

## **URBAN REDEVELOPMENT, BASEBALL, AND DISPLACEMENT IN WASHINGTON D.C.**

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**ABSTRACT:** *In December 2004, D.C. and Major League Baseball agreed to a public financing package to build a 41,000-seat baseball stadium for the Washington National baseball team. In February 2006, the D.C. City Council passed the required stadium lease agreement. A ceremony to celebrate the placement of the final structural steel in the stadium was held July 11, 2007. The stadium is scheduled to be ready for Opening Day in 2008. The stadium is intended to spur economic development, including the demand for high-value housing, in the area. Changes in the area's housing costs are likely to displace current residents, especially minorities, though no estimate of their number has been reported. This paper calculates estimates of minorities' displacement resulting from the new stadium's construction by first estimating the minorities' elasticity of demand for housing in the district, and then calculating minorities' displacement using an analog model.*

**Keywords:** *Stadium, Redevelopment, Displacement, Estimate*

### **INTRODUCTION**

Mayor Anthony Williams is committed to the economic redevelopment of Washington D.C., especially the southeast quadrant of the city. At the center of his redevelopment plans is a new baseball stadium. The mayor and other stadium proponents cite the success of Baltimore's Oriole's Park at Camden Yards, and studies by Robert Charles Lesser & Co., LLC (RCLCo, 2005) to support claims that the new baseball stadium will create jobs; will promote widespread physical changes in market-challenged areas; will "brand" the area as the baseball district, thus creating a new market awareness for the community; will create new retail and entertainment destination for city residents and visitors; will stimulate demand for new high-value housing in the area; and yield billions of dollars in tax revenue (Williams, 2006).

Opponents of the stadium argue that the mayor's claims are made without supporting data; and that redevelopment is likely to adversely affect residents, especially minorities, in the surrounding area. In terms of economic benefits, critics note that the Camden Yards stadium produces far fewer benefits than costs. Lazere (2003) has shown that Camden Yards yields \$3 million in annual economic

gains to Maryland, while its annual public costs are \$14 million. Critics of sports venues as a redevelopment tool note that the new jobs created by stadiums are often offset by reduced employment in other parts of the city, and are commonly low-paying, part-time concession jobs (Friedman et al., 2004). As for retail development, critics argue that a stand-alone baseball park with 81 games a year is unlikely to induce many rational retailers to locate businesses in the area (Zimbalist, in Lazere, 2003).

Regarding residents, critics note that any further increase in high-cost rentals and high-value homes will worsen the pressures on the city's already-skewed housing market (Rodgers and Lazere, 2005). Between just 2003 and 2004, the city lost 2,400 affordable rentals and 9,400 affordable homes, and gained 4,600 high-cost rentals and 10,800 high-value homes (Rodgers, 2005). Central to this criticism is a concern that the displacement of minorities is likely to follow from increases in housing costs that will accompany the construction of the stadium. There is, as yet, no estimate of the displacement that can be expected to accompany the new stadium's construction. This paper represents a first step in filling that void.

## **THE LITERATURE OF REDEVELOPMENT AND DISPLACEMENT**

Mayor William's plans for the transformation Washington's southeast quadrant is, essentially, a scheme to create and exploit a "rent-gap" in the neighborhood surrounding the new stadium.

### **Rent Gap Theory**

Rent-Gap Theory remains the principle explanation of urban redevelopment processes (Lind and Hellstrom, 2003). Rent-Gap Theory focuses upon the disparity between "the actual capitalized land value of a parcel given its present use and the potential value that might be gleaned under a 'higher and better' use" (Smith, 1979). Rent-Gap Theory argues that redevelopment is a process of intentional "capital devalorization" whereby land-owners purposely allow properties to become blighted. The subsequent disparity between the actual capitalized land value of a parcel given its present use and the potential value that might be gleaned under a 'higher and better' use represents a "rent-gap." The theory argues that when the rent-gap was wide enough, developers and landlords see the potential profit to be had in redeveloping the parcels for new inhabitants. Such redevelopment effectively closes the rent-gap and leads to higher rent, mortgage and lease rates. Higher rents and property values act to displace residents, many of whom are minorities.

### **Multiple Dynamics Theory**

Beauregard (1990) augments Rent-Gap Theory by arguing that redevelopment and displacement represent more complex forces than a simple rent-gap. He posits that neighborhoods are influenced by the tension between accumulation and community. Together these represent the problematic intersection of structural forces with the particularities of space. For Beauregard, interclass struggles occur in neighborhoods as different groups attempt to establish their own norms and image, and the potential for redevelopment is both a function of accumulation opportunities and of the nature and strength of the 'community' as historically produced (Beauregard, 1990, p. 856). In this manner, Beauregard broadens Rent-Gap Theory to account for a redevelopment process which occurs when investors discover the potential for profit in neighborhoods undergoing inter-class struggle.

### **Empirical Studies of Displacement**

Estimates of the amount of displacement accompanying neighborhood transformations can be found in Leckie (1995), Rauta and Pickering (1992), Marcuse (1986), Lyons (1996) and Atkinson (2000). Each estimate, as is the one to follow, is limited by the fact that the magnitude of people displaced is a difficult thing to measure (Lind and Hellstrom, 2003). In part, this may be because displacement has various forms: direct, indirect and secondary (Atkinson, 2000). Directly displaced peoples are those forced to move by extreme forces such as eviction or government claims to eminent domain. Indirect displacement refers to resident who wish to stay in a neighborhood but can no longer afford to do so when redevelopment occurs. Secondary displacement is that which follows from higher rents and property values in areas adjacent to redeveloped neighborhoods.

## **METHODS**

Direct displacement is calculated by simply tabulating the number of minority residents forced to move because of the stadium's footprint. Indirect and secondary displacement is derived by first estimating minorities' elasticity of demand for housing in the district and then applying the resulting coefficient to expected changes in rent to the stadium's neighborhood and to adjacent neighborhoods. Census block groups are used in lieu of neighborhoods, because the latter are not geographically defined by the district. Census blocks adjacent to the stadium site, and forming a concentric ring contiguous to the stadium site, bound the area of indirect displacement; and census blocks in adjoining concentric rings, one-half mile wide and extending to a distance of 2.5 miles from the stadium site, delimit the area of secondary displacement. Due to the irregular shape of certain block groups, some could be assigned to more than one concentric ring. In these cases, the block group is assigned to the concentric ring in which the majority of the block group lies.

The use of census block groups for the analysis follows previous research on Washington D.C. neighborhoods. Cunningham and Droesch (2005) note that the neighborhood definitions vary, but are often based on a census-unit aggregation. The Urban Institute of Washington D.C. uses census units as the spatial unit of neighborhoods because

they “capture a group of residents with similar population characteristics, economic status, and living conditions (Kingsley and Petit 2007). For Washington D.C., at least, census units seem to approximate neighborhoods well (Turner and Fenderson 2006).

This concentric ring pattern is produced for both the existing Baltimore stadium and the new D.C. stadium: for Baltimore’s in order to measure actual changes in housing costs, an experience proponents of the new D.C. stadium hope to replicate, and for the new D.C. stadium to apply expected changes in housing costs.

**Estimating D.C. Minorities’ Elasticity of Demand for Housing**

Washington D.C.’s minority populations’ elasticity of demand for housing can be estimated as:

$$\ln(pop) = a + b_1 (\ln(rent)) + e$$

where “pop” is measured as the count of minority population in a census block group, “rent” is measured as the median rent in/of that census block group’s housing, and the log-transformation of the variables yields the classical econometric definition of elasticity. The estimated coefficient (b<sub>1</sub>) is interpreted as the percentage change in minorities’ population due to a one percentage point change in median rent.

**RESULTS**

The estimated elasticity of demand for housing by the district’s minorities is:

$$\ln(pop) = 1.734 + (-0.672) (\ln(rent)) + e$$

(9.039)                      (- 3.494)

$$r^2 = 0.406$$

t-scores in parentheses

The estimated equation has moderate explanatory power: roughly 41% of the variance in minority population counts in Washington D.C. census block groups can be “explained” by the variance in census block group median rents. Minorities’ elasticity of rent has the correct sign, and is statistically significant: as median rents increase, minority populations decrease. The t-score of the coefficient

b<sub>1</sub> is -3.494, and is interpreted to mean that the probability of making a mistake by rejecting the null hypothesis, that b<sub>1</sub> = 0, when it should not be is less than 0.000.

The coefficient is interpreted as follows: a 1% increase in a census block group’s median rent, yields a less-than-one percent increase in the census block group’s minority population. In other words, minority populations’ demand for housing in Washington D.C. census block groups is inelastic.

**DISCUSSION**

One explanation for minorities’ inelasticity of demand for housing may lie in two characteristics of the D.C. housing market: the high costs of housing in adjoining markets and the subsidies provided to low-income residents. Regarding the former, Angie Rodgers of the D.C. Fiscal Policy Institute testifying at a public hearing on the reform of the district’s Rental Housing Act of 1985, noted that “rents in the close-in suburbs of Arlington, Alexandria, Fairfax, Montgomery County and Prince Georges County are more expensive then rents in the District. If families are being pushed out, where are they going to go?” (Rodgers, 2005). The higher rents in surrounding areas clearly limit the choices available to district residents when facing increases in housing costs associated with redevelopment. Coupled to these cost constraints, are the subsidies to low-income families provided by the district. While these same subsidies (for child care, Medicaid, food, and transportation) are available in Prince George’s County Maryland and Fairfax County Virginia, their impact makes total living costs significantly lower in the district—reducing the monthly “self-sufficient” wage from \$3,549 to \$1,269 (Pearce and Brook, 1999). In Prince George’s County that monthly self-sufficient” wage is 46% higher (\$1,860) and in Fairfax county it is 70% higher (\$2,156). Given these characteristics, it is a seemingly rational choice for minorities to remain in the district and absorb higher housing costs, and it is understandable that minorities exhibit an inelasticity of demand throughout the district. The study now turns to estimating displacement.

**Direct Displacement**

The number of minority residents directly displaced by the new stadium is quite small. The census block group which is covered by the stadium’s footprint contains 18 minority peoples.

Most of the area is vacant and/or occupied by small businesses, whose properties are being taken through eminent domain.

**Indirect and Secondary Displacement**

Estimating the minority population whose displacement is “indirect” and those whose displacement is “secondary,” involves applying the estimated elasticity to the expected changes in median rent, derived from the experience of Baltimore, to the concentric rings. Table 1 summarizes the results.

The number of minority peoples whose displacement is indirect and secondary is projected to be 8,176. The total number of minorities residing in these rings is 66,497. Thus, indirect and secondary displacement of minorities amounts to roughly 12.3% of total minority peoples living in the area of the proposed stadium. This low number (12.3%) probably reflects the inelasticity of minorities’ demand/price curve with respect to rents noted above.

Table 1. Displacement Results

"ring" ID	Projected Average Percent Change in Median Rent*	Displaced ("indirect" & "secondary") displaced minority population (estimated)
1	69.65	1,915
2	62.67	3,331
3	31.43	2,301
4	25.14	629

Note: Average percent change in concentric-ring-specific median rent taken from actual percent changes in corresponding concentric-rings surrounding Baltimore’s Camden Yards Baseball Park.

**CONCLUSION**

This study estimates the housing displacement of minority residents located in and around the proposed site for a baseball stadium in Washington, D.C. Total displacement, direct (18) together with indirect and secondary displacement (8,167), is estimated to be 8,185. While this displacement may seem small, numerically, the underlying circumstances of redevelopment in the area pose significant problems for minority residents.

Unable to move because of economic conditions in the district and in surrounding housing markets, they face a difficult choice: absorb increases in housing costs within the redeveloping area or absorb increases in total living costs associated with a move to some new location with lower subsidies. At this point in time, it cannot be determined which of these choices will prevail. To do so will require a follow-up study.

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