TRANSFORMATION OF MIDDLE CLASS SUBURBS IN WASHINGTON D.C. 1950-1990

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ABSTRACT

Suburbanization in the United States is rooted in the nineteenth century, but much of the attention paid to this process has focused on the tremendous growth since World War II. Many studies have focused on the development that occurred at the outer fringe of metropolitan areas during this period, but few studies have examined the changes occurring in inner suburbs during this same period. This aspect of suburban America is examined because it is a common feature of metropolitan areas in the northeast United States. Economic, housing, and demographic data from the U.S. Census from 1950 to 1990 form the basis of this study of seven communities in suburban Washington D.C. Weighted and standardized scores for selected characteristics for these places and recorded over time formed the analytical base. Communities making substantial shifts of standardized scores over time were examined and compared to urban neighborhood life cycle models. Explanations are offered that examine changes in these communities. The discussion of the processes involved in their changes over time should be applicable to other inner suburban areas in the northeast United States.

INTRODUCTION

Suburbanization, a process that has its origins in the nineteenth century in the United States, is present in almost all American cities. The expansion of this process in the post-World War II period in America has been at the center of many studies (Checkoway 1980, Epstein 1967, Jackson 1985, Muller 1981). The growth in urban areas after 1945 was largely at the outer fringe of the urbanized areas, in communities referred to as outer suburbs. Inner suburban communities, however, were founded prior to 1940, developed along transportational nodes, and were generally located within 10 miles of the city limits. Since much of the infrastructure, streets, sewers, and utility lines of these inner suburbs were built prior to World War II, the response of these communities to the post World War II trends in suburbanization was much different than that of the outer suburbs. These inner suburbs continue to have a distinct, if declining character. According to Paul Knox, "In every American city these infill (inner) suburbs survive today as distinctive elements of urban form: what are now considered to be relatively high density suburbs with relatively small houses and few neighborhood amenities. Most have filtered down the scale to become working class suburbs."(Knox 1994). As metropolitan areas continue to change in the post war years, inner suburban communities, part of most metropolitan areas, seem to be largely overlooked.

Part of the Washington D.C. metropolitan area was examined for this study. The general pattern of suburban growth in the Washington area appears to be similar to that in other cities in the northeast and midwest United States. Suburban nodes appeared in the mid nineteenth century along steam railroad lines and in the late nineteenth and early twentieth centuries along electric streetcar lines. Suburban communities that formed in this manner and were incorporated prior to World War II can be considered inner suburbs.

Seven middle class inner suburban communities were selected for the post WWII era. These communities are Bladensburg, Brentwood, Capitol Heights, Cheverly, Hyattsville, Riverdale and Mt. Rainier, Maryland (Figure 1). This figure labels the test communities and shades them in gray. All these communities are in Prince George's County, Maryland. They are examples of inner suburbs that were incorporated prior to WWII particularly between 1870 and 1920, and had origins along steam railroad or electric streetcar lines. Bladensburg was a colonial trading post but was not largely developed until the early twentieth century after the advent of the streetcar.

Figure 1

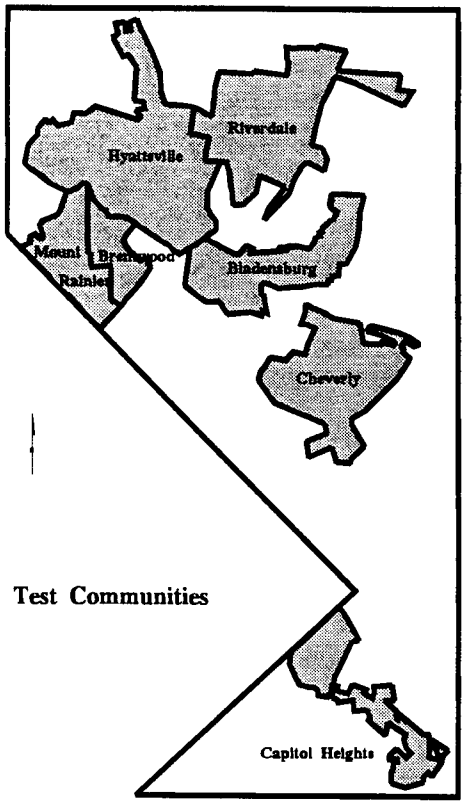
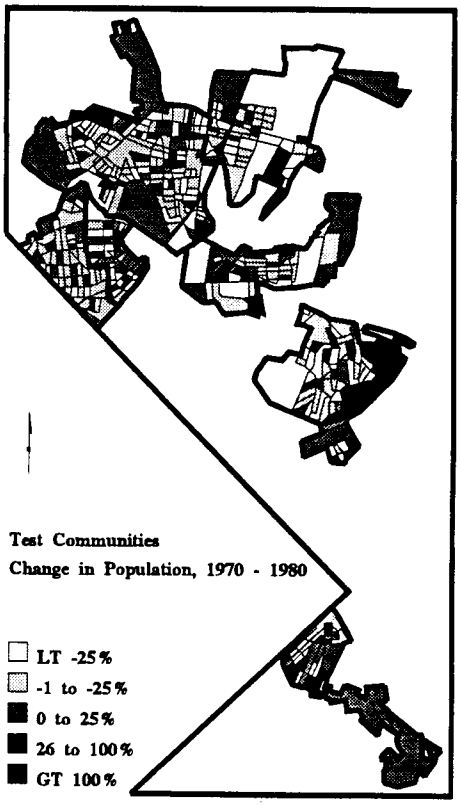


Figure 2



DESIGN

During this period of rapid suburbanization at the metropolitan fringe, these communities already had much of their infrastructure in place and were similar to cities in this regard. Did these communities respond in a manner similar to cities to the changes occurring in metropolitan areas after WWII? These communities appear to have urban characteristics, as referred to by Knox, and urban models may be useful in explaining these changes. Three urban neighborhood life cycle models will provide a framework for this study.

Urban Models

The models to be used have been formulated by Patricia Gober, Larry Bourne and David Birch (Gober 1986, Bourne 1981, Birch 1971) and are detailed in figure 3. Each provides a hypothetical neighborhood life cycle. All three models emphasize the evolution from young to old of both housing and demographic structure. All imply eventual thinning, but different final stages. Gober suggests variety, and refers to a mix of household types such as single parent families and non-family households. Bourne suggests renewal and rehabilitation and refers to housing. He suggests that public housing or luxury highrises or townhouses will be constructed on urban land that is increasing in value. Birch suggests recapture, which is a return to his stage three, and thus implies a cyclical pattern.

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It is the purpose of this paper to seek out the processes occurring in the test communities within a framework of urban neighborhood life cycle models. Since these communities were older and well established in 1950, the start of the test period, it seems possible that the end of a life cycle was being reached during the test period and the final stages of the models should be studied. The specific questions asked are: Do urban models apply to inner suburban communities? Do we return to the beginning of these models at the end of the cycle?

Procedures

A z-score analysis was performed on census data for each community for each census year from 1950 to 1990 to identify socio-economic attributes for each of these communities and to see how they shifted over time relative to one another. The attributes obtained from the census were: percent population change (from the previous census), percent of owner occupied housing, percent of single family housing units, median family income, population per housing unit, and median value for a single family house. These attributes are available on the political unit level for these communities.

Each community was compared for each of the attributes and a standardized z-score calculated for each attribute. (Figure 4) The standardized scores were then added together for each community for each census year to obtain a composite z-score. This composite score was used to compare the communities over time. The communities remained relatively stable over time which suggests that whatever trends were occurring in this area affected all of the test communities similarly.

Figure 3

URBAN NEIGHBORHOOD LIFECYCLE MODELS

	GOBER	BOURNE	BIRCH
Stage one	New Houses New Families	Young Families	Rural
Stage Two	Old Houses Old Families	Infilling with Multiple Family Units	First Wave of Development
Stage Three	Childless Couples	Thinning Out, Non Families Dominate	Fully Developed High Quality Residential
Stage Four	Variety of Household Types	Renewal or Rehabilitation	Packing - High Density
Stage Five	N/A	N/A	Thinning
Stage Six	N/A	N/A	Recapture - Tear Down and Replace with Stage Three

Figure 4

1950 z-score	1	2	3	4	5	6	7
Population chg	0.30	-1.07	-1.23	1.98	-0.44	0.15	0.3
Owneroccc%	0.07	-0.30	0.40	1.84	0.24	-1.75	-0.51
Single Family %	0.09	-0.35	0.90	1.54	0.16	-1.86	-0.48
Med Fam Inc	-0.17	0.02	-1.20	2.00	0.59	-0.18	-1.06
Pop per Unit	-0.22	0.16	-0.98	-0.98	0.55	2.08	-0.6
Med Value sfh	0.29	-0.77	-1.62	1.92	0.14	-0.07	0.1
Composite z	0.37	2.31	-3.73	8.30	1.24	-1.62	-2.25

1960 z-score	1	2	3	4	5	6	7
Population chg	-0.17	-0.26	0.17	1.99	0.53	-0.91	-1.35
Owneroccc%	0.10	-0.57	0.30	1.55	0.03	-1.96	0.57
Single Family %	0.03	-0.63	0.85	1.33	-0.10	-1.97	0.49
Med Fam Inc	0.01	-0.67	-0.90	2.29	0.21	-0.58	-0.36
Pop per Unit	-0.23	0.35	-1.10	-1.10	0.23	2.08	-0.23
Med Value sfh	0.22	-0.77	-1.16	2.12	0.26	-0.68	0.01
Composite z	-0.04	-2.56	-1.83	8.18	1.13	-4.01	-0.87

1970 z-score	1	2	3	4	5	6	7
Population chg	2.31	-0.60	-0.64	0.09	-0.49	-0.80	0.13
Owneroccc%	-1.42	0.16	1.37	1.10	0.38	-1.28	-0.31
Single Family %	-1.33	0.08	1.71	0.84	0.20	-1.23	-0.26
Med Fam Inc	-0.11	-0.80	-0.07	2.22	0.24	-1.09	-0.38
Pop per Unit	0.50	-0.05	-2.08	-0.42	0.32	1.42	0.32
Med Value sfh	0.18	-0.90	-0.76	2.19	0.14	-0.86	0.0
Composite z	0.13	-2.12	-0.48	6.02	0.79	-3.84	-0.5

1980 z-score	1	2	3	4	5	6	7
Population chg	0.93	-0.50	2.03	-0.61	-0.73	-0.24	-0.89
Owneroccc%	-1.46	-0.06	1.47	1.08	0.36	-1.16	-0.23
Single Family %	-1.48	0.09	1.77	0.85	-0.12	-0.96	-0.15
Med Fam Inc	-0.82	-0.71	0.58	2.00	0.41	-1.07	-0.39
Pop per Unit	0.33	0.33	-2.36	-0.01	0.41	0.95	0.36
Med Value sfh	-0.05	-0.89	-0.84	2.20	0.30	-0.77	0.06
Composite z	-2.55	-1.74	2.65	5.51	0.63	-3.25	-1.26

1990 z-score	1	2	3	4	5	6	7
Population chg	-0.60	-1.83	1.36	-0.63	0.66	0.36	0.69
Owneroccc%	-1.39	0.27	1.40	1.18	0.12	-1.22	-0.38
Single Family %	-1.43	-0.15	1.69	1.04	0.07	-0.97	-0.25
Med Fam Inc	-0.41	-0.89	0.12	2.33	-0.09	-0.68	-0.38
Pop per Unit	0.64	-0.16	-2.22	-0.28	0.50	1.04	0.48
Med Value sfh	-0.23	-0.78	-1.21	2.05	0.59	-0.55	0.14
Composite z	-3.42	-3.55	1.14	5.68	1.85	-2.00	0.3

Column 1=Bladensburg, 2=Brentwood, 3=Capitol Heights, 4=Cheverly, 5=Hyattsville, 6=Mt Rainier, 7=Riverdale.

MAPS

A number of maps were prepared from the census data that reflect the changes occurring in these communities. Figure 2 shows the population change in the test communities form 1970 to 1980. Population had been relatively stable or declining between 1950 and 1980. This map suggests a continuation of this trend. Large areas of the map indicate declining population. This suggests the thinning stage that is referred to in all three models. The data displayed in figure 5 shows the population changes from 1980 to 1990. Many more block areas are in the positive population change ranges. The population was generally increasing during this time. This is notable after years of stable or declining population. The population seems to be turning over and this could indicate the end of the thinning cycle and possibly the start of a new stage.

Figure 5

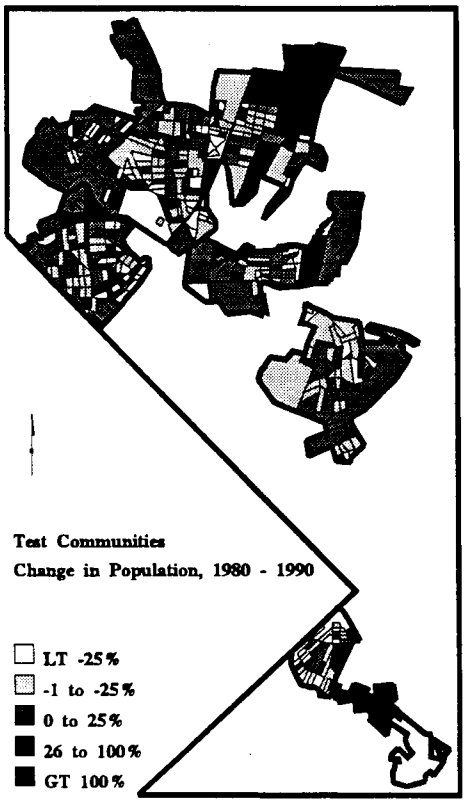
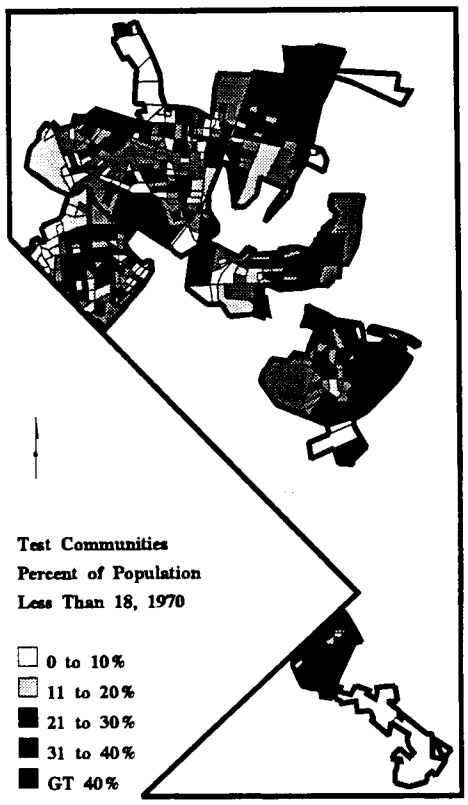


Figure 6



TRANSFORMATION OF MIDDLE CLASS SUBURBS

The next series of maps addresses the presence of families in these inner suburbs. The presence or absence of families is an indication of lifecycle stages in the urban models presented. Families are generally indicated by the presence of children. Figure 6 shows the percentage of the population that is under 18 years of age in 1970. A large number of blocks are in the greater than 40% range as well as the 31-40% range, indicating that children are present in most areas. Figure 7 shows the percentage of the population that is less than 18 in 1980. This period has noticeably fewer children present in most areas, a further indication of an aging and thinning population as children leave the home or families move out. The final map in this sequence shows the percentage of population under 18 in 1990 (Figure 8). The data suggest a slight continuation of the trend towards fewer children. More blocks appear in the ranges less than 20%, including the notable example of Bladensburg which has less than 20% under 18 years old in all its census blocks. This offers further support to the notion that the thinning stage has occurred. This could also indicate the influx of new young families without children as well as reflect the variety stage of Gober's model with a mix of "non-traditional" household types.

Figure 7

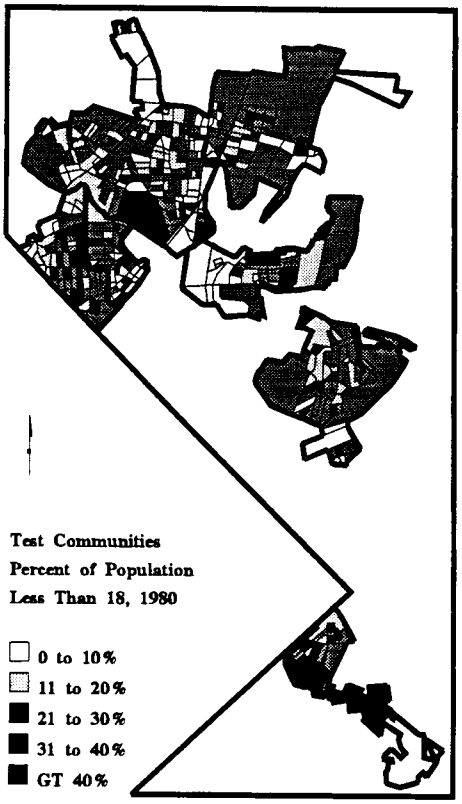


Figure 8

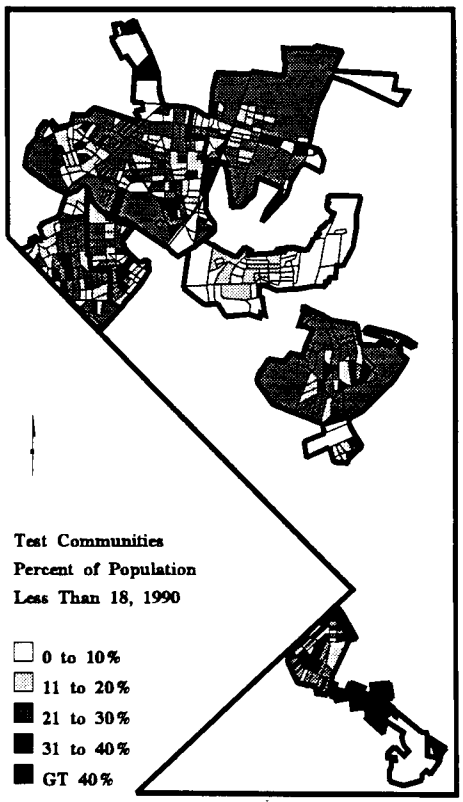


Figure 9

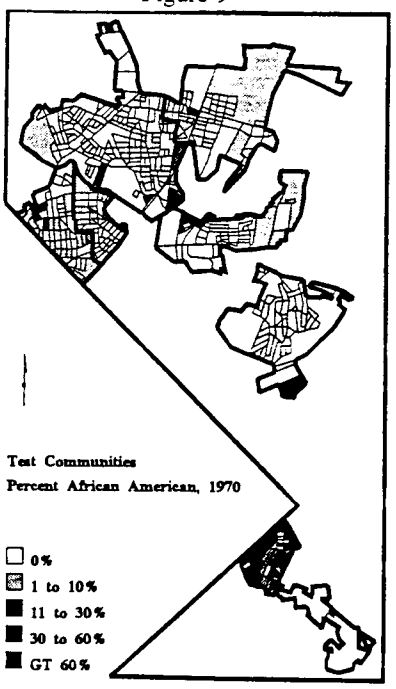


Figure 10

Figure 11

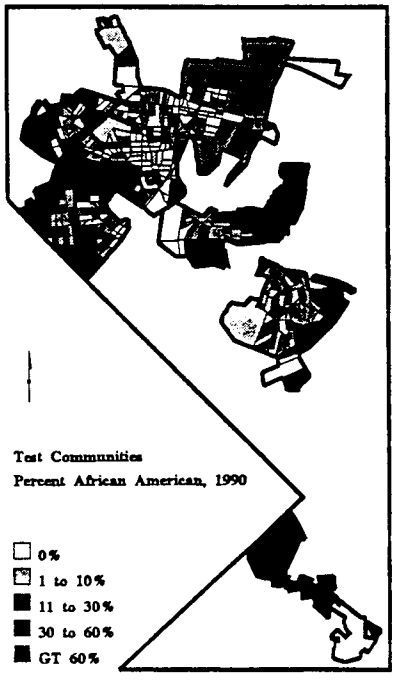
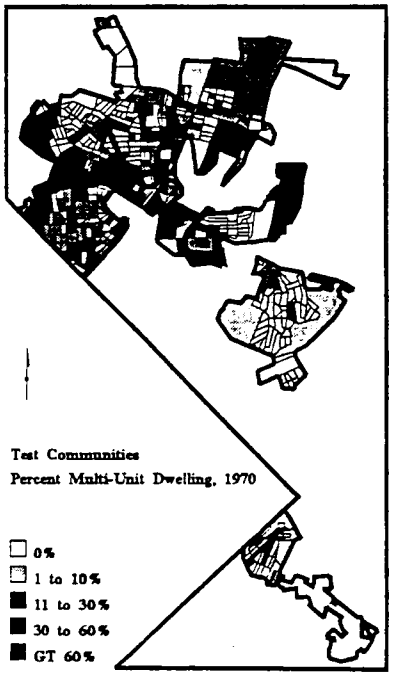


Figure 12



The most dramatic changes that occurred in these inner suburbs during the study period was the changing of ethnic composition in the population. Other than African Americans, few other minority groups were present throughout the study period. The small size of the African American population in 1970 in the test communities is evident in Figure 9. Many blocks in this period are in the 0% range. The only area with a significant portion of African Americans was Capitol Heights which directly borders the District of Columbia. Figure 10 displays the percentage of African Americans in 1980. There is clearly a significant increase in the percentage of African Americans in these communities between 1970 and 1980. Many blocks are in the 30 to 60% range and the greater than 60% range. Mt. Rainier, Brentwood, Hyattsville and Bladensburg show significant increases in these areas.This ethnic change was occurring at the same time that total population was dropping. This is an indication that many white individuals were leaving these communities. Figure 11 shows the percentage African American in 1990. There is more of an increase in the percentage of African Americans, indicated by even more blocks in the 30 to 60% and greater than 60% range. Mt. Rainier seems to have experienced the largest transformation, yet Brentwood and Bladensburg have also undergone significant transition. Overall these communities seem to have experienced a significant change in demographics. It seems likely that a life cycle stage has ended and a new one has begun. The population is now of different ethnicity than at the start of the study period, and is visible in the census data. This shift to a predominantly African American population in many areas agrees with the final stage of Birch's model, that of recapture, since he allows for a change of ethnicity when entering stage three.

When considering the effects of housing type on the changes in these communities, the areas of initial entrance into these suburbs seem to have been apartment structures. Figure 12 shows the percentage of multiunit dwellings (more than one dwelling unit per structure) for the test communities for 1970. The increase in African American population appeared to start in the areas were multiple unit dwellings were most concentrated. Cheverly had the fewest number of blocks with multiple dwellings units and seems to have experienced the least ethnic change. Elsewhere, areas with apartments seem to have been the main point of entrance. The presence of apartments accelerated the process of change in these communities through relatively easy access of lower priced rental units.

CONCLUSION

The urban models used in this paper seem to explain the changes in these inner suburban communities in general. They appear to explain the changes occurring through the end of one cycle. Inner suburban communities do seem to be behaving like urban areas. The change in ethnicity, increase in population from 1980 to 1990 and the drop in the percent of population under 18 years of age indicate this. Birch allows for changing ethnicity and Gober refers to changing household types away from traditional families (lack of children). The neighborhood life cycle models seem to reach their final stages in these communities. Gober's variety stage seems to offer the best explanation for the situation in 1990. A new stage may be necessary, however, to describe the behavior of new and ethnically different populations during the last ten years in the northeastern United States.

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