

Changes in Land Use and Value Along Atlanta's Expressways

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● ATLANTA'S SYSTEM of expressways has been under development for about eleven years. The highly important north-south portion of the system is well on the way to completion, the major east-west line is under construction, and an outer perimeter route is being developed on a section by section basis. The north-south connector in the center of the city is still incomplete, but many miles of high volume limited access roadways serve motorists in both the northern and southern segments of the metropolitan area.

There is widespread interest in the changes which may take place in urban development as a result of expressway development. In order to provide some specific local information, it was decided in June of 1957 to conduct a study to determine, insofar as possible, the effects of such construction on land use and value in the vicinity of the Atlanta Expressway.

Prior to the design of the Atlanta Expressway System, the State Highway Department, supported by the Bureau of Public Roads, made extensive studies to determine the desires and intentions of prospective users of the new facilities. The tests and projections showed that a large majority of vehicles on the expressways would be destined to go into the Atlanta area. For this reason, the north-south core of the Atlanta Expressway System was designed primarily to meet the needs of the metropolitan area rather than to act as a bypass route to take highway through-traffic away from the city. As a result, the Northwest and Northeast Expressways were engineered to converge at Brookwood Station to form a single route, the North Expressway, into the center of the city.

It might simplify understanding if these units are thought of as a giant letter Y, with the bottom of the letter thrusting into the north portion of Atlanta's central business district.

The North Expressway, which is the pillar of the Y, was intended to serve as a high-volume thoroughfare and was expected to remove a major portion of the traffic flow from overworked streets nearby. A large amount of traffic has shifted to the North Expressway, but because of the general increase in traffic flow in the entire metropolitan area the current volume along Spring and West Peachtree is approximately equal to that which existed previously.

The Northeast Expressway was planned as a new road to serve the mid-northeast sector of the metropolitan area. It also was expected to relieve local traffic congestion, principally on Peachtree and Piedmont Roads. Movement along the Northeast Expressway is heavier than was contemplated at the time of development, and the other important thoroughfares serving this region also carry maximum numbers of vehicles.

An important result of the community planning which brought about the development of the expressway system was the location finally chosen for the rights-of-way. The objective was to build the expressways in areas where they would best serve the community, but at the same time, vacant or low value areas were chosen whenever this was possible. The route designated for the North Expressway ran through a partially vacant area adjoined by low value properties; along the Northeast Expressway, large tracts of vacant land existed on both sides of the right-of-way. The choice of these sites indicated that extensive changes in land use and value in adjacent properties should be expected to follow in the wake of construction.

AREA STUDIED

Studies of this type are always troubled by the problem of defining an area to be examined because there is no exact way to measure roadway influence upon any given

piece of property, especially when the property does not front on and have direct access to the roadway in question. In the Atlanta study it was decided to use the oldest portion of the expressway system which fortunately served a broad accumulation of commercial and industrial properties as well as urban and suburban residential sectors. A relatively large tract of land in the north and northeast part of the metropolitan area of Atlanta was thus selected as the study area. It begins at North Avenue (US 78) near the central business district, extends north along the North Expressway to the Brookwood Station interchange, and thence runs out along the Northeast Expressway to Clairmont Road.

There are eight interchanges and two street grade separations serving the $7\frac{1}{2}$ -mi area. Three of the interchanges and one grade separation are found south of the Brookwood Station interchange. The three interchanges along the Northeast Expressway out to Clairmont Road are of similar design but are more widely separated. Each interchange or separation provides passage of its intersecting main artery across the expressway. All other roads and streets formerly crossing the line now occupied by the expressway have either been closed or diverted away.

PATTERN FOR THE STUDY

Changes in land value have been studied by means of comparison.

Changes in land value during the period of the study were obtained by a study of prices paid for properties within the study area. All real property sales were obtained by examination of deed records and appropriate values for the land without buildings were developed. These values then were available for comparison with other properties.

Areas affected by expressway development have been compared with unaffected or "control" areas, both before and after construction of the expressway.

Anyone familiar with real estate markets understands that no two urban properties can be identical. Similar houses and buildings can be constructed if this is desired, but every piece of land has a certain amount of monopoly value. No two lots can occupy the same location, and location is one of the prime factors in determining land value.

For this and other reasons, no area is available to serve as a perfect basis of com-



Figure 1. Atlanta, looking southeast, with Tech Stadium in middle distance at right. North Avenue, crossing Expressway to left of Stadium is beginning of study area. North-South Expressway extends north (left) out of picture at lower left.



Figure 2. Downtown Atlanta, looking in opposite direction to Figure 1, with Expressway in upper middle. Tech Stadium and North Avenue bridge are near southern end of Expressway, which extends out of picture at top.

parison for this study. Since the comparative method is desirable, however, an area was designated which has many of the characteristics of the study area. This sector is generally of the same type and nature as that in the northeast section except that no expressway construction has taken place nor is any planned for this region. The control area, located in four and one-half land lots in southwest Atlanta, includes commercial property, churches, schools, apartment houses, and residences.

Two major road systems serve the control area and provide access to the central business district. They are (a) Cascade-Gordon-Peters Streets and (b) Campbellton-Lee-Peters Streets. Both road systems come together south of the central business district, but there are alternate routes into the city. Although the route into the central business district is occupied by older commercial establishments, the traffic pattern is comparable to that of the study area before the development of the north and northeast expressways.

The control area has a mixture of older, well-established sectors and some that have been developed during the years covered by the study. New desirable subdivisions and shopping centers have been opened in the control area in a manner similar to that in the study area, but there has been no industrial development.

Also, affected areas of one type have been compared with affected areas of other types in an effort to determine the degree of influence and the timing of influence of expressway construction.

Changes in land use also have been studied by means of comparison, except that control areas have not been used as a major technique. Before-and-after comparisons as well as comparisons of different sectors of the study area have been the principal tools of analysis. In addition, extensive compilations of information pertaining to the total extent of change in land use have been developed.

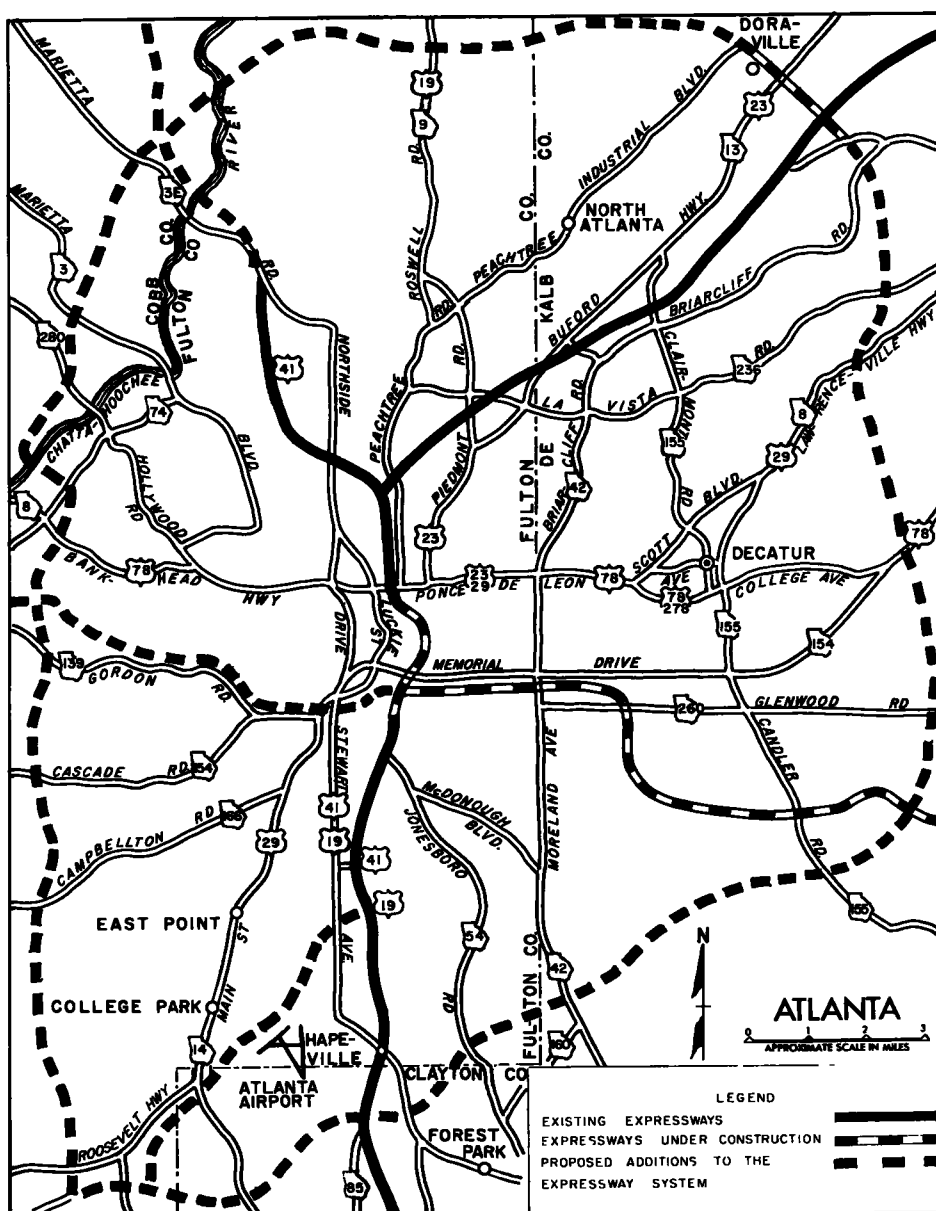


Figure 3. Atlanta's expressway system.

The plan for observing changes in land values and land use was to compare or contrast changes in certain areas as conditions changed over time. This necessitated the establishment of time periods divided as nearly as possible into equal lengths, both before and after construction, in order to measure changes caused or influenced by the coming of the expressway. The sixteen years from 1941 through 1956 were established as the study period. The years 1941 through 1946 (Period I) were taken as years before the expressway was built and before much serious thought was given to construction. The years 1947 through 1951 (Period II) cover the period of major study as well as construction of the first part of the expressway. The years 1952 through 1956 (Period III) constitute the period following early activity during which the northeast leg of the

expressway was completed. An ideal study situation would call for an additional time period, perhaps five years following the completion of the northeast section of the expressway. It would be highly proper and enlightening if such a study of a post-construction period were to be arranged at sometime in the future.

BASIC ASSUMPTIONS

Three assumptions stand out as basic to the procedure of this study. These assumptions underlie the division of the study area into band, section, and strip noted below.

Initially, it was assumed that there would be variations in land use and land value as the distance from the central business district increased. To study these variations, the subject area was divided into sections, which changed as distance from the central business district increased.

The purpose was to designate sections showing the relative nearness to downtown Atlanta. Thus, Section 1 is closest and Section 6 is the most distant. These divisions are not evenly spaced, but have been established in a manner designed to keep like properties in the same section whenever possible. As is true with the band designation, some section numbers have been omitted because of the shape of the study area; but in no case has a section number been misapplied so as to cause confusion about distance from downtown. Section 1 is composed of the area from North Avenue to Sixteenth Street, or that property closest to downtown Atlanta. Section 2 is composed of the properties located on both sides of Peachtree Road in the vicinity of Brookwood Station. Section 3 lies beyond this area and is roughly bounded by Piedmont and Cheshire Bridge Roads. Section 4 is marked by Lenox Road extending both north and south of the expressway. Section 5 is bounded on the east by a combination of Briarcliff and North Druid Hills Road running roughly north and south through the study area. Section 6 is bounded on the east by Clairmont Road and the boundary of the study area in the north-east sector.



Figure 4. Aerial view looking north, showing boundaries of study area.

Second, it was assumed that variations in land use and land value would occur as the distance from the expressway right-of-way increased. In order to measure changes of this kind, the study area was divided into bands which changed as distance from the expressway increased.

This breakdown of the area serves to establish bands paralleling the expressway to distinguish nearness to the expressway. Band A thus is closest to the roadway, Band B is next, and Band C is the area most distant from the right-of-way. The bands are not of equal width throughout their length, because an effort was made to keep like properties in the same band whenever this was possible. In a few cases, because of special

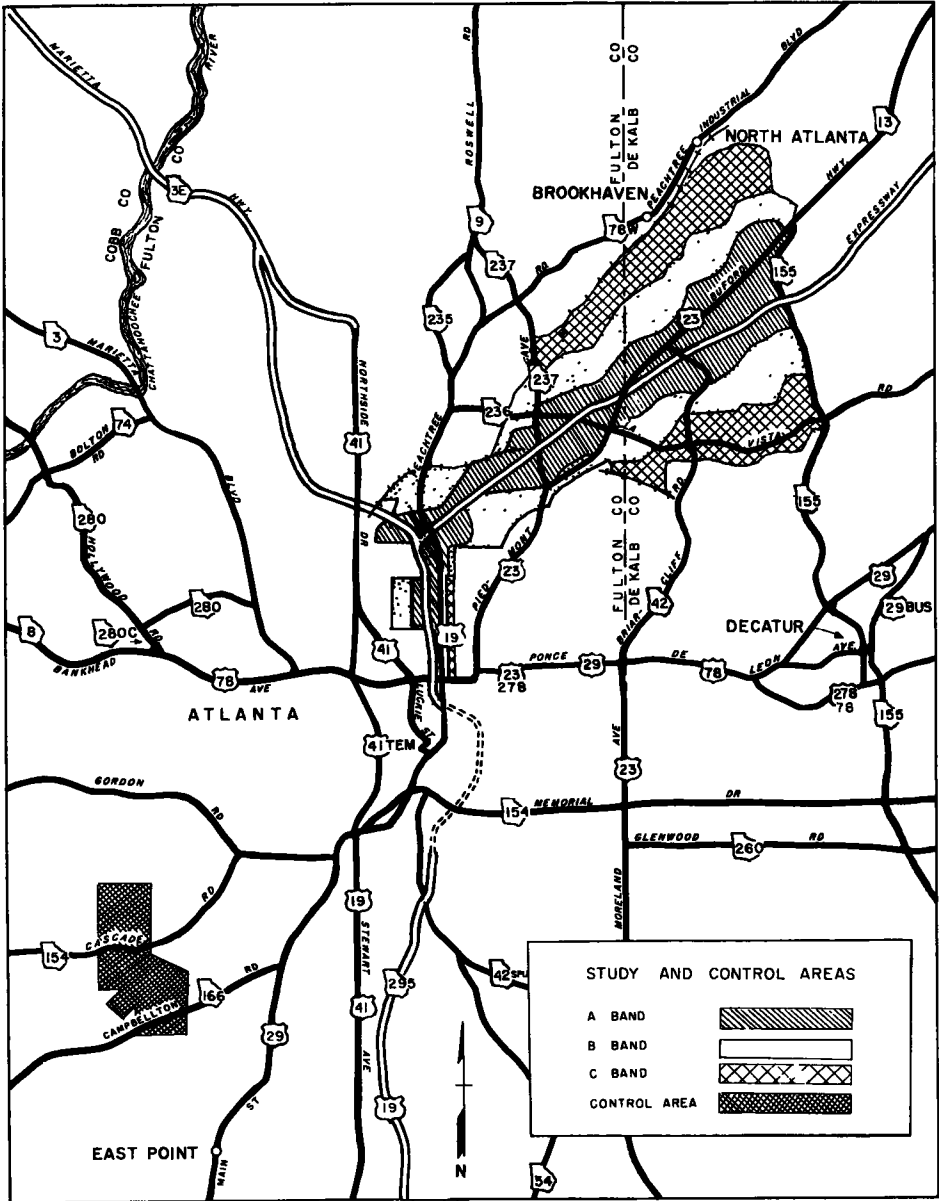


Figure 5.

problems of development or size in the area, a band designation has been altered in an effort to preserve as much homogeneity as possible.

Third, it was assumed that changes in accessibility would cause variations in land use and land value within the central business district and along the more important access roads leading on and off the expressway. In order to show the changes in these areas, the downtown property fronting on Techwood, Williams, Spring and West Peachtree Streets as well as the major streets which cross the expressway (strips) have been treated separately.

The strips are made up of the properties that front upon and extend along both sides of the major roads crossing the expressway throughout the study area. For example, Fifth Street is Strip 1; Tenth Street, Strip 2; Fourteenth Street, Strip 3. Peachtree Road within the study area constitutes Strip 4. Strip 5 is that portion of Piedmont Road south of the Southern Railway line lying within the study area. Strip 6 is Cheshire Bridge Road between the expressway and Piedmont Road. Strip 7 is all of the Buford Highway lying within the study area.

In addition to the separation into sections, bands, and strips, the study area also was divided into sides of the expressway and a separation by counties was necessary for collection purposes. There was no other purpose in separating the material into Fulton and DeKalb County groupings as no natural barrier exists at the county line.



Figure 7. North Expressway and cross streets (strips). Two of the streets (strips 6 and 7) are off the picture.

EVIDENCES OF CHANGE

The plan for measuring specific changes within the study area was built around the three basic assumptions just mentioned which are not applicable only in Atlanta but are more or less general in nature. The first assumption was based on the general tendency for land use and values in urban communities to decline as distance from the central business district increases.

A special feature related to distance from the central business district is a result of the geography of the study area. Due to the location of the expressway, all property on the east side of the study area is closer to the central business district than are the

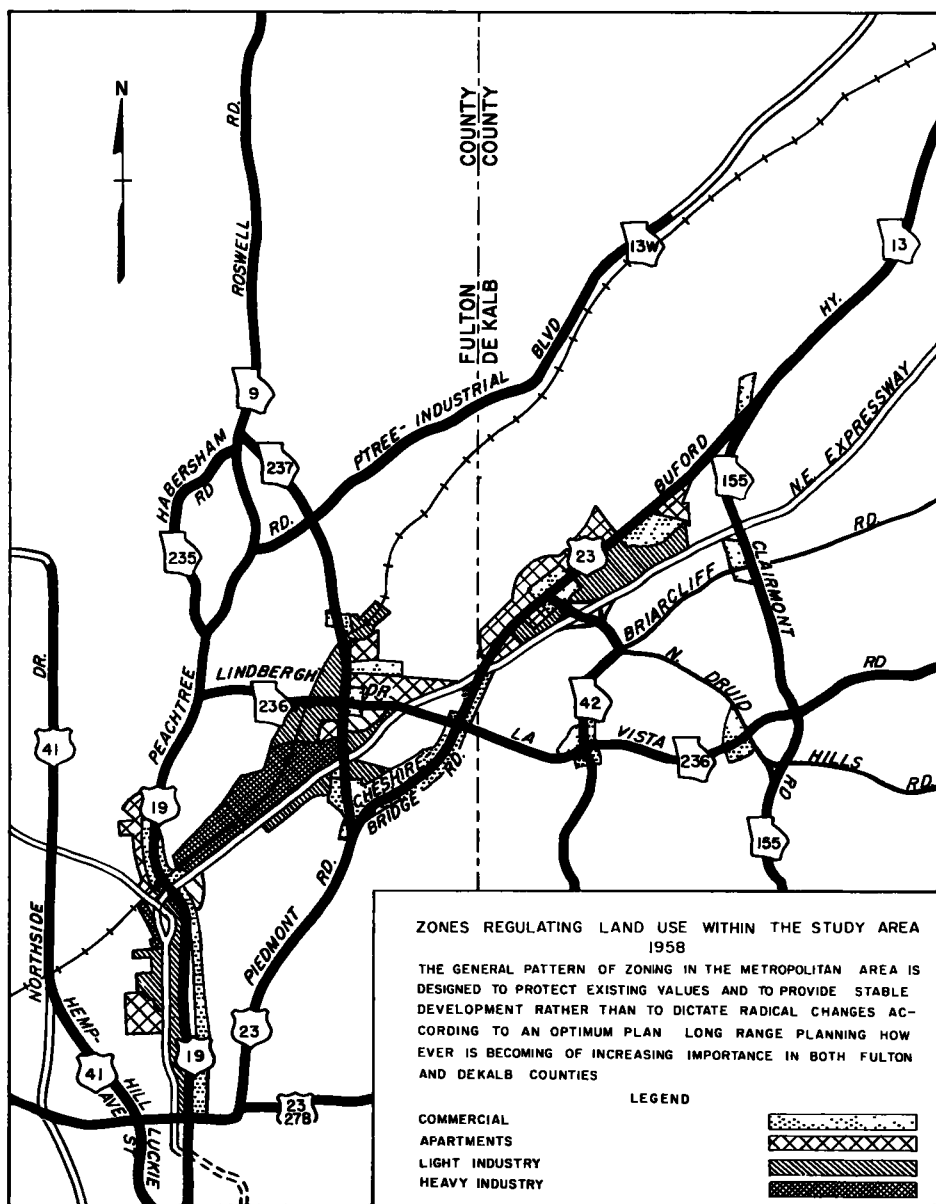


Figure 8. Zone areas within study sections and use for which each is designated.

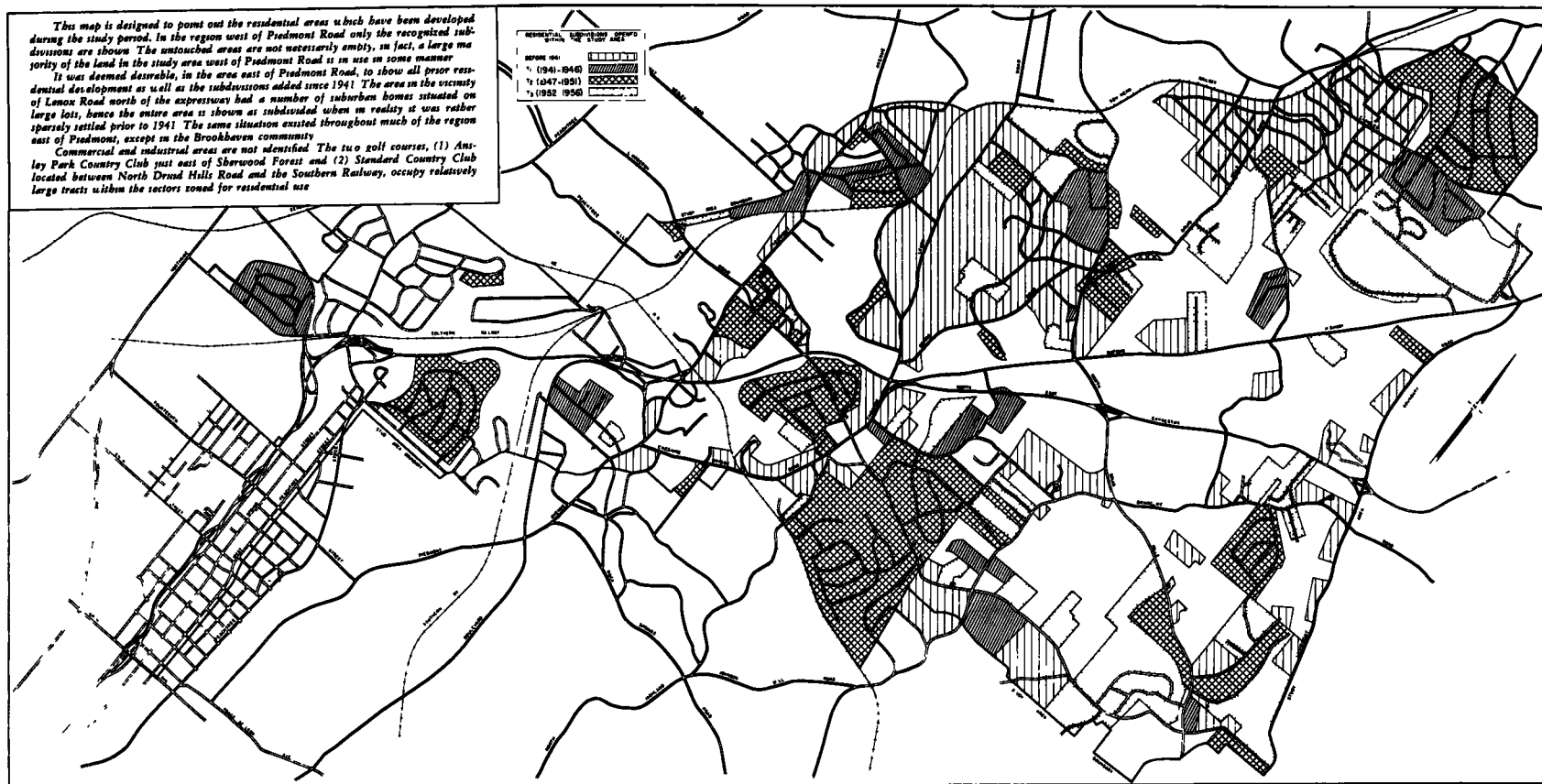


Figure 9. Residential subdivisions opened before 1941 and during the three time-periods of the study.

corresponding sections on the west side of the study area. This characteristic is a partial explanation of the fact that property values on the east side are consistently higher in value than those on the west. Several specific examples can be cited which emphasize this rather unusual phenomenon. First, the most important commercial areas within the entire study territory are found along Spring and West Peachtree Streets. Also the highest valued residential property in the study area is that in Sherwood Forest. In addition, up to the present time, more extensive commercial activity has taken place along Cheshire Bridge and along Piedmont Road south of the expressway. This may not hold true in future years when Piedmont north of the expressway is widened.

It was felt that the construction of the Atlanta expressway system might alter the existing pattern of urban land development within the areas influenced by these new roads. Examination of the evidence in this study has shown that within the designated areas the expressway has helped to produce such changes.

In Period I, land values did not decline uniformly as distance from the central bus-

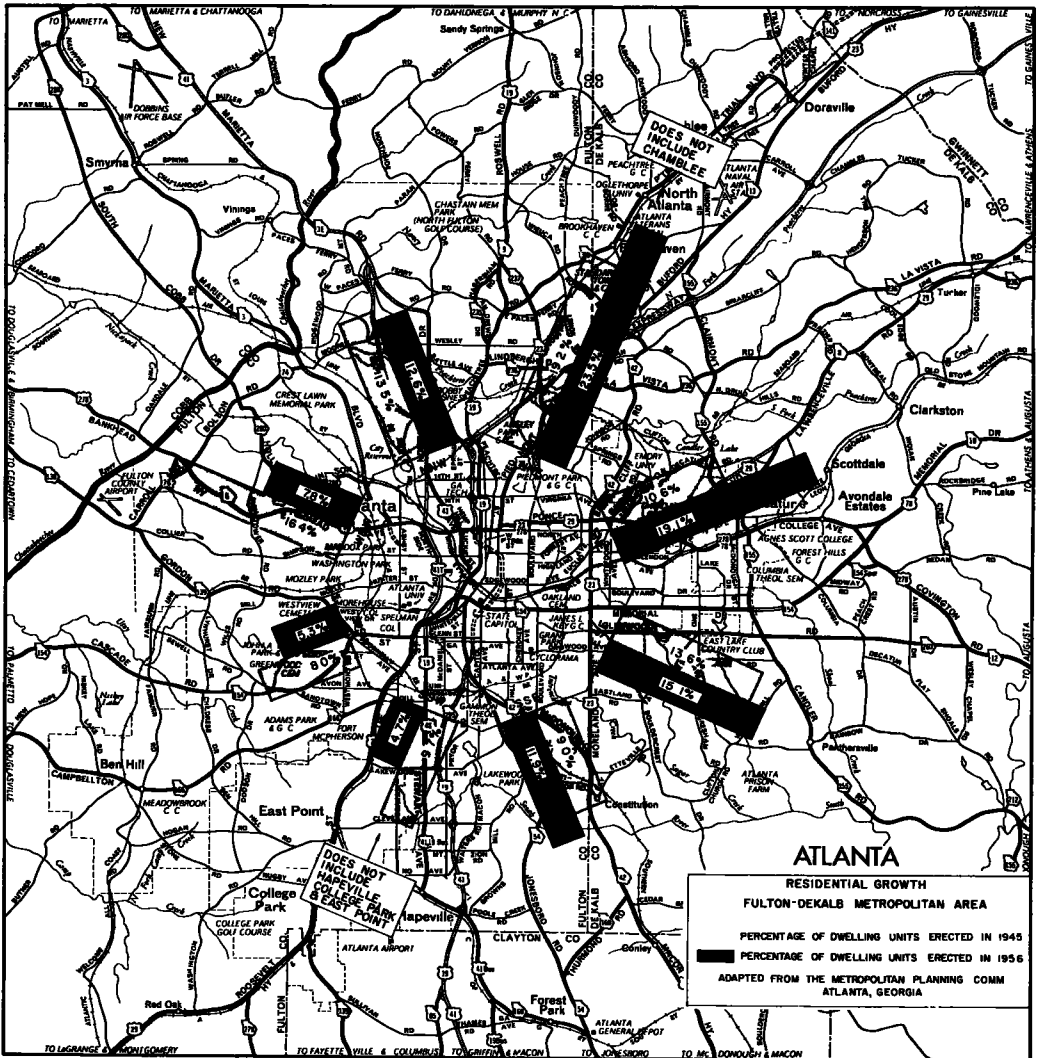


Figure 10. Relative percentages of residential growth in dwelling units and distribution over the Atlanta area by percentages in 1945 and in 1956.

iness district increased. It is true that typical declines were in evidence in some sectors but certain areas outside of the downtown sector were more valuable than other areas located closer to the central business district. On the east side of the study area in Band A, Section 4 had higher values than Section 3; and in Band B, Section 5 had higher values than Section 4. Also in Band B, Section 4 had higher values than Section 3. On the west side of the study area, within Band A, Section 4 was higher in value than Section 3 and Section 5 was higher in value than Section 4. Also on the west side, in Band B, Section 2 was higher in value than was Section 1.

OUTLINE OF THE STUDY AREA
BY SIDE, BAND AND SECTION

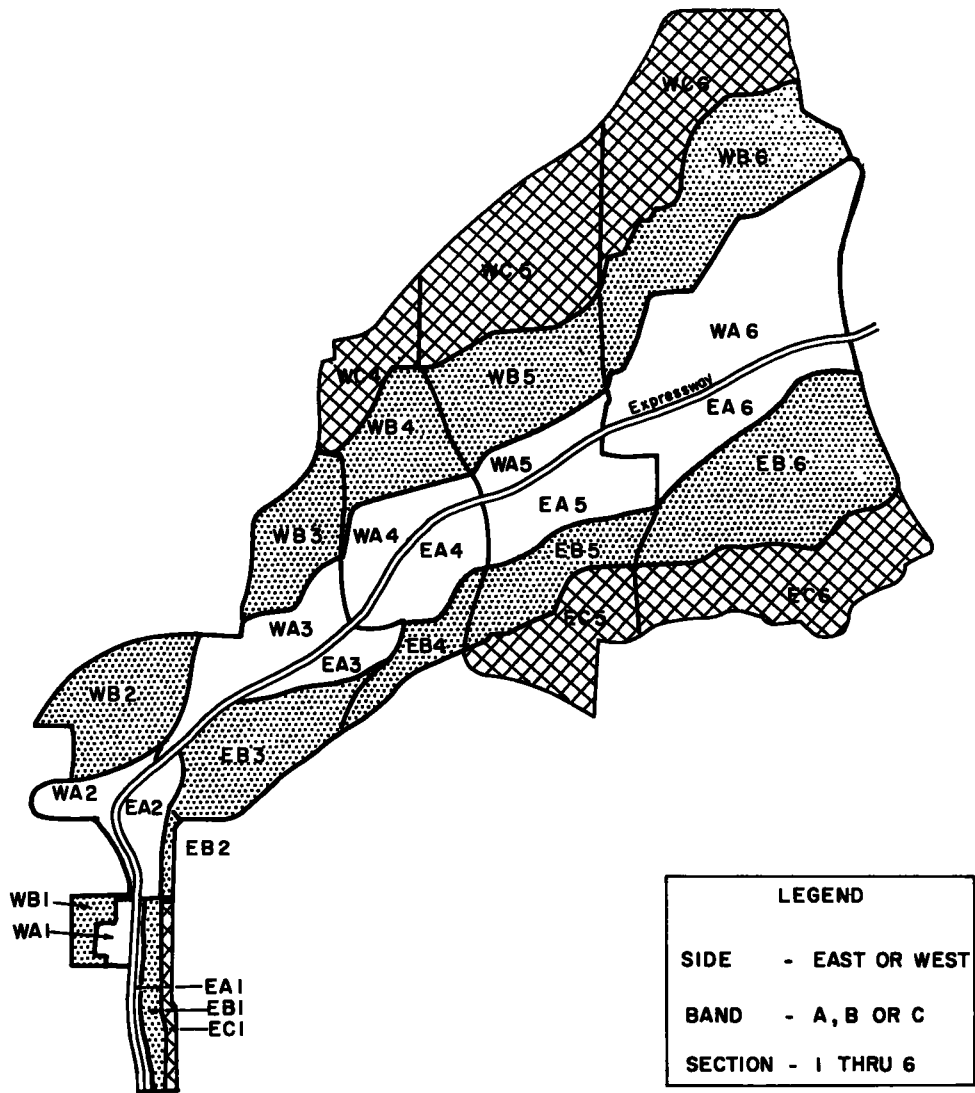


Figure 11. Study area by side, band, and section.

One apparent reason for these departures from the typical pattern of declining prices in relation to distance can be found in neighborhood characteristics such as the status of development at a given time. In some of these cases, vacant land was compared with developed land; this was true for Sections 3 and 4 in Band B on the east side. In other cases, comparisons between low priced residential areas and higher priced residential areas were being made.

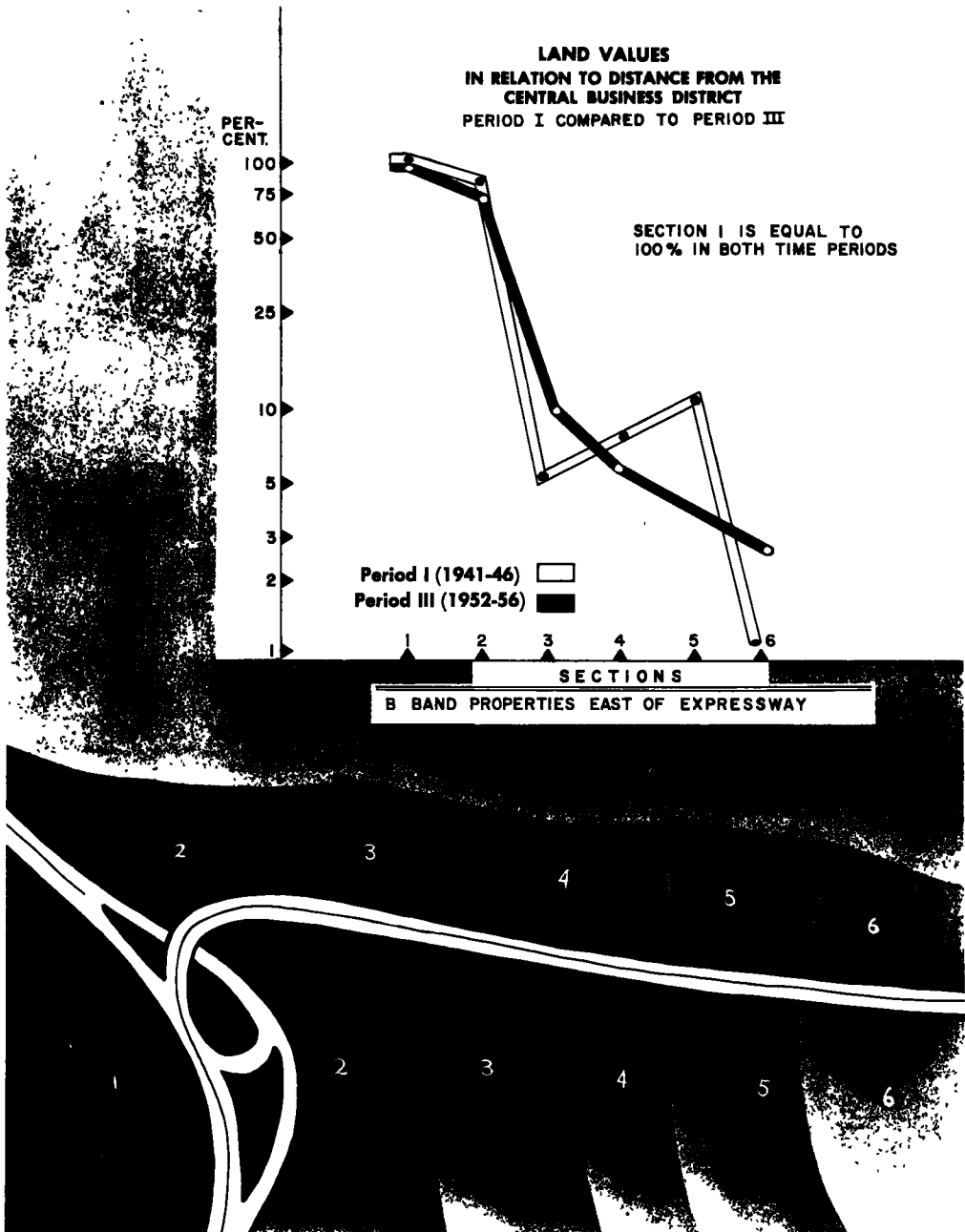


Figure 12. Changes in land values in relation to distance from central business district.

Another possible explanation for the existence of higher priced areas located farther from downtown than the lower priced areas is the tendency for new development to leap-frog over older regions which show signs of declining desirability. A clear example of bypassing in this manner is the comparison of Section 2 with Section 1, Band A, on the west side. Section 2 is much farther from the central business district and is relatively hard to reach from the downtown area. Section 1 is the older area developed many

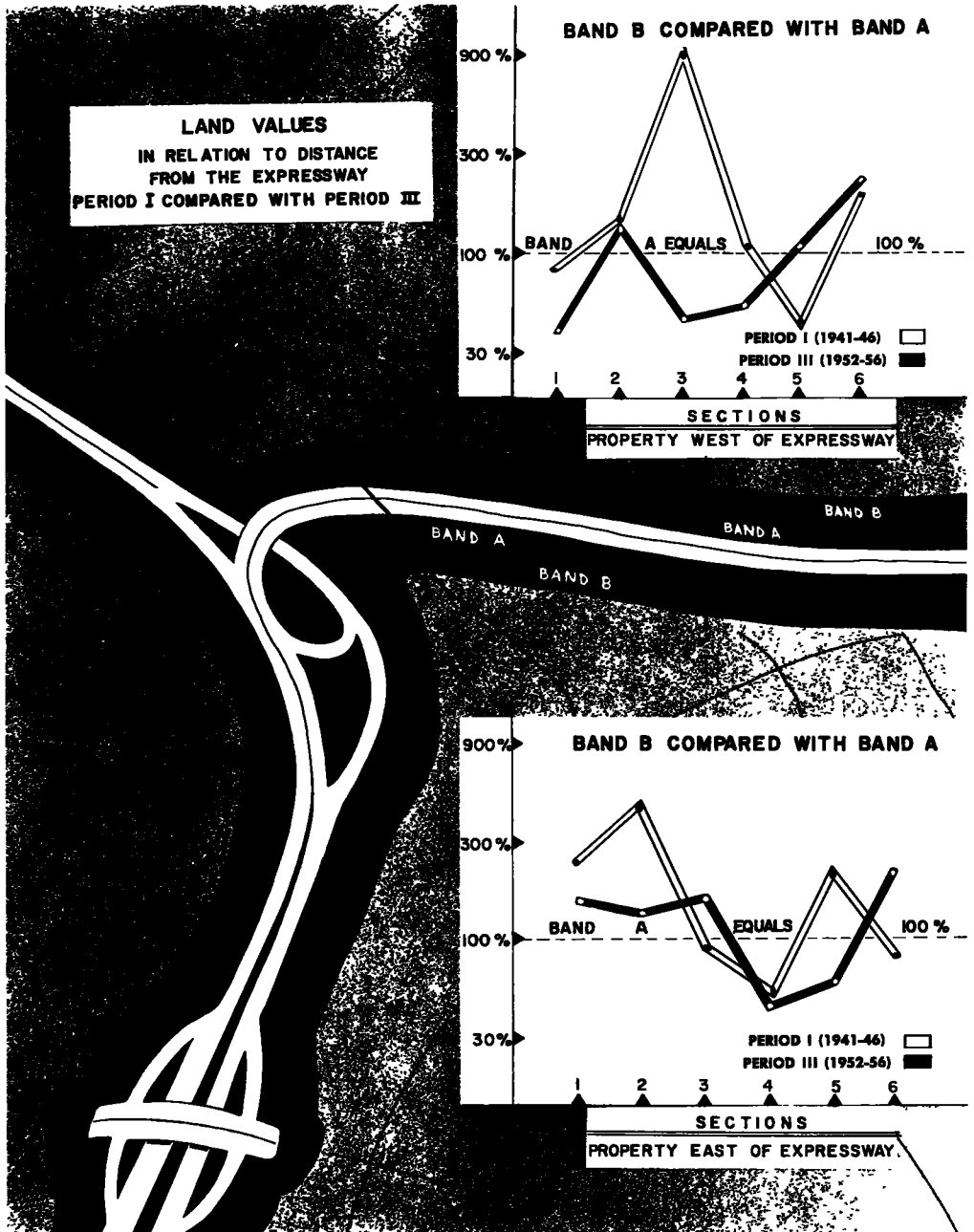


Figure 13. Changes in land values in relation to distance from Expressway.

years ago. Section 2 was opened for development during Period I and hence was at its peak in desirability. Also, these two areas are separated by the extensive property of the Atlantic Steel Company which provided a barrier to earlier extension in this sector. Section 2 values are not higher than those in Section 1 but they are considerably higher than one would expect under normal conditions.

Still another reason for the lack of uniformity in prices based on distance can be

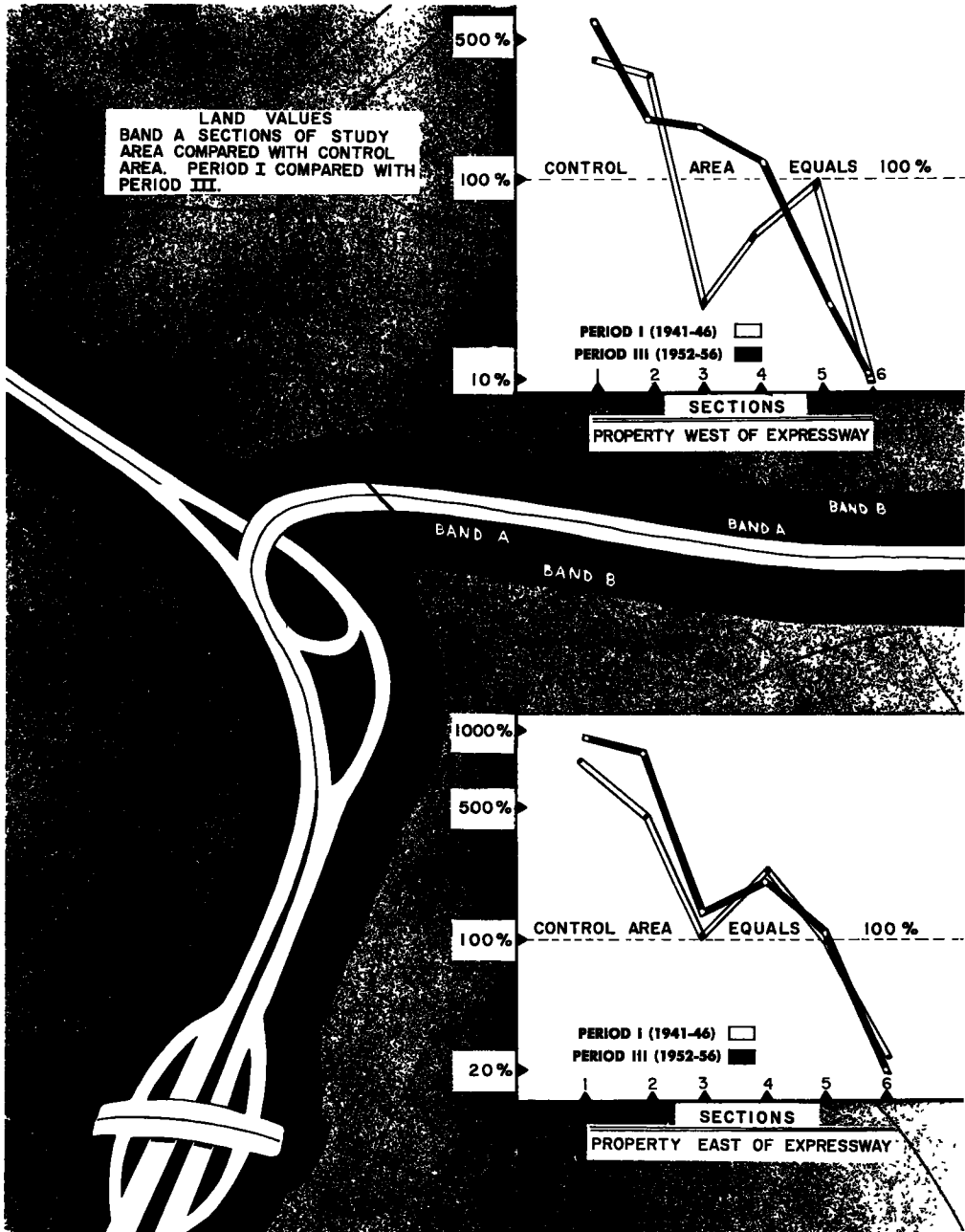


Figure 14. Changes in land values for Band A sections of study area as compared with control area.

found in street and terrain problems. This has been a highly important item because Atlanta has a very irregular street system caused largely by uneven terrain.

The coming of the expressway has altered the pattern of relationships which existed in Period I. In Period III, only two variations were in evidence and strong neighborhood influences prevailed in each case. On the east side of the expressway in Band A, Section 4 has higher values than does Section 3. This is a continuation of the pattern as found in Period I for these two neighborhoods. On the west side in Band B, Section 2 has values greater than Section 1. This also is a continuation of the situation existing in Period I. It should be stated that there is no similarity and little proximity between Sections 2 and 1 on the west side. The property of the Atlantic Steel Company as well as all of the properties in Section 2, Band A, intervene between the two sections. This separation was forced by the curve of the study area in the vicinity of Brookwood Station. Section 2, Band B, on the west side centers on Peachtree Road in a valuable area. Section 1, Band B, west side, consists of relatively small houses built many years ago in the vicinity south of the Atlantic Steel Company.

The second assumption pertains to variations in value in relation to lateral distance from the expressway. In Period I, Band A values were lower in general than were Band B values, and Band C values in general were higher than Band B. This is a relationship contrary to the theoretical assumptions that values are likely to decline with increases in lateral distance from the expressway. In Period I, however, no expressway existed and as has been pointed out, the rights-of-way were intentionally located in vacant property wherever possible. Hence in the Atlanta scene, it was entirely reasonable in Period I to find higher values at greater distances from the route selected for the Northeast Expressway. Certain exceptions to this over-all pattern existed in Period I and should be recognized here. On the east side, properties in Sections 3, 4 and 6 within Band A were greater than like sections in Band B; also, properties in Band C, Section 5 were drastically lower than Band B and lower than in Band A. On the west side, values of property in Band B in Sections 1 and 5 were lower than corresponding sections in Band A. Also in Section 5 on the west side, Band C was lower than Band A and Band C was greater than the properties in Band B in this section. These variations can be easily understood if an examination is made of neighborhood characteristics such as time of development, terrain features, or street layout in the subject areas. One specific case is cited here for illustration. In Period I, Section 3 in Band B, on the east side, was lower in value than in Band A. It should be remembered that Band B, Section 3, on the east side is largely made up of properties in Sherwood Forest. This land in Period I was raw land awaiting development. Section 3, Band A, on the contrary, had been extensively developed for some time prior to Period I.

In Period III, the evidence indicates that values in Bands B and C were still higher than values in Bands A, but the discrepancy was not nearly so great. Band A properties had increased much more rapidly on a relative basis. Again it is worthwhile to look at the exceptions in this analysis. In Period III on the east side, Sections 4 and 5 in Band B are less than in Band A. In Section 5 within Band C, property values are less than either A or B. On the west side, Sections 1, 3 and 4 are lower in value in Band B than in Band A. This represents no change for Section 1 but it does represent changes in Sections 3 and 4. Section 6 on the west side shows higher values in C than in B and higher values in B than in A, but Band A in this section has improved its position greatly in relation to Band C.

Clearly the evidence available at present indicates that the expressway has tended to increase values very substantially in Bands A. The total long-run evidence will not be available until a major portion of the land which is still vacant in Bands A is sold and put to urban uses.

The evidence is clear that the North Expressway has contributed materially to extensive changes in use within the area south of Brookwood Station. Changes in value have also been impressive in this area and the expressway has played a major part in these advances, particularly in the areas closest to the new roadway.

The second part of the third assumption concerns changes in land values along major streets crossing the expressway (strips). The changes in strip properties have been

compared with variations in neighboring land units. Over the 1941-1956 study span, Fifth, Tenth, Fourteenth, Peachtree and Cheshire Bridge Road properties advanced in value more rapidly than their neighborhoods. The highest rate of growth took place along Fifth Street and Cheshire Bridge Road. Fifth Street apparently felt the impact of the expanding business district and Cheshire Bridge Road shifted from mixed suburban usage to relatively high level commercial activity. The shift to industrial usage in the vicinity of Piedmont Road has brought wide-spread price increases in the surrounding region. Thus, while Piedmont Road properties have grown in value, they have not shown the rate of growth which has characterized the property along Cheshire Bridge Road.

All of the major traffic arteries which now cross the expressways were in existence before the building of the new roadways. Hence, it cannot be contended that any of them were created or made important solely by expressway construction. The evidence at hand, however, does indicate that the development of the expressway system has materially increased the rate of growth along these thoroughfares.

EFFECTS OF NEIGHBORHOOD DEVELOPMENT PATTERNS

Because of the importance of mobility in urban development, any expressway will make some contribution to greater use and higher values of properties within its tributary area. At the same time, however, it must be emphasized that a facility such as an expressway is only one determinant of value. The importance of an expressway in relation to other determinants such as shopping facilities, schools, churches, and prestige value, is variable. An expressway helps to provide a favorable climate but in a number of instances, local or neighborhood decisions have played a dominant part in establishing both use and value relationships within sectors. Analysis has indicated very clearly that the decisions made by land developers have been very important in establishing and maintaining high levels of use and value with specific neighborhoods.

RATES OF CHANGE IN LAND USE AND VALUE

One of the principal consequences of the development of the Northeast Expressway has been to open large amounts of land to new urban development. Not only has this roadway opened areas relatively close to the city but it is providing accessibility to a tremendous area which extends for many miles beyond Clairmont Road, the boundary for this present study. In providing these new areas for urban development, the expressway obviously has increased values in the areas thus made accessible. For example, in Period I, Section 6 was much lower in value than Sections 1 and 2. In Period III, Section 6 is still lower in value but its rate of growth has been more rapid than in the downtown sections. Without doubt, this is a result primarily of changing land use. Much of the land in Section 6 in Period I was raw land, but by Period III, residential development had taken up a major portion of the entire section. During the same period the downtown areas have not been static but the change from high level residential use to commercial activity has brought about a smaller percentage increase in value. Utilization in the downtown areas has been at a high level throughout the study period.

At the same time, a companion result of the expressway has been to weaken or reduce the rate of growth of property values in areas which formerly possessed local advantage due to the existing street and terrain pattern. The decline in relative value of Section 2, Band A, west side, is a clear example of this situation and others could be pointed out in other sectors, as can be seen from Table 1.

Three sections within the entire study area reveal declining prices from Period I to Period III. This evidence, is based on the constant dollar values used for all of the analytical material. In terms of current dollars, these declines disappear. It is true, however, that there are some sectors where evidences of growth in value are almost non-existent. In other areas the rate of growth in value has been little short of phenomenal. For example, Sections 1 and 3 in Band A on the east side have increased more than 200 percent in value while Section 2 has increased at a rate greater than 400 percent. Within Band B on the east side, Section 3 has increased by approximately 425 percent and Section 6 in the same period has increased by 485 percent. The only other

TABLE 1
RELATIVE CHANGE IN LAND VALUES, 1941-56

Side	Section	Relative Change ¹ (%)								
		Periods I-II			Periods II-III			Periods I-III		
		Band A	Band B	Band C	Band A	Band B	Band C	Band A	Band B	Band C
East	1	24.1	48.2	NA	157.2	33.8	NA	219.2	98.3	93.0
	2	374.4	3.6	NA	8.3	61.5	NA	413.5	67.3	NA
	3	152.8	280.5	NA	19.8	32.2	NA	202.8	425.8	NA
	4	57.6	37.2	NA	32.3	21.2	NA	108.5	66.3	NA
	5	25.1	62.5-	125.9	104.2	110.8	329.8	155.5	20.9-	870.7
	6	37.3-	203.6	94.9	194.9	92.6	10.0	84.8	484.8	114.5
West	1	16.6	25.9	NA	187.7	29.1	NA	235.6	62.6	NA
	2	102.1	64.7	NA	18.9-	10.7-	NA	63.9	47.0	NA
	3	141.6	106.1	NA	754.7	50.1-	NA	1965.0	2.8	NA
	4	21.8	47.5	40.8	339.1	69.8	6.5-	435.0	150.5	31.6
	5	27.2	21.2	41.6	42.8-	44.9	43.7	27.2-	75.7	103.4
	6	150.0	693.1	16.8	17.6	56.1-	34.0	194.0	248.0	22.9-

¹NA = Not applicable.

large-scale increase on the east side is Section 5 in Band C which has increased by 870 percent. The other sections on the east side have shown varying degrees of increase except Section 5, Band B, which shows approximately a 21 percent decline in value in constant dollars.

The areas listed are composed of a variety of activities. Sections 1 and 2, it will be recalled, are the downtown commercial areas. Section 3, Band A, is made up of commercial and industrial properties in the vicinity of the expressway south of Piedmont Road. Section 3, Band B, on the east side, is composed primarily of Sherwood Forest properties. Section 5, Band C, is land which in previous periods was isolated and almost ignored. In Section 6, Band B, properties consist of new and well accepted residential subdivisions.

There are not as many rapid increases in value on the west side as there are on the east, but the greatest single rate of increase for any sector is that for Section 3, Band A, on the west side. This section, composed almost entirely of industrial property, has increased almost 2,000 percent during the study period. At the time, Section 3 in Band B on the west side has shown an increase of only 3 percent for the same period. Much of the variation between these adjoining areas can be explained in neighborhood and time differentials.

Within Section 3, Band A has moved steadily toward high level industrial use from extremely low levels of use. It should be remembered that this area is bisected by tracks of both the Southern and Seaboard railroads as well as by Peachtree Creek. In former periods it was considered entirely unsuited to normal residential development. When the expressway provided access into this area, it immediately was marked for high level industrial expansion. The property in Band B presents a different picture. A substantial portion of the land in Section 3, Band B, is residential and was worth much more in Period I than the land in Band A. The rate of change in Band B during Periods I to II was almost as great as that for Band A. In Period III, sales of isolated, completely undeveloped tracts produced an average picture which is not representative.

Only two other sections on the west side have shown increases of more than 200 percent. Section 1, Band A, on the west side has increased by approximately 236 percent, while Section 6, Band B, on the west side, has increased by 248 percent. Section 6, Band A, has done almost as well in increasing by 194 percent. Section 6 in Band C, however, shows a decline of almost 23 percent. This is perhaps the one area where

evidences of decline are strongest. Even here, however, current dollar prices do not indicate reductions but it is true that the property has not kept pace with the Atlanta region as a whole. The other declining figure on the west side is for Section 5, Band A. It is not believed that actual declines exist in this area, but the design features of the expressway as well as relocation of traffic away from Buford Highway to the expressway has caused a lessening of desire for property in this immediate sector.

COMPARISON WITH CONTROL AREA

The last of the analytical patterns to be summarized is the comparison of sectors on the study area with the control area. The purpose of developing information about the control area was to determine, if possible, whether property within the study area had advanced more rapidly in value than had other sectors of the city. Average figures for each of the separate segments of the study area are compared with the average figures for the entire control area. Examination of the Period I price level for the control area alongside similar measurements for the various sectors within the study area reveals a wide range of differences.

When one tries to analyze the total relationship of the study area to the control area, no distinguishable pattern is apparent. Again it should be said that differences in neighborhood development account for most of the variations which exist. The study area, a large and diverse sector of the metropolitan region, contains a variety of neighborhoods with diverse patterns of land use and value. The control area, in contrast, is a much smaller and more unified sector which in Period I had little commercial activity. Its residential development had been uniformly superior to most of the other properties in its quadrant of the city, although it was not generally regarded as a "prestige" area by other sectors of the Atlanta community.

In Period III, a clearer picture has emerged. Both the control and the study area have undergone extensive development. Important commercial activity has sprung up in the control area and much residential building has taken place. The control area does not contain a burgeoning offshoot of the central business district and it does not have any industrial development inside its boundaries but without doubt its growth has kept pace with the community as a whole. Examination of the evidence shows that the rate of growth of values in the control area is greater than for a majority of the sections of the study area, but, taken as a whole, the study area has had a higher rate of growth than the control area.

It is felt that the more rapid growth of the total study area has resulted from the availability of special advantages in the region, one of which has been the expressway system.

CONCLUSIONS

This study has provided extensive information about the impact of the North and Northeast Expressways upon the areas served by these new roadways. The following are the broad accomplishments which can be credited to this major realignment of Atlanta's street system.

1. Commercial activity along the major thoroughfares crossing the expressway has increased greatly. Primary cause of this growth is the increased importance of these streets as a result of cross-town traffic being channeled over them.
2. South of Brookwood Station, (the downtown sector) a rapid change from residential to commercial and light industrial activity has been extensively influenced by the presence of the North Expressway. Properties in this area which were originally low in value have increased tremendously while the other higher valued properties have also increased as higher levels of use have been reached or changes to new uses have been made.
3. A large majority of all land close to the expressway lying east of Brookwood Station (Peachtree Road) and west of Piedmont Road has been devoted to or zoned for industrial use. In these areas the rate of increase in value has been remarkable. In particular, the value of vacant land in this area has undergone tremendous increases.

The Northeast Expressway has been the factor which has brought these areas into prominence although other items such as proximity to the center of the city and the presence of rail facilities have played an important part in the development of these areas.

A major portion of the land lying east of Piedmont Road and immediately adjacent to the Northeast Expressway has been devoted to or zoned for industrial expansion. Little of the land within DeKalb County which is zoned for industrial uses has been sold. For this reason no specific measures of the final acceptance of these areas can be obtained at this time. It is felt that the industrial areas east of the Cheshire Bridge-Buford Highway intersection with the expressway will owe much of whatever improvement they receive to the presence of the Northeast Expressway. Prior to the coming of the expressway, this area had little or no reason to expect serious industrial development as it is far removed from the center of the city and has no peculiar advantage to assist its industrial development.

4. Because of the rate of commercial and industrial expansion, in a relatively short period of time no residential properties will remain in the region east of Techwood and south of Brookwood Station. The residential areas just north of Brookwood are being influenced and altered but the expressway system is only indirectly involved in these changes.

Two new residential areas, Sherwood Forest and the Martin Manor-Lindridge sector, have been very well received by the general public and show no injurious effects resulting from location immediately adjacent to the expressway. Other residential areas close to the route of the Northeast Expressway have not been injured and in some cases new activity is superior to the older development in these sectors.

East of Piedmont Road, a majority of all land within the study area is devoted to or zoned for residential use. High levels of activity have been observed in this area during the years that the Northeast Expressway was being planned and built. Extensive changes have taken place in values of land in this area, with some neighborhoods showing weak tendencies of growth and with others showing tremendous improvements in use and value.

The effect of the Northeast Expressway does not halt at the eastern boundary of the present study area. Impressive developments are continuing for several miles east of Clairmont Road within the area tributary to the Northeast Expressway. In general, a higher level of residential development is being maintained in the larger, newer, tracts located at some distance from the expressway route.

Multi-unit apartment development within the study area has not been significant except in the sector west of Peachtree Road. Outside of this sector, almost all of the units which have been built within the study area are in the immediate vicinity of or east of Piedmont Road.

The economic impact of the North and Northeast Expressways upon the areas tributary to these roads has been impressive up to the present time. It must be realized, however, that the full effect of expressway development cannot be measured at a time so soon after construction. For that reason, the results presented in this report should be regarded as preliminary findings. A further analysis at a future time should yield definitive results.