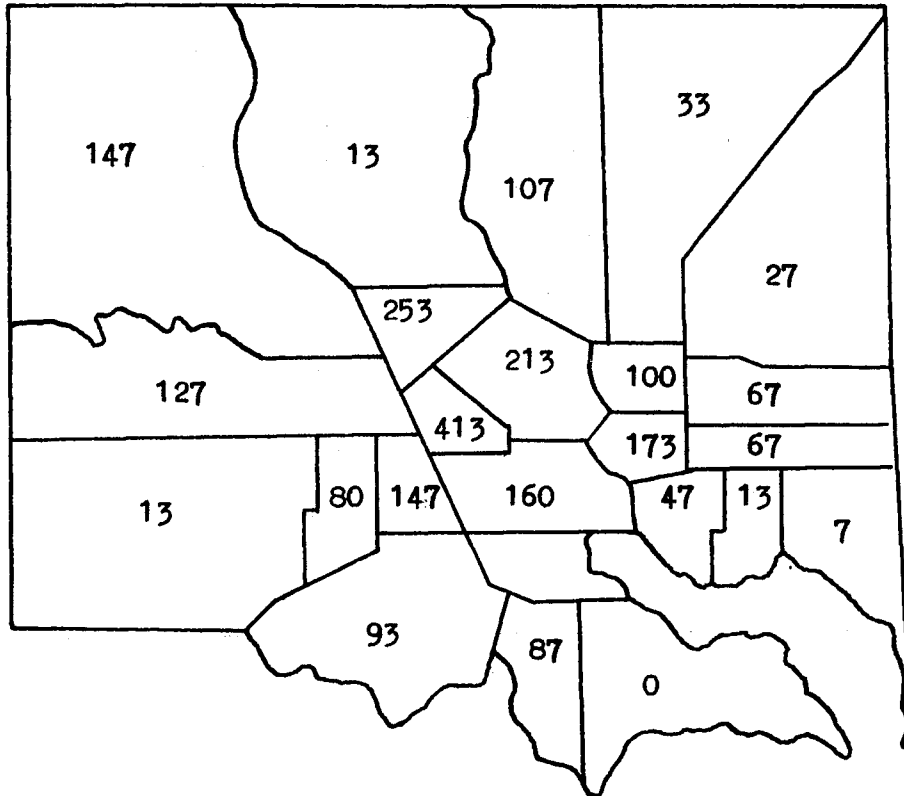
Source: U.S. Census Office, Eleventh Census, 1890, I, pp. 533-4.



100 = 16%

Figure IV-12. Distribution of Blacks in 1900, by ward and index.

Source: U.S. Census Office, Twelfth Census, 1900, I, pp. 657-8.



100 = 15%

Figure IV-13. Distribution of Blacks in 1910, by ward and index.

Source: U.S. Census Office, Thirteenth Census, 1910, II, p. 850.



The segregation of the blacks occurred much more quickly than that of the foreign-born. In 1850, only 8 percent of the city's blacks lived in wards in which their proportion was greater than one and one-half times their proportion in the city as a whole. This proportion had increased to 51 percent by 1900. The first ward which housed a population more than half of which was black was the Eleventh Ward in 1890; within thirty years, more than 71 percent of the population in the same general area was black.<sup>10</sup>

The processes of decentralization and deconcentration combined thus introduced a heterogeneity into the formerly homogeneous distribution of the population across the city. White-collar workers and others who were able to commute on the street railways tended to move away from industrializing areas. The northwest, in particular, gradually became a white-collar residential haven within the confines of the city. Working-class persons, on the other hand, tended to inhabit neighborhoods in the vicinity of industries because of the need for maintaining a close proximity to the place of employment. Moreover, since there was an unequal distribution of blacks and foreign-born across the occupational spectrum, the redistribution of the population on the basis of occupation and wealth also contributed to the concentration of certain ethnic groups at various places. Decentralization and deconcentration resulted in more than merely growth of industrial and residential neighborhoods: They set into motion the changes that culminated in segregated metropolis.

<sup>10</sup>U.S. Census Office, Seventh Census, 1850, p. 221; Eleventh Census, 1890, I, pp. 533-4; Twelfth Census, 1900, I, pp. 657-8; Fourteenth Census, 1920, III, pp. 27-8.

## Chapter V. Conclusion

"As social conditions become more equal, the number of persons increases who, although they are neither rich nor powerful enough to exercise any great influence over their fellows, have nevertheless acquired or retained sufficient education and fortune to satisfy their own wants. They owe nothing to any man; they acquire the habit of always considering themselves as standing alone; and they are apt to imagine that their whole destiny is in their own hands.

"Thus, not only does democracy make every man forget his ancestors, but it hides his descendants and separates his contemporaries from him; it throws him back forever upon himself alone, and threatens in the end to confine him entirely within the solitude of his own heart."

Alexis de Tocqueville, 1840.<sup>1</sup>

The redistribution of Baltimore's population during the second half of the nineteenth century was far from unique. Every large American city deconcentrated during the century.<sup>2</sup> The causes of both deconcentration and decentralization, together with the differentiating consequences, were likewise universal. The segregation of the city was not a regional phenomenon: Wherever the industrialization and improvements in transportation occurred within the setting of an unequal distribution of wealth, the segregated city was the consequence.<sup>3</sup>

<sup>1</sup> Democracy in America, edited by Richard D. Heffner (New York: The New American Library, 1956), p. 194.

<sup>2</sup> Jackson, "Urban Deconcentration."

<sup>3</sup> Warner, The Urban Wilderness, pp. 85-112.

The present study suggests that several factors were responsible for the decline in residential density in the core and for the greater growth of the ring. The expansion of the central business district directly reduced the quantity of housing available in the core. This phenomenon is central to David Ward's thesis that explains the rise of central immigrant ghettos in large cities. Requiring cheap housing, which was made available by subdividing the old stock, and residences close to employment opportunities, immigrants occupied neighborhoods within and surrounding the core.<sup>4</sup> Although Baltimore's proportion of foreign-born residents was exceptionally low, this tendency was noted in the concentration of foreign-born at Fells Points at the southwestern portion of the eastern zone. Since blacks were even more concentrated at the unskilled end of the occupational spectrum, a similar residential concentration resulted in one portion of the core.

The growth of industry at non-central areas within the city also contributed to and directed decentralization. For Baltimore specifically, such growth along Jones Falls, the extensive waterfront, and the vicinity of the Mount Clare railroad yards exerted a strong attraction for persons engaged in manual occupations. This linkage was exhibited in the over-representation of such persons in the housing surrounding these industrial focal points. Similar

<sup>4</sup>David Ward, "The Emergence of Central Immigrant Ghettos in American Cities, 1840-1920," in Jackson and Schultz, Cities in American History, pp. 164-176.

experiences were shared by other metropolises, usually reflected in the classic sector-ring model epitomized by Chicago.<sup>5</sup>

The pursuit of the rural ideal was also a universal undertaking for those who could afford new suburban housing and the resulting cost of daily commuting. The relatively sudden growth by which mills, iron works, canneries, clothing sweatshops, and the like filled the inner city rarely failed to persuade the middle class to seek some arcadian bliss away from the core. To escape from congestion, smoke, noise, and crime - and yet to remain a part of the urban world - became the goal of many. The development of street railways fortuitously blended with the industrialization of American cities. The fact that the mobility was beyond the means of most workingmen for many years contributed to the segregation of the city.<sup>6</sup>

By the 1880's, Baltimore was therefore well on the way toward becoming a city segregated in terms of race, economic means, and land use. The former mix of residences and workshops, of black and white, of native and foreign-born, of rich and poor, of merchant and laborer,

<sup>5</sup>Warner, The Urban Wilderness, pp. 106-7. See also Gregory H. Singleton, "The Genesis of Suburbia: A Complex of Historical Trends," in Louis M. Masotti and Jeffrey K. Hadden, Editors, The Urbanization of the Suburbs (Beverly Hills, California: SAGE Publications, 1973), pp. 37-9.

<sup>6</sup>Joel Arthur Tarr, "From City to Suburb: The 'Moral' Influence of Transportation Technology," in Alexander B. Callow, Jr., Editor, American Urban History: An Interpretive Reader with Commentaries (New York: Oxford University Press, 1973), pp. 202-12. For a brief, though good, analysis of the rural ideal, see Warner, Streetcar Suburbs, pp. 5-14.

was gone from most neighborhoods. Decentralization and deconcentration resulted in a patchwork of distinctive zones. The new polarity was visible, not only in the variations of land use, ethnic, and economic characteristics, but also in the vital statistics of the separate zones.

The eastern zone combined its iron works, canneries, coal yards, and wharves with the homes of their laborers, mechanics, and longshoremen. Many were of foreign birth. An "open cesspool," the Jones Falls emptied its filth along the western extremity, in which tenements and smaller crowded and dilapidated homes were located. Some of the health districts of the eastern zone exhibited the highest mortality rates in the city.<sup>7</sup>

The northeastern zone still contained much vacant land, although it was rapidly being filled with the homes of the middle and laboring classes. Brickyards and pipe works were still located in its northern extremity, while clothing establishments were making their way into its southern territory. With a generally low residential density and a varying topography, it was among the healthiest zones in the city.<sup>8</sup>

The southern zone was dominated by workingmen who labored in the factories, canneries, warehouses, and other businesses that rose along the waterfront and around the railroad yards. Of the two

<sup>7</sup>John S. Billings, Vital Statistics of the District of Columbia and Baltimore (Washington: U.S. Census Office, 1890), pp. 56-7.

<sup>8</sup>Billings, pp. 60-3.

zones whose chief industrial neighborhoods served the waterfront industries, the southern exhibited a lower mortality rate than the eastern zone.<sup>9</sup>

The core still maintained a certain demographic heterogeneity, although the enlarged central business district and the new manufacturing establishments had transformed its overall appearance. That territory surrounding the basin, into which the factories and the streets emptied their filth, exhibited the worst mortality rates of the city.<sup>10</sup>

The northwestern zone, laced with streetcar tracks, was the largest strictly residential zone of the city before additional territory was annexed in 1888. Combining residences of middle and high income whites with those of some blacks in many alleys, it was exceptionally well served by the system of street railways. Although it was not as homogeneous and well-to-do as some of the outer suburbs, the northwestern zone had certainly earned a distinction for its fashionable, clean neighborhoods. Most of its health districts exhibited the lowest mortality rates of the city.<sup>11</sup>

Nationwide, the street railways that had built such neighborhoods had been hailed as the "improvement of the age." They would promote democracy, because they would transport rich and poor, native

<sup>9</sup>Billings, pp. 73-5.

<sup>10</sup>Billings, pp. 58-9, 65-7, 72.

<sup>11</sup>Billings, pp. 68-9, 75-6.

and immigrant, elbow to elbow in friendly, enlightening journeys through the streets. They would uplift the poor; for they would make it possible for everyone to remove himself at the end of the day's work to the suburbs of fresh air and waning sunshine and clean cottages. While one might labor with thousands in the teeming industrial districts during the day, he could still live apart in his own home with his family in fine, new residential neighborhoods.<sup>12</sup>

It was the tragedy of the American city at the turn of the century that society permitted such dreams to be fulfilled only by those who could afford them. Urban America might well continue to offer a standard of living better than that offered in the Maryland, Virginia, or European countryside; but that standard was realized unequally by native and foreign-born, white and black. The street-cars and their successors might well continue to promise a healthy, peaceful escape from the growing ills of the central business district; but that promise was made only to those who could afford to commute daily. Democracy might well continue to evolve; but the constraints and opportunities that would govern such evolution were no longer those provided by the mixed, cosmopolitan, everyman's neighborhood of the past. Urban growth had produced a dynamic

<sup>12</sup>Glen E. Holt, "The Changing Perception of Urban Pathology: An Essay on the Development of Mass Transportation in the United States," in Jackson and Schultz, Cities in American History, pp. 324-43 and Tarr, "From City to Suburb," pp. 202-12.

setting that mechanically sorted the population into different neighborhoods, different environments, with different chances for life itself. The "other half" had assumed geographic, as well as socioeconomic, connotations.

As the divided cities faced the turn of the century, reformers sought ways in which to ameliorate the environment of the other half. Progressives experimented with a variety of measures: the expansion of the park system; the institution of public baths; a greater public support for charities; legislation regulating child labor, working hours, and working conditions. Such measures invariably proved to be superficial; none succeeded in extending the advantages of the improved urban life to all urban residents.<sup>13</sup> Considering the forces that led to decentralization and segregation, a modern observer might well conclude that such measures would never exert a significant impact upon the segregated city.

Created by industrialization, unleashed by mass transportation, and molded by the unequal distribution of wealth, the sprawling, segregated industrial metropolis is the product of technological and economic conditions which are fundamental to the American way of life. The metropolis perfectly reflects the organization of labor, the state of transportation technology, and the distribution of wealth. Reform that leaves such variables untouched is futile. City planning that deals only with the architecture of dwellings and public buildings, municipal programs that seek to introduce better lighting

<sup>13</sup>James B. Crooks, Politics and Progress: The Rise of Urban Progressivism in Baltimore, 1895 to 1911 (Baton Rouge: Louisiana State University Press, 1968).



and more parks, federal spending that hopes to provide public housing - such efforts merely palliate urban ills. In contrast, a greater commitment to the education of the poor, which would alter the organization of labor and the distribution of wealth, might contribute to the desegregation of the city. Until such fundamental changes are made, the geography of the metropolis shall continue to defy superficial reform.

## BIBLIOGRAPHY

### Articles and Books

- Bernard, Richard M., "A Portrait of Baltimore in 1800" Maryland Historical Magazine, vol. 69, no. 4 (Winter 1974), pp. 341-60.
- Bromley, G. W., Atlas of the City of Baltimore. Baltimore: 1896.
- Bruchey, Eleanor S., "The Development of Baltimore Business, 1880-1914" Maryland Historical Magazine, vol. 64, (1969).
- Chudacoff, Howard P., The Evolution of American Urban Society. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971.
- Crooks, James B., Politics and Progress: The Rise of Urban Progressivism in Baltimore, 1895 to 1911. Baton Rouge: Louisiana State University Press, 1968.
- Della, M. Ray, Jr., "An Analysis of Baltimore's Population in the 1850's." Maryland Historical Magazine, vol. 68 (1973).
- Farrell, Michael R., Who Made All Our Streetcars Go? The Story of Rail Transit in Baltimore. Baltimore: Baltimore NRHS Publications, 1973.
- Franck, Michael S., "The Congregational Community in the Changing City, 1840 - 70" Maryland Historical Magazine, vol. 71, no. 3 (Fall 1976, pp. 367-80.
- Garonzik, Joseph, "The Racial and Ethnic Makeup of Baltimore Neighborhoods, 1850 - 70" Maryland Historical Magazine, vol. 71, no. 3 (Fall 1976)
- Hirschfeld, Charles, Baltimore, 1870 - 1900: Studies in Social History. Baltimore: The Johns Hopkins University Studies in Historical and Political Science Series LIX, no. 2 (1941)
- Holt, Glen E., "The Changing Perception of Urban Pathology: An Essay on the Development of Mass Transportation in the United States" in Kenneth T. Jackson and Stanley K. Schultz (eds.), Cities in American History. New York: Alfred A. Knopf, Inc., 1972. pp. 324-43.
- Jackson, Kenneth T., "Metropolitan Government Versus Suburban Autonomy: Politics on the Crabgrass Frontier" in Kenneth T. Jackson and Stanley K. Schultz (eds.) Cities in American History. New York: Alfred A. Knopf, Inc., 1972. pp. 442-62.

- Jackson, Kenneth T., "Urban Deconcentration in the Nineteenth Century: A Statistical Inquiry" in Leo F. Schnore (ed.). The New Urban History. Princeton, New Jersey: Princeton University Press, 1972. pp. 110-42.
- Kasarda, John D., and Redfearn, George V., "Differential Patterns of City and Suburban Growth in the United States" Journal of Urban History, vol. 2, no. 1 (November 1975)
- Knights, Peter R., The Plain People of Boston, 1830 - 1860: A Study in City Growth. New York: Oxford University Press, 1971
- Matchett, R. J. Baltimore City Directory. Baltimore: 1850.
- McKelvey, Blake, The Urbanization of America, 1860 - 1915. New Brunswick, New Jersey: Rutgers University Press, 1963.
- Muller, Edward K., and Groves, Paul A., "The Changing Location of the Clothing Industry: A Link to the Social Geography of Baltimore in the Nineteenth Century" Maryland Historical Magazine, vol. 71, no. 3 (Fall 1976), pp. 403-20.
- Pred, Allan, "Manufacturing in the American Mercantile City, 1800 - 1840" in Kenneth T. Jackson and Stanley K. Schultz (eds.), Cities in American History. New York: Alfred A. Knopf, Inc. 1972, pp. 111-42.
- Riis, Jacob, How the Other Half Lives. New York: Hill and Wang, Inc., American Century Series, 1957. Originally published in 1890.
- Schnore, Leo F., "Municipal Annexations and the Growth of Metropolitan Suburbs, 1950 - 60" The American Journal of Sociology, vol. 67 (1962), pp. 406-17.
- Sharrer, G. Terry, "Flour Milling in the Growth of Baltimore, 1750 - 1830" Maryland Historical Magazine, vol. 71, no. 3 (Fall 1976), pp. 322-33.
- Singleton, Gregory H., "The Genesis of Suburbia: A Complex of Historical Trends" in Louis M. Masotti and Jeffrey K. Hadden (eds.), The Urbanization of the Suburbs, Beverly Hills, California: SAGE Publications, 1973.
- Spencer, Edward (ed.), Memorial Volume: An Account of the Municipal Celebration on the 150th Anniversary of the Settlement of Baltimore, Baltimore: King Brothers, 1881.

Tarr, Joel Arthur, "From City to Suburb: The 'Moral' Influence of Transportation Technology" in Alexander B. Callow, Jr., (ed), American Urban History: An Interpretive Reader with Commentaries New York: Oxford University Press, 1973, pp. 202-12.

Tisdale, Hope, "The Process of Urbanizations" Social Forces, vol. xx (March 1942).

Ward, David, Cities and Immigrants: A Geography of Change in Nineteenth Century America New York: Oxford University Press, 1971.

Ward, David, "The Emergence of Central Immigrant Ghettoes in American Cities, 1840 - 1920" in Kenneth T. Jackson and Stanley K. Schultz (eds.), Cities in American History. New York: Alfred A. Knopf, Inc., 1972, pp. 164-76.

Warner, Sam Bass, Jr., The Private City: Philadelphia in Three Periods Of Its Growth Philadelphia: University of Pennsylvania Press, 1968.

Warner, Sam Bass, Jr., Streetcar Suburbs: The Process of Growth in Boston, 1870 - 1900 New York: Atheneum, 1970.

Warner, Sam Bass, Jr. The Urban Wilderness: A History of the American City New York: Harper and Row, Inc., 1972.

Woods, J. W., Baltimore City Directory Baltimore: 1866, 1872, 1880, 1885, 1900.

(Anonymous) The Stranger's Guide to Baltimore and Its Environs Baltimore: John Murphy and Co., 1876.

(Anonymous) The Visitor's Guide to Baltimore Baltimore: 1878.

#### Government Publications

Maryland Bureau of Industrial Statistics and Information, Annual Report, 1901.

U. S. Census Office, Seventh Census (1850)

U. S. Census Office, Eighth Census (1860). Vols I, III.

U. S. Census Office, Ninth Census (1870). Vol. I.

U. S. Census Office, Tenth Census (1880). Vols. I, II.

U. S. Census Office, Eleventh Census (1890). Vol. I.  
and John S. Billings (comp.), Vital Statistics of the District of Columbia and Baltimore.

U. S. Census Office, Twelfth Census (1900). Vols. I, VIII.

U. S. Census Office, Thirteenth Census (1910). Col. II.

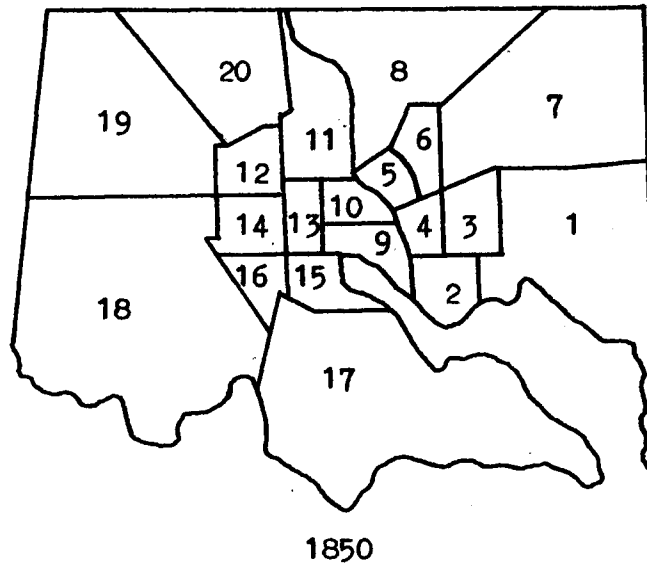
## Appendix

Rewarding as the study of a dynamic community might be, it also has its share of inconsolable agony. One would think that comparing census returns by ward over a mere forty-year period would be a simple task. Unfortunately, it turned out to be an undertaking that required much approximation. The city was not only changing its population and economy during the period in question; it was also changing its ward boundaries.

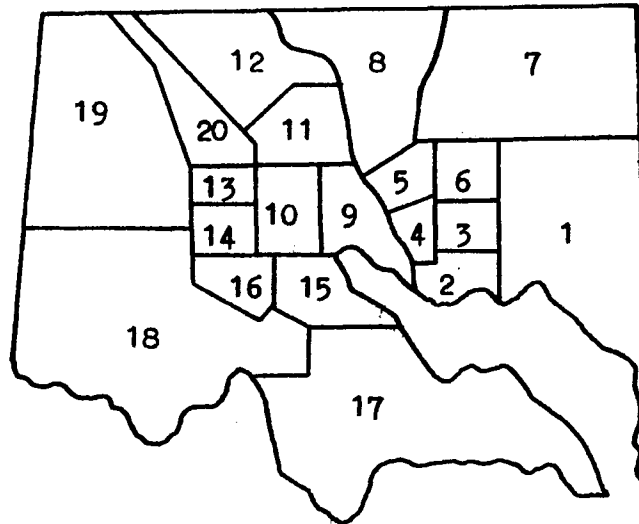
The accompanying figures may explain why it was necessary to reduce the city's twenty wards to eleven geographic units. Of the three decennial censuses used in this study, no two had the same ward designations. The United States Census of Population in 1850 reported population of wards that corresponded to the 1870 wards exactly in only one case (the Fifteenth). The ward boundaries in 1890 were even less cooperative; they seemed to meander through streets unnamed on available maps. One can sympathize with the census bureau's special expert for vital statistics, who prefaced his 1890 report with the terse complaint that the city had again changed several boundaries on the very eve of the publication of his findings.<sup>1</sup>

Comparing demographic measures throughout the period for individual wards would have required breaking up the 1850 and 1890 wards into pieces that could be distributed among the twenty 1870

<sup>1</sup>John S. Billings, Vital Statistics of the District of Columbia and Baltimore (1890), 54.



1850



1870 and 1880

Figure A-1. Baltimore City Wards in 1850, 1870, and 1880.

Source: R.J. Matchett, Baltimore City Directory, 1850; J.W. Woods, Baltimore City Directory, 1865, 1872, 1880 (The ward boundaries for these years were constant.).

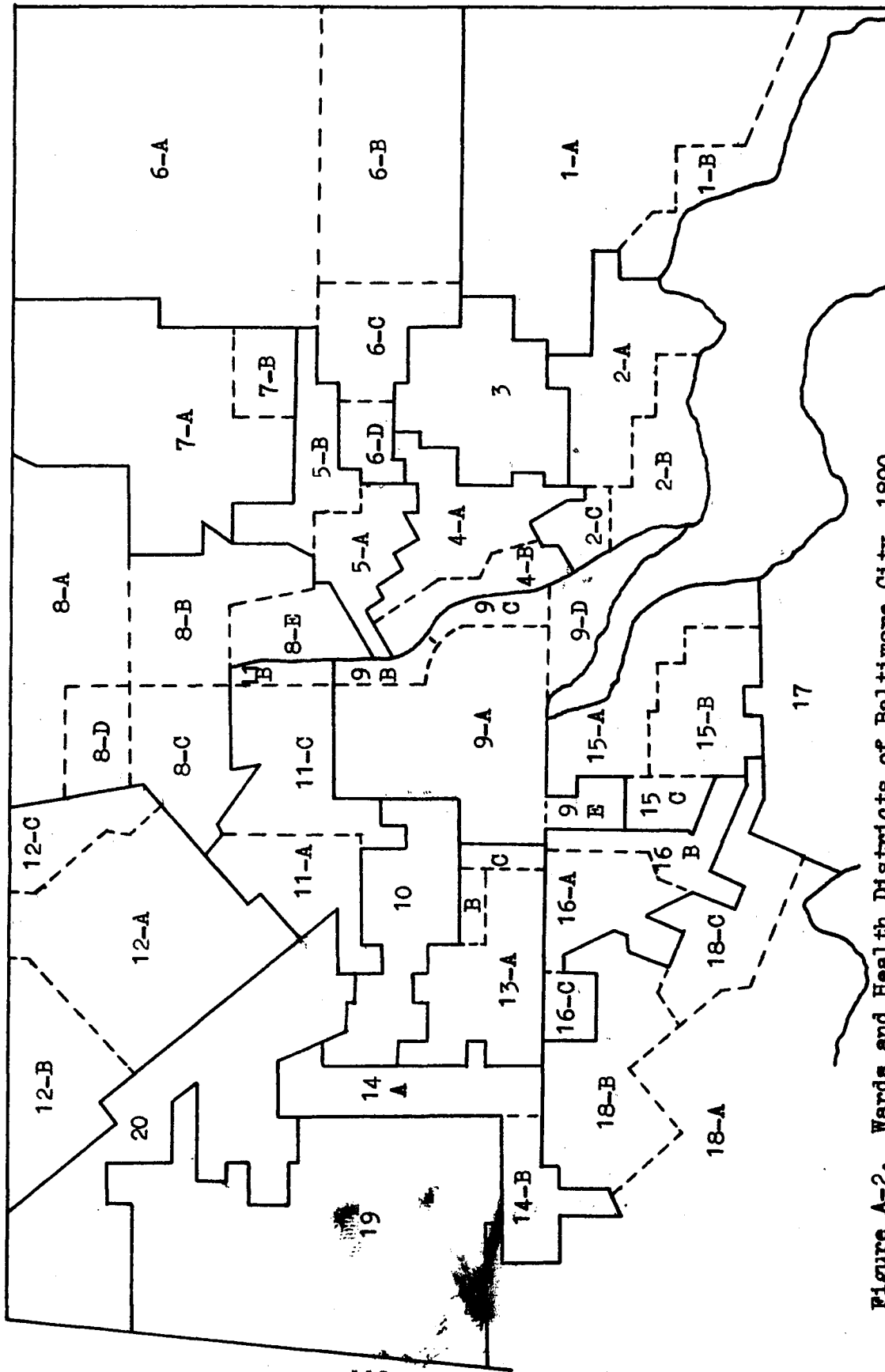


Figure A-2. Wards and Health Districts of Baltimore City, 1890  
 Source: John S. Billings, Vital Statistics of the District of Columbia and Baltimore  
 (Washington: U.S. Census Office, 1890).



wards. This procedure would have had the advantage of providing twenty discrete areas with which to compare and contrast growth and decline across the city. However, it would have presumed an accuracy that had no relation to reality. It would have required the unlikely assumption that the residential density throughout each ward was constant; or it would have required guesswork as to the variation of demographic density throughout the various wards. In either case, the reliability of data distributed among twenty wards would have been further reduced by the inaccuracy of census data to begin with.<sup>2</sup>

Insofar as the present study is an attempt to describe the growth of major regions throughout the city, rather than of individual neighborhoods, it is hoped that the distribution of the data among eleven areas provides a sufficiently discrete analysis. It is certainly more accurate. Errors accumulating from transferring so many blocks from an 1850 or 1890 ward to an 1870 ward, blocks that may or may not have been representative of their wards' populations, would have significantly reduced the reliability of the individual ward's apparent demographic trend because of the smaller base. For groups of wards, however, such transfers do not exert so great an impact; for the base population is now the population of several wards. Furthermore, the study of ward groups, rather than separate wards, reduces the number of blocks that have to be transferred from

<sup>2</sup>Peter R. Knights, The Plain People of Boston, New York: Oxford University Press, 1971, 144-7.

census to census. A comparison of the accompanying maps indicates that there were several zones, consisting of ward groups, whose overall boundaries were relatively constant.

The procedure used in this study was therefore to identify such zones. An effort was also made to establish zones most of whose populations were approximately equal in 1870, the midpoint of the study, thus ensuring a common base with which to compute rates of growth and decline. The eleven selected areas are the basis for the 1880 zones described in Chapter III.

The accompanying table lists the eleven areas chosen for the study. They are based upon the 1870 wards and are shown with the approximations used for computing population reported in terms of 1850 wards and 1890 wards and health districts. Note that only four of the twenty 1850 wards have been broken up. The remaining sixteen were, for the most part, within the selected areas.

The approximations used for the 1890 census data are based upon health districts whose populations were reported in a special study issued to supplement the 1890 Census of Population.<sup>3</sup> The populations of health districts that cut across the 1870 area boundaries were distributed to the nearest one-fourth of their magnitude. If more than three-fourths of a health district lay within a given area, the district's entire population was counted within that area.

<sup>3</sup>Billings,

Table A - 1. Approximations Used for Comparing Census Data for 1850, 1870, and 1890

<u>1850 Wards</u>	<u>1870 Wards</u>	<u>1890 Wards and Health Districts</u>
1 2 one-fifth of 7	1, 2	1 6 - B one-half of 6 - C 2 - A 2 - B one-half of 2 - C
3 4	3, 4	one-half of 2 - C three-fourths of 3 one-half of 4 - A one-half of 4 - B
5 6 one-tenth of 7	5, 6	one-fourth of 3 one-half of 4 - A one-half of 4 - B three-fourths of 5 - A one-half of 5 - B one-half of 6 - C 6 - D
seven-tenths of 7 8	7, 8	6 - A 7 one-fourth of 5 - A one-half of 5 - B 8 - A 8 - B 8 - E
9 10 13 one-fourth of 12 one-third of 14	9, 10	9 - A 9 - B 9 - C three-fourths of 9 - D one-fourth of 10 13 - C
11 one-fourth of 12 20	11, 12	8 - C 8 - D one-fourth of 9 - D one-half of 11 - A 11 - B 11 - C three-fourths of 12 - A one-half of 12 - B 12 - C

Table A - 1. Approximations Used for Comparing Census Data for 1850, 1870, and 1890 (continued)

1850 Wards	1870 Wards	1890 Wards and Health Districts
one-half of 12 one-tenth of 18 19	13, 19, 20	three-fourths of 10 one-half of 11 - A one-fourth of 12 - A one-half of 12 - B three-fourths of 14 - A 19 20
two-thirds of 14 16 one-tenth of 18	14, 16	13 - A 13 - B 17 - D 16 - A one-half of 16 - B one-half of 18 - B
15	15	15 - A three - fourths of 15 - B 15 - C 9 - E
nine-tenths of 17	17	one-fourth of 15 - B 17
one-tenth of 17 four-fifths of 18	18	one-fourth of 14 - A 14 - B one-half of 16 - B 18 - A one-half of 18 - B 18 - C

Sources: Figures A - 1 and 2

Insofar as there was a total of fifty health districts encompassing the eleven selected areas, the demographic trends shown for the 1870 - 90 period are probably more accurate than those shown for the 1850 - 70 period. Approximations of the twenty larger 1850 wards dealt with greater areas, a fact that invites greater errors caused by variations in residential density.

The number of dwellings in each of the eleven areas in 1890 was estimated by distributing the number of dwellings reported for each ward in 1890 among the ward's health districts proportionately with the population of each health district. The estimated number of dwellings in each 1890 health district was then distributed among the eleven areas using the ratios listed in Table A - I.

The author readily acknowledges the fact that the demographic trends reported in the present study are based upon approximations, as well as the fact the the eleven areas selected are but several of many possible combinations. Ideally, one would choose for the core all the interior blocks that demonstrated a significant lag in growth. Such a procedure would require an analysis of the original census manuscripts, an undertaking that is bequeathed to the more patient and nimble-fingered. Such an analysis would refine the present study.

## VITA

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