

# Latino Park Access: Examining Environmental Equity in a “New Destination” County in the South

Cassandra Johnson-Gaither

---

**EXECUTIVE SUMMARY:** This paper examines Latino migration to a “new destination” county in the southeastern U.S., Hall County, Georgia, where environmental equity is considered in terms of Latino communities’ walking access to public and private parks in the county. Park access is considered an environmental equity or justice issue because some research shows less park acreage available to minority and immigrant communities, compared to communities where residents are mostly white and U.S. born. Given that much Latino settlement in the county has occurred in working class, majority white neighborhoods, I examine the amount of parkland acreage that, in 2000, had significant Latino, white, and African American populations. Findings show that formerly working class white communities contained considerably fewer park acres than more affluent, mostly white communities elsewhere in the county. Consequentially, Latinos moving into these areas had access to little park acreage relative to amounts available in the county. Results suggest that Latinos must live in more integrated, middle- and upper-income neighborhoods to access a greater number of parkland acreage. Information from this study can be used to help inform park planning at the municipal and county levels, with a particular focus on improving access for the county’s Latino populations. Latino settlement is confined largely to two central-city (Gainesville, Georgia) census tracts where the amount of land available for park conversion is extremely limited. White settlement, on the other hand, extends to the outlying suburbs with more potentially convertible land. Possible strategies to address the relative lack of parkland in higher density Latino communities include converting land from existing uses such as abandoned landfills, rail yards or lines to park acreage; or the establishment of land sharing initiatives whereby neighborhood residents use schoolyards or even cemeteries for recreation. The larger task, however, for city leaders and community organizers is to involve the affected citizenry in decisions about parkland conversion; as Harnik (2010) argues, the most effective strategies for increasing park acreage involve grassroots, political engagement. Indeed, procedural justice, or the participation of nonwhite, minority, and poor communities in decisions about the production and distribution of both environmental burdens and goods (park resources) is a central tenant of environmental equity.

**KEYWORDS:** Latino migration, park access, environmental equity

**AUTHORS:** Cassandra Johnson-Gaither is with the USDA Forest Service Southern Research Station, Forestry Sciences Lab, 320 Green St., Athens, GA 30602, phone: 706.559.4270, Email: cjohnson09@fs.fed.us.

**ACKNOWLEDGMENT:** Technical assistance for this study was provided by Urban Forestry South ([www.urbanforestrysouth.org](http://www.urbanforestrysouth.org)).

---

Since 1990, Latinos have either migrated or immigrated to nontraditional areas of the southeastern U.S. (states other than Florida) in unprecedented numbers. Between 1990 and 2000, the Latino population of Georgia, North Carolina, and Tennessee increased 324%, 440%, and 284%, respectively (U.S. Census Bureau, 1990, 2000a, 2000b). The increases were less from 2000 to 2010 in each of these states (96.1%, 111.1%, and 132.4%, respectively), but Latino growth exceeded that for whites by at least 9 to 1 and 3 to 1 for African Americans in this most recent period (U.S. Census Bureau, 2000a, 2011a).

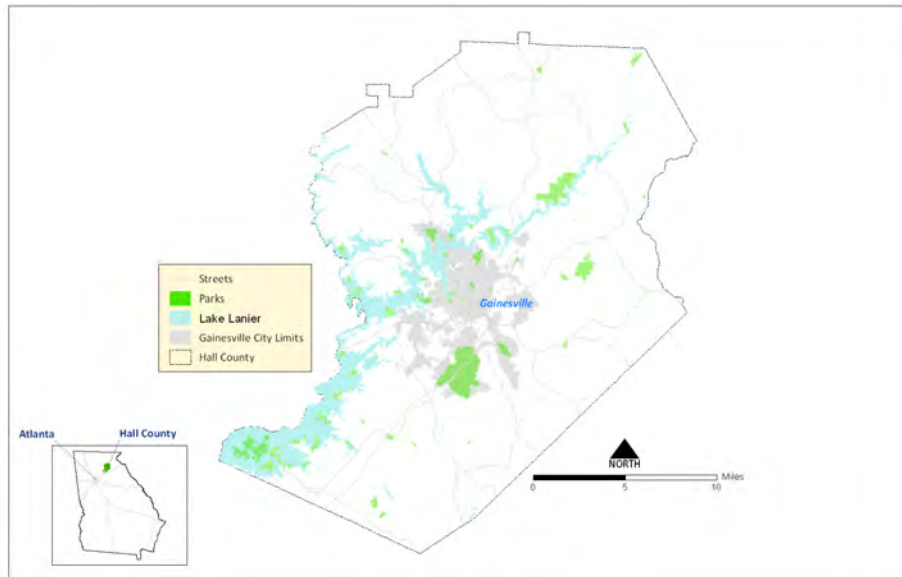
Historically, large cities outside the southeast (Miami as an exception) have been the primary recipients of immigrant populations and this continues to be the case (Suro & Singer, 2002). However, smaller cities, towns, and rural areas in the Appalachian, Piedmont, and “Black Belt”<sup>1</sup> South are receiving Latino populations (primarily from Mexico) in growing numbers as these groups spread outward from traditional destination sites (Kandel & Cromartie, 2004; Smith & Furuseh, 2006; Winders, 2005; Zúñiga & Hernández-León, 2001).

In the South, these trends have transformed longstanding, “black<sup>2</sup>–white” communities into tripartite places grappling with cultural change (Yarbrough, 2007). For example, Winders (2005) questions how Latino migration to nontraditional destination cities in the South “has challenged the centrality of a black–white racial binary in southern urban politics and social relations” (p. 692) and urges that more serious academic and policy consideration be given to southern cities receiving large immigrant populations.

Presented in this paper is a case study of one such nontraditional Latino destination or relocation site in the South: Hall County, located in northeast Georgia (Figure 1). I compared walking access (one-quarter mile) to parks<sup>3</sup> in Hall County for communities where at least 50% of the residents were Latino, black, or white; and where percentage below poverty and below aged 18 were greater than 25%. In doing so, I address the broader topic of environmental equity,<sup>4</sup> specifically the equitable distribution of parklands across sociodemographic groupings. By interrogating the topic of equity in parkland distribution throughout Hall County, I engage with an emergent trajectory of environmental justice, which in the South, has usually involved disparities between lower income black and middle or upper income white communities (Bullard, 1990; Coyle, 1992; Checker, 2005). The growing Latino presence demands an examination of park access for some of the South’s newest arrivals.

### **Latino Migration to the “Old South”**

Hernández-León & Zúñiga (2000) trace the beginnings of significant Latino migration/immigration to Georgia in the late 1980s, when young (primarily), Mexican migrant workers, lured by growing southern economies and less anti-immigrant sentiment and job competition, moved from the American southwest to the South. Documenting the phenomenal increase in the Latino population of “Carpet City,” a small northwest Georgia textile manufacturing town, Hernández-León & Zúñiga (2000) write that federal



*Figure 1. Hall County, Georgia*

immigration reform in the mid-1980s paved the way for Latin American immigrants to move more freely within the U.S. The South's lucrative economy in the 1990s and need for low wage laborers in industries ranging from hotel services to poultry processing combined to produce one of the most significant migrant/immigrant flows in recent history.

Studies have examined Latino employment, health care, housing, education, and transportation access in parts of the South where they are relatively new arrivals (Atilas & Bohon 2002; Bohon, MacPherson, & Atilas, 2005; Harrison & Scarinci, 2007; Johnson-Webb & Johnson, 1996; Smith & Winders, 2008); but few investigations have examined Latino communities' access to parkland in new destination areas (i.e., Elmendorf, Willits, Sasidharan, & Godbey, 2005 as an exception). However, immigrant and minority access to outdoor, natural places in the South is an important consideration for urban ~~foresters and~~ park managers to address because of the many human benefits associated with park access, such as physical, social, and psychological well-being (Hartig, Evans, Jamner, Davis, & Gärling, 2003; Kaplan & Talbot, 1988).

Moreover, this topic is relevant to city planning because urban parks may be the sole natural resource available to some immigrant communities. Residents in lower income, minority and immigrant communities are less likely to own private automobiles or to live in places with sufficient investments in public transportation. For instance, Bullard, Johnson, and Torres (2004) documented the lack of transportation in minority and immigrant communities in metropolitan Atlanta and the difficulties this presents for lower income, central-city residents seeking employment in outlying suburbs. It may be that lack of transportation also limits access to natural resource engagement for those with few transportation options. Indeed, Atilas and Bohon (2002) stress that lack of adequate transportation is one of the major constraints to integration of Georgia's Latino populations.

### **Latino Settlement in Hall County, Georgia**

In 2000, Latinos accounted for about 20% of Hall County's population and 33% of Gainesville's population (U.S. Census Bureau, 2000a). Gainesville is the county seat. As of 2010, the Latino population had increased to 26% of the county population. By 2010, Latinos had increased to 41% of Gainesville's population. I base the analyses on Census 2000 population estimates because other than race and ethnicity, many of the sociodemographic and population data are not yet available at the scale used in this investigation (census tract).

In 2000, the Latino population in Gainesville and Hall County was predominantly of Mexican origin. Roughly 84% of Hall County Latinos claimed Mexican ancestry and 83% of Gainesville Latinos had Mexican ancestry (U.S. Census, 2000c). This immigrant population was also young. Forty percent of Latinos were aged 0 to 19 and 26% were males between the ages of 22 and 39 (U.S. Census Bureau, 2000d). The countywide mean household size was 2.89 as compared to 5.16 for Latino households (U.S. Census Bureau, 2000e).

Through the effective use of social capital and entrepreneurial activities, Latino employment networks have come to represent powerful agents in the continual recruitment of immigrants/migrants to the southeastern U.S. (Hernández-León & Zúñiga, 2002; Hou & Milan, 2003; Winders, 2005). While Latino migration was welcomed by industries needing entry-level employees, it also drew anti-immigration backlash from some residents and extremist groups. These sentiments are evident in increasing Ku Klux Klan activity and the formation of anti-immigration groups in north Georgia counties with high Latino populations. Latino day workers have been brutally beaten in nearby Cherokee County and anti-immigrant aggression was suspected in the apparent beating death of a Latino worker in the county (Moser, 2004). Some longtime residents voice concerns about the growing number of young Hispanics in Gainesville who they believe overburden the school system. Also prevalent among some is the perception that young Latino males contribute substantially to increases in gang activity and violence in the larger county (Moser, 2004).

Hall County Latino communities are located in census tracts that were formerly central city, white working-class, and poor sections of the city. These communities and neighborhoods consist still of government subsidized or low rent properties. Census data indicate that "white flight" had been occurring for some time in central city neighborhoods, as many of the areas that were formally majority white had transitioned to include substantial Latino populations by 2000. For instance, in 1990, the earliest year for which comparable census tract delineations are available, percentage Latino was only 9% for track 10, a track which had 44% and 30% Latinos by 2000 (the track was split into two tracks in 2000). Further, percentage Latino more than doubled in track 11 from 1990 to 2000, increasing from 31% to 69% (U.S. Census Bureau, 2000b). This residential and neighborhood transitioning is indicative of Duncan and Duncan's (1957) "invasion-succession" model describing white exit from neighborhoods when African Americans gain entry (Denton & Massey, 1991 as cited in Hou and Milan, 2003).

### **Parkland Access as Environmental Equity**

From its beginnings in the early 1980s, environmental justice has been concerned with two primary objectives: the fair or just siting of environmental hazards or disamenities throughout society (distributive justice) and the participation of minorities and low socioeconomic status groups in decisions about the production of environmental burdens or goods (procedural justice). Corrective justice includes corrective measures to redress disparities in park distribution and access across different neighborhoods (Liszka, 2010). Procedural justice must not be overlooked because this level of participation represents a more fundamental achievement, which includes marginal populations in not only decisions about how to distribute what has already been produced or decided upon (by someone else) but also decisions about what should be produced a priori.

Research dating back to the 1980s shows that in a number of instances, ethnic and racial minorities and lower income populations, on a national scale, are disproportionately exposed to environmental hazards such as toxic waste facilities, polluting industries, and environmental contaminants in the home (United Church of Christ Commission for Racial Justice, 1987, p. 14). More recently, Mohai and Saha's (2007) national level reanalysis of the relationship between race and toxic sitings found an even stronger association among these variables than previously reported in the 1987 United Church of Christ study. Research specific to New Jersey employed spatial variation techniques to examine the relationship between toxic pollutants in that state and minority populations. Results generally showed positive associations for urban and suburban areas although this relationship did not hold for all urban areas (Mennis & Jordan, 2005). However, in California, Paster, Morello-Frosch, and Sadd (2005) found much larger pollution risks for Latinos and African Americans as compared to whites.

Environmental equity has expanded to highlight access or proximity of socially marginalized communities to environmental goods such as parks. Researchers argue that park access constitutes an environmental justice issue because of negative correlations between poor and/or minority neighborhoods and proximity to publicly funded parks and natural areas (Sister, Wilson, & Wolch, 2007; Sister, Wilson, & Wolch, 2008; Taylor, 2000; Taylor, Floyd, Whitt-Glover, & Brooks, 2007).

Examining this issue, Heynen, Perkins, and Roy (2006) found urban tree canopy in Milwaukee, Wisconsin, was located disproportionately more in white, upper income districts. In particular, Latino residency was negatively correlated with the amount of both public and residential tree canopy. A study of parkland acreage distribution in Los Angeles, California, revealed that majority white neighborhoods contained roughly 32 park acres per 1,000 residents, while predominantly Latino areas had only 0.6; Asian/Pacific Islander areas, 1.7; and African Americans, 0.3 (Wolch, Wilson, & Fehrenbach, 2002). Also, a nationwide examination of 409 communities showed higher income communities had more physical activity settings and those with higher percentages of black households had fewer parks and green spaces (Powell, Slater, & Chaloupka, 2004).

On the other hand, Talen (1997) found greater access to municipal parks in Macon, Georgia, for residents in predominantly nonwhite, lower income districts. More affluent, majority white areas farther from the central city had disproportionately less access to urban parks. The majority white census blocks in this study were located in the expanding suburban area of the city, which suggests more recent settlement. The relative lack of parks here may have to do with residential development outpacing park establishment.

More recently, Boone, Buckley, Grove, and Sister's (2009) study of park distribution in Baltimore, Maryland, found that while a higher number of African Americans as compared to whites were within walking distance of city parks, parks in majority African American districts had higher park congestion. The authors offer the "potential park congestion" (PPC) technique as a way of assessing the degree to which parks are equitably distributed across a given space. Similar to the current study, the Baltimore example draws attention to white flight and the urban parks realized by a succeeding minority population.

Boone et al. (2009) argued that more comprehensive investigations of environmental equity must include "place-specific," historical analyses that examine the underlying drivers or causes of inequities. These may include housing and employment discrimination, with the former excluding racial and ethnic minorities from majority white neighborhoods and job discrimination limiting gainful employment for minorities. While such an in-depth investigation is beyond the scope of the present research, attention to historical patterns of racial clustering in the city of Gainesville provides a broader context for understanding present day Latino settlement in the city and Latino community park access.

Important to this inquiry are both historical and contemporary racial segregation in Gainesville. African Americans residents of an in-town Gainesville neighborhood remark that the east/west corridor, Jesse Jewell Parkway, effectively divides the more affluent, largely white, north side of town from the lower income African American and Latino enclaves on the south side (personal communication, 2011). In 2000, roughly 54% of Hall

County's African American population was concentrated in South Gainesville and Hall County census tracts 7, 8, and 12. Tracts 7 and 12 are just outside of Gainesville and tract 8 is located southeast of downtown (U.S. Census Bureau, 2000a; Weitz & Weitz, 2005). While Latinos are more evenly dispersed throughout the city, they also cluster in south side communities, again in areas that were predominantly white, working class. Disproportionately large Latino populations reside in downtown-proximate, south side census tracts 10.1, 11, and 12. Weitz and Weitz's (2005) "Neighborhood Planning Framework" document developed for Gainesville in 2005 reports that 94.5% (4,905) of Gainesville residents who are at or below the poverty line reside in three south side neighborhoods, the majority black census track 8 and the heavily Latino tracts 10.1 and 11.

Latino communities are beset with many of the same problems prevalent in predominantly African American communities—higher crime rates, poor health and air quality, and limited environmental amenities (Hernandez & Arroyo, 2005; Kuo & Sullivan, 2001; Kuo, Sullivan, Coley, & Brunson, 1998; Stodolska & Santos, 2006; Taylor, Wiley, Kuo, & Sullivan, 1998; Taylor, Floyd, Whitt-Glover, & Brooks, 2007). One means of addressing health disparities for urban minorities is to promote physical fitness in urban parks (Floyd, Crespo, & Sallis, 2008; Floyd, Spengler, Maddock, Gobster, & Suau, 2008); although, Stanis, Schneider, Chavez, and Shinew (2009) found that Latinos reported a greater number of constraints to physical activity in parks as compared to whites. Alternatively, Lohr, Pearson-Mims, Tarnai, and Dillman (2004) found that Latinos were more likely than African Americans to agree that trees are important to life quality.

### Parkland Acreage and Latino Communities

As indicated, there are ~~not only numerous~~ examples of a relative lack of parks in minority communities across the country ~~but~~ also studies showing greater opportunities for park access in minority communities. My question is whether the long-established, white working-class communities into which Hall County Latinos have settled are areas that are within walking distance of city parks. I suggest that in the case of migrant/immigrant settlement in formerly majority white neighborhoods, new settlers may encounter established park structures. However, other considerations are the amount of acreage available to migrating groups. Typically, older, downtown proximate areas where immigrants settle are more densely populated; and while these areas may contain parks, these parks tend to be smaller in size than their suburban counterparts (Sister et al., 2007). Also, Low, Taplin, and Scheld (2005) found that when blacks moved to formerly majority-white communities in the 1970s, facility maintenance in public parks deteriorated due to multiple factors including declining park budgets and white flight to the suburbs. So, although minorities may encounter established green spaces when moving to formerly majority-white communities, service levels associated with park facilities may decline.

### How Much is Equitable?

In 1983, the National Recreation and Park Association (NRPA) recommended between 6.25 to 10.5 acres of parkland per 1,000 persons (Mertes & Hall, 1996); but in the mid-1990s, NRPA stopped recommending a set number of acres per capita. Instead, NRPA advocated a "systems" approach to park provision, which considers that various cultures or people situated at different points along the life cycle have different park needs (Mertes & Hall, 1996). The systems approach differs from earlier methods of park planning in that it stresses the need for individual communities to determine their desired level of service. Along similar lines, Harnik (2010) stresses that factors such as population density, "existing structures, streets, uses, patterns, customs, expectations, and general history" (p. 15) should be taken into account when devising the optimal number of parks in a given city. Further, Harnik (2010) recommends calculating park acres based on population density for a given area. The present research follows this recommendation.



### Purpose of the Study

The purpose of this study is to determine whether and to what extent Latinos and other selected social groups have equitable access to county parks. If proportional (to their numbers in the larger population) or greater than average percentages of Latinos or other sociodemographic groups live within walking distance of parks, this would suggest that parks are equitably distributed with respect to social groupings. More importantly, if parkland density per thousand residents in majority Latino areas is similar to that for other places in the country with similar population density, this would provide further support for the claim of equitably distributed park resources along ethnic lines in Hall County, Georgia.

Three research questions were examined in this study: (a) What is the mean number of Hall County residents within walking distance (a quarter mile) to park entrances; (b) what is the mean number of racial, ethnic, poor people, and persons below aged 18 within walking distance of a park; and (c) what is the density of specific racial, ethnic, poor people, and those under aged 18 within walking distance of a park?

### Method

There are 74 parks in Hall County. Of these, 29 are U.S. Army Corps of Engineers facilities located in the county's higher income Lake Lanier district; 21 are city parks (including Gainesville, city of Clermont and Flowery Branch); 18 are administered by Hall County; two are privately owned; two are Georgia State Parks; and two are a combined Gainesville/Hall County park. Total parkland is 7,987.3 acres (Figure 1).

Data for parks contained in the county are from state and county files. State park location and size were obtained from the Georgia GIS Clearinghouse (<http://gis.state.ga.us/>). Data for other Hall County park boundaries are from the Hall County Planning Office ([www.hallcounty.org/devserv/planning\\_zoning.asp](http://www.hallcounty.org/devserv/planning_zoning.asp)). Demographic data are from U.S. Census 1990, 2000 Summary File 1 and 3, the U.S. Census Bureau's July 2008 Population Estimates, and 2010 Redistricting data (Oak Ridge National Laboratory, 2008; U.S. Census Bureau, 1990, 2000a, 2011b).

Following Sister et al. (2008), Wolch et al. (2005), and Sister, Wolch, and Wilson (2010), the radius method of assessing park access for communities was used. A one-quarter mile buffer (Thiessen polygon) was drawn around a place of interest—in this case, entrance points for each park in Hall County. Generally, two or three park entrance points were identified based on visual inspection of parks using Google Earth. In other cases, with more open access, multiple entrance points were identified. In no case were boundaries simply drawn around an entire park with the assumption of free access from all sides. Seventy-four buffers were drawn.

The population within the one-quarter-mile buffer was estimated using population figures from the U.S. Census Bureau's July 2008 Population Estimates. These estimates were apportioned using LandScan algorithms, which modify or "move" populations based on ancillary data such as land cover, roads, slope, and nighttime lights (Oak Ridge National Laboratory, 2008). The aim is to redistribute populations based on physical features of place rather than assume populations are evenly distributed across a given area. LandScan provides approximately 1 kilometer x 1 kilometer polygons containing reapportioned population numbers. Sociodemographic characteristics associated with LandScan populations were calculated by multiplying the population proportion for a given group (e.g., Latinos) in a census tract that coincided with a LandScan polygon by the LandScan population. For example, if a LandScan buffer with 100 persons intersected a census tract where the proportion of Latinos was .20, then the Latino population for that section of the buffer was determined to be 20.

Total population, number of Latinos, blacks, whites, those in poverty, and those under aged 18 contained in each buffer were calculated. When these respective populations are summed across the 74 buffers, the totals are not true counts but rather a count of the number of persons with access to at least one park. The number is not an absolute population count because a person could be captured in more than one buffer. For this reason, the tables do not present aggregate population counts for all the buffers as this would overestimate the

distinct number of people with access to parks and acreage. Instead, mean population per buffer and mean percentages of a given group (e.g., mean Latino per buffer/mean population per buffer) are presented. To examine density, the number of park acres accruing to each group per 1,000 residents was also calculated.

As indicated, the present research estimates the optimal number of parkland acres for Hall County residents based on population density, as suggested by Harnik (2010, p. 18). Harnik (2010, p. 19) suggests that the amount of parkland acreage be based on the amount of park acreage in cities/counties with similar population density. Persons per acre in Hall County in 2000 was .55 (139,315/251,942.4—numerator is county population; denominator is county acreage), which places the county in Harnik's (2010) "low density" (p. 18) category of cities and counties such as Albuquerque, New Mexico, and Charlotte/Mecklenburg, North Carolina. Harnik's (2010) calculation of parkland acreage for low density cities and counties varies widely with a high of 1,794 acres for Anchorage, Alaska, to a low of 6.9 acres for Honolulu, Hawaii. I use the median parkland acreage for low-density cities/counties as a suggested amount for Hall County (23.60) (Harnik, 2010, p. 170).

## Results

### Parkland Access by Race and Ethnicity

Table 1 displays parkland acreage and population characteristics for Hall County and for residents within a quarter mile of Hall County parks. For the county, again, total park acreage is roughly 7,987; mean number of parkland acres per park is about 108. The average number of people within a buffer is 484, yielding a mean number of park acres per 1,000 population within each buffer of about 223. The number of parkland acres per 1,000 population for the county is about 57. Both the acreage for the county and acreage for persons within the buffers are well above the NRPA's standards of 6.25 to 10.5 per 1,000 residents. The average parkland acreage for the county is also above the recommended amount for a low-density place (23.60 acres).

On average, there were more whites compared to either Latinos or African Americans, living within a short walking distance of a park. About 55% of the population within a quarter mile of any park was accounted for by whites, about 33% by Latinos, and 11% by African Americans (Table 1). Further, about 1 out of 5 residents within a quarter mile boundary were below the poverty threshold; roughly 23% of the population within those boundaries included children and youth below age 18 (Table 1). This figure is comparable to the percentage reported by Sister et al. (2008) for metropolitan Los Angeles (28%). Although the buffers contain a higher percentage of whites than either Latinos or blacks, the average proportion of whites with walking access to parks is lower than the white proportion in the county population, while the proportion of blacks and Latinos is overrepresented relative to their proportions in the larger population.

### Parkland Acreage for Buffers with Varying Race/Ethnic Compositions

To address population density by race/ethnicity, I compared parkland per 1,000 persons for parks in buffers that contain a predominant racial or ethnic group. Each quarter-mile buffer was assigned to a majority racial or ethnic group. For instance, if the population in a given park buffer was greater than 50% Latino, then that buffer was labeled a "Latino" buffer. Sister et al. (2007, 2008) and Wolch et al.'s (2005) investigations in Los Angeles showed more park acres in predominantly white buffer zones. If Latinos have succeeded whites in formerly working class neighborhoods that had abundant parkland, few differences in access between these groups may be observed. But again, Latino access is also filtered by household densities specific to this group. Even though Latinos may settle in neighborhoods vacated by whites, the higher population densities of the former may effectively lower quality of park experience (Sister et al., 2010).

Of the 74 park buffers, two (2.7%) had populations that exceeded 50% Latino and one had an African American population in excess of 50% (Table 2). In contrast, 67 park



**Table 1**

*Parkland Acreage and Population Characteristics within a Quarter Mile of Hall County, GA Parks*

<i>Park Indicators</i>	
Total park buffers	74
Total park acres	7987.29
Mean park acres	107.94
<i>Population and Park Indicators</i>	
Mean population	483.72
Mean park acres per 1,000 population	223.15
Parkland acres per 1,000 (county)	57.33
<i>Number of Race/ethnic Group inside Buffer</i>	
Mean Latino population	153.66
Mean White population	267.30
Mean African American population	51.31
<i>Percent of Race/ethnic Group inside Buffer</i>	
Mean percent Latino	31.78
Mean percent White	55.25
Mean percent African American	10.60
<i>Poverty and Population below 18 inside Buffer</i>	
Mean population in poverty	103.33
Mean percent of population in poverty	21.36
Mean number of persons below 18	111.14
Mean percent of population below 18	22.97
<i>Racial/ethnic Percent inside Buffer to Total Racial/ethnic for Hall County</i>	
Mean percent Latino	1.59
Mean percent White	0.78
Mean percent African American	1.51

**Table 2***Parkland Acreage for Buffers with Varying Race/ethnic Compositions*

<i>Buffers with more than 50% of Race/ethnic Group</i>			
	Latino	White	Black
Number of buffers	2	67	1
Total park acres	8.24	7,935.71	0.817
Mean park acres	4.12	118.44	0.817
Mean population	3,053	343	708
Mean parkland acres per 1,000	1.37	345.30	1.15
Mean population below poverty	1004	48	199
Mean percent below poverty	32.8	14.09	28.19
Mean population below 18	894	76	170.45
Mean percent below 18	29.23	22.32	24.07

buffers (91%) had white populations of more than 50%. An average of 1.37 park acres per 1,000 residents are in the predominantly Latino buffers and 1.15 in the majority black areas. The number of park acres in majority white buffers was about 345—a very large number compared to the dearth in the minority buffer zones. The average percentage below poverty was greatest in majority Latino and black buffers, whereas the mean percentage under 18 was more constant across these neighborhoods.

### Park Acres by Poverty Level

Seven park buffers had populations where more than one quarter of the population was below poverty (Table 3). In these areas, total parkland acres were relatively low at about 15, while the average parkland acre per buffer was only about two. Further, average parkland per 1,000 population was one. Latinos averaged about 50% of the population, whites 31%, and blacks roughly 17%. Latinos were overrepresented in park buffers where the population was below poverty, relative to their presence in the total county population (20%); whites were underrepresented (71% in county); and blacks were overrepresented compared to their presence in the general population (7%).

Table 3 also indicates that there were 33 park buffers where at least one quarter of the population was less than 18 years of age. Here, average parkland acreage was about 87; mean park acreage per 1,000 persons was about 250. Percentage Latino (41.27%) and white (47.99%) were fairly even, but percentage black was only 9%.

### Year Parks Established

To get a sense of whether this relative lack of park access in Latino-prevalent areas constitutes an environmental inequity from the perspective of race/ethnicity, I noted the year of park establishment for parks in buffers with at least a 40% Latino population. I chose 40% as the indicator of “Latino community” because this level of integration indicates a substantial Latino presence even though it is not the majority. If parks in Latino-prevalent (> 40%) neighborhoods were established when the areas were majority white and no significant decreases have been made in the number of parks or the amount of acreage since that time, I might conclude that the environmental disparity between contemporary, majority Latino and majority white areas relates to factors other than race/ethnicity.

The four parks in buffers with 40% or more Latinos are Engine 209 Park, Kenwood Park, Myrtle Street Park, and Poultry Park, all of which are relatively small and located in south Gainesville. Engine 209 Park and Poultry Park are each less than one acre. Kenwood has 2.3 acres and Myrtle Street Park has just under six acres. Engine 209 and Poultry Park

**Table 3**

*Parkland Acreage Where Percent below Poverty and Percent Below 18 Greater than 25%*

---

*Parkland Indicators by Poverty*

Number of buffers	7
Total parkland acres	14.87
Mean parkland acres	2.12
Mean population	2,100
Mean parkland acres per 1,000	1.00
Mean Latino population	1,054
Mean percent Latino	50.19
Mean white population	650
Mean percent white	30.96
Mean black population	361
Mean percent black	17.20

*Parkland Indicators by Youth under 18*

Number of buffers	33
Total parkland acres	2886.3
Mean parkland acres	87.45
Mean population	350
Mean parkland acres per 1,000	249.86
Mean Latino population	144.49
Mean percent Latino	41.27
Mean white population	167.97
Mean percent white	47.99
Mean black population	32.00
Mean black percent	9.1

---

are small thematic parks that pay homage to the railroad and the county's poultry industry. Kenwood and Myrtle Street Parks are located on opposite sides of the street and feature more traditional amenities, with picnic tables, walking trails, playgrounds, and basketball courts.

Engine 209 Park opened in 1982, Kenwood in 1973, Myrtle in 1939, and Poultry in 1975 (Gainesville Parks and Recreation Department, personal communication, August 9, 2010). All were established well before Latinos arrived en masse in Gainesville and Hall County in the 1990s and 2000s. Engine 209 and Poultry Park are in census block group 1001.1 and Kenwood and Myrtle Park in 11002. The 2000 census shows that block group 1001.1 was 56.6% Latino, and 11002 was 83.6% Latino. In 1990, the earliest census year for which comparable census block delineations are available, percentage Latino was only

14% for block group 1001.1 and 27.3% for 11002. Also, the median annual household income in 1990 for both the block groups was \$10,670 and \$10,256, respectively. Both figures were below the median county income for 1990 (\$21,133), which suggest that the population in these neighborhoods was largely white and working class/low income prior to Latino influx.

Thus, while there is evidence of contemporary environmental inequity based on race/ethnicity (again because the neighborhoods in which Latinos settled were largely white and contained a similar number of parks and acreage as when the neighborhoods transitioned to majority Latino), I must also consider socioeconomic (income) disparities as a basis for both contemporary and historical inequity. On average, there are about 129 acres per 1,000 population in buffers with median household incomes below the 2000 countywide figure (\$44,908), but 905 in areas with median income above the county average.

### Discussion

Findings do not suggest that Latinos in predominantly Latino communities realize abundant urban parkland when moving to places vacated by whites, as the mean number of park acres and parkland per 1,000 population in these communities was far less than expected amounts for a low-density county. Parkland acreage was greater in majority white areas. In terms of equitable access for those in poverty, results indicated that on average, poor people have much less access to parkland than others elsewhere in the county. However, in those areas where more than 25% of the population is less than aged 18, there appear to be more than sufficient amounts of parkland available. Again, however, parkland availability varies given socioeconomic status of the neighborhood.

Findings suggest that Latinos must live in more integrated neighborhoods to have access to recommended levels of park acreage. This presents challenges, again, as Hall County's Latino population is highly concentrated. The majority of Hall County Latinos and blacks concentrate in older, higher density, central city areas with little parkland. In contrast, the north end of the county adjacent to well-known Lake Sydney Lanier is a relatively newer (since the 1960s), mostly white, higher income area with extensive, undeveloped parcels that have been converted to parkland.

One notable exception to the relative lack of parkland near the city is the expansive Chicopee Woods (2,408 acres) natural area in South Gainesville, which is approximately four to five miles from lower income, mostly Latino communities (census tract 11). A state highway and railroad tracks, however, separate the predominantly Latino census tract from this extensive acreage. These thoroughfares may represent physical barriers to Latino visitation of Chicopee Woods. Chicopee Woods staff also commented informally in 2008 that area Latinos visit the preserve infrequently, which suggests factors other than physical proximity as engagement constraints (personal communication, 2008).

The uneven distribution of parkland in Hall County may be attributed to historical segregation based on race and income. As discussed, prior to Latino migration to the county, neighborhoods were demarcated along expected black-white racial lines although lower income whites also occupied majority-white, south side neighborhoods. Lower income white and black concentration in Gainesville's industrial, south side made it highly unlikely that these populations would have access to expansive acres that could be converted to parkland acreage. For instance, Gainesville's Newtown community was established in 1937 as an all black community. It is located adjacent to major rail lines. Over the years, this transportation corridor attracted a number of industries to the area. The tiny Newtown community is virtually encircled by industry, resulting in numerous charges of environmental racism (Roskie et al., 2008). Industrial acreage rather than parkland is a prominent feature of this historically black neighborhood and others nearby.

With the entrance of significant Latino populations into working class and lower income white communities, they too, encountered relatively little parkland acreage. When Latinos moved into Hall County, overt discriminatory housing policies had been eliminated; however, the limited income of many of these populations acted to circumscribe their movement to areas with more parkland. The same is true for much of

Hall County's African American population. If, however, the emergence of lower density, rural areas to the south of the city is the result of lower and working class whites relocating from Gainesville, this mobility would give these populations more access to parkland than is available to blacks and Latinos in the city.

Because of the lack of uncommitted land uses in and around minority communities, an obvious option for public park managers in Gainesville and Hall County is redevelopment or conversion of existing uses into parkland or other green space uses. The city of Gainesville has approved a plan to redevelop roughly 300 acres of its Midtown area (once a vibrant commercial center) into a mixed-use area including street trees, walking trails, and parks (Gainesville and Hall County Comprehensive Plan, 2005). The aim is to invest sufficiently in the area to attract private investors who would actually redevelop property. One of the city's first investments is to convert a CSX rail line into a greenway.

African American community organizers remarked to the author that the greenway extension does not extend to their historically black community (Gainesville and Hall County Comprehensive Plan, 2005, p. 14). However, to achieve full integration of neighborhood and community goals with respect to parkland development, efforts such as the Midtown project should coalesce with neighborhood goals. Further work on this topic would investigate possible minority neighborhood linkages with Midtown.

Although city officials state that the city does not intend to redevelop land but rather make city districts attractive enough so that private developers will, municipal managers still might consider the current Red Fields to Green Fields effort spearheaded by the Georgia Institute of Technology in Atlanta (<http://rftgf.org/joomla/>). The local government will acquire financially distressed properties (in the "red") and the land will be converted to locally determined public parks. Such efforts have already been evaluated for larger cities such as Cleveland, Denver, Miami, Philadelphia, and Wilmington. To purchase property, cities can take low-cost loans funded by the Federal Reserve, Treasury Department, and Federal Deposit Insurance Corporation.

### Conclusion

This study represents an initial effort to understand environmental opportunities and barriers encountered by recent migrants/immigrants to the southeast. Parkland access and its contribution to life quality are not immediately identified as a factor influencing successful integration into place. Yet, public parks can provide immigrants a venue for establishing meaning and attachment to their new environment while remaining connected through nature to their culture of origin (Lanfer & Taylor, n.d.). I recommend additional studies using more targeted data collection procedures in the South's larger cities, (e.g., Atlanta, Georgia, or Charlotte, North Carolina) to understand better how immigrant populations make use of municipal parks and the extent to which parks are equitably distributed across urban places in the South.

### References

- Atilas, J. H., & Bohon, S. A. (2002). *The needs of Georgia's new Latinos: A policy agenda for the decade ahead (Public Policy Research Series)*. Retrieved from University of Georgia, Carl Vinson Institute of Government website: <http://www.cviog.uga.edu/publications/pprs/52.pdf>
- Bohon, S. A., MacPherson, H., & Atilas, J. H. (2005). Educational barriers for new Latinos in Georgia. *Journal of Latinos and Education*, 4(1), 43–58.
- Boone, C. G., Buckley, G. L., Grove, M. J., & Sister, C. (2009). Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers*, 99(4), 1–21.
- Bullard, R. D. (1990). *Dumping in Dixie: Race, class, and environmental quality*. Boulder, CO: Westview Press.
- Bullard, R. D., Johnson, G. S., & Torres, A. O. (2004). Dismantling transit racism in metro Atlanta. In R. D. Bullard, G. S. Johnson, & A. O. Torres (Eds.), *Highway robbery: Transportation racism and new routes to equity*. Cambridge, MA: South End Press.

- Card, D., Mas, A., & Rothstein, J. (2008). Tipping and the dynamics of segregation. *The Quarterly Journal of Economics*, 123(1), 177–218.
- Coyle, M. (1992). Company will not build plant: Lawyers hail victory. *The National Law Journal*, 15(7), 3.
- Checker, M. (2005). *Polluted promises: Environmental racism and the search for justice in a southern town*. New York University Press: New York.
- Denton, N. A., & Massey, D. S. (1991). Patterns of neighborhood transition in a multiethnic world: U.S. metropolitan areas, 1970–1980. *Demography*, 28(1), 41–63.
- Duncan, O. D., & Duncan, B. (1957). *The Negro population of Chicago: A study of residential succession*. Chicago: University of Chicago Press.
- Elmendorf, W. F., Willits, F. K., Sasidharan, V., & Godbey, G. (2005). Urban park and forest participation and landscape preference: A comparison between blacks and whites in Philadelphia and Atlanta. *U.S. Journal of Arboriculture*, 31(6), 311–317.
- Floyd, M. F., Crespo, C. J., & Sallis, J. F. (2008). Active living in diverse and disadvantaged communities: Stimulating dialogue and policy solutions. *American Journal of Preventive Medicine*, 34, 271–274.
- Floyd, M. F., Spengler, J. O., Maddock, J., Gobster, P. H., & Suau, L. (2008). Park-based physical activity in diverse communities of two U.S. cities: An observational study. *American Journal of Preventive Medicine*, 34, 360–375.
- Gainesville and Hall County comprehensive plan. (2005). Retrieved from <http://www.hallcounty.org/files/pdfs/devserv/HCCP/LanduseAmendDocument.pdf>
- Harnik, P. (2010). *Urban green: Innovative parks for resurgent cities*. Washington, DC: Island Press.
- Harrison, L., & Scarinci, I. (2007). Child health needs of rural Alabama Latino families. *Journal of Community Health Nursing*, 24(1), 31–47.
- Hartig, T., Evans, G. W., Jamner, J. D., Davis, D., & Garling, T. (2003). Tracking restoration in natural and urban field settings. *Journal of Environmental Psychology*, 23(2), 109–123.
- Hernández, N., & Arroyo, E. (2005). *Latinos in Georgia: A closer look* (Statistical Brief No. 7). Retrieved from [http://northgaumc.s3.amazonaws.com/Files/Hispanic/Latinos\\_in\\_Georgia\\_A\\_Closer\\_Look.pdf](http://northgaumc.s3.amazonaws.com/Files/Hispanic/Latinos_in_Georgia_A_Closer_Look.pdf)
- Hernández-León, R., & Zúñiga, V. (2000). “Making carpet by the mile:” The emergence of a Mexican immigrant community in an industrial region of the U.S. historic south. *Social Science Quarterly*, 81(1), 49–66.
- Heynen, N., Perkins, H. A., & Roy, P. (2006). The political ecology of uneven urban green space: The impact of political economy on race and ethnicity in producing environmental inequality in Milwaukee. *Urban Affairs Review*, 42(1), 3–25.
- Hou, F., & Milan, A. (2003). Neighbourhood ethnic transition and its socioeconomic connections. *Canadian Journal of Sociology*, 28(3), 387–410.
- Johnson-Webb, K. D., & Johnson, J. H. (1996). North Carolina communities in transition: The Hispanic influx. *The North Carolina Geographer*, 5(Winter), 21–40.
- Kandel, W., & Cromartie, J. (2004). *New patterns of Hispanic settlement in rural America*. (Rural Development Research Report No. 9). Washington, DC: Economic Research Service, USDA.
- Kaplan, R., & Talbot, J. F. (1988). Ethnicity and preference for natural settings: A review and recent findings. *Landscape and Urban Planning*, 15(1/2), 107–117.
- Kuo, F. E., & Sullivan, W. C. (2001). Environment and crime in the inner city: Does vegetation reduce crime? *Environment and Behavior*, 33(3), 343–367.
- Kuo, F. E., Sullivan, W. C., Coley, R. L., & Brunson, L. (1998). Fertile ground for community: Inner-city neighborhood common spaces. *American Journal of Community Psychology*, 26(6), 823–851.
- Lanfer, A. G., & Taylor, M. (n.d.). Immigrant engagement in public open space: Strategies for the new Boston. Retrieved from [http://www.arborcp.com/articles/Immigrant\\_Engagement\\_in\\_Public\\_Open\\_Space\\_final.pdf](http://www.arborcp.com/articles/Immigrant_Engagement_in_Public_Open_Space_final.pdf)



- Liszka, J. (2010). Lessons from the Exxon Valdez oil spill: A case study in retributive and corrective justice for harm to the environment. *Ethics & the Environment*, 15(2), 1–30.
- Lohr, V. I., Pearson-Mims, C. H., Tarnai, J., & Dillman, D. A. (2004). How urban residents rate and rank the benefits and problems associated with trees in cities. *Journal of Arboriculture*, 30(1), 28–35.
- Low, S. M., Taplin, D., & Scheld, D. (2005). *Rethinking urban parks: Public space and cultural diversity*. Austin: University of Texas Press.
- Mennis, J. L., & Jordan, L. (2005). The distribution of environmental equity: Exploring spatial nonstationarity in multivariate models of air toxic releases. *Annals of the Association of American Geographers*, 95, 249–268.
- Mertes, J. D., & Hall, J. R. (1996). *Parks, recreation, open space, and greenway guidelines*. National Recreation and Park Association and American Academy for Park and Recreation Administration.
- Mohai, P., & Saha, R. (2007). Racial inequality in the distribution of hazardous waste: A national-level reassessment. *Social Problems*, 54(3), 343–370.
- Moser, B. (2004). The battle of ‘Georgiaformia.’ *Intelligence Report*, 116 (Winter). Retrieved from [www.Splcenter.org/intel/intelreport/article.jsp?aid=505&printable=1](http://www.Splcenter.org/intel/intelreport/article.jsp?aid=505&printable=1)
- Oak Ridge National Laboratory. (2008). *LandScan 2008 global population database*. Retrieved from <http://www.ornl.gov/sci/landscan/>.
- Paster, M., Morello-Frosch, R., & Sadd, J. L. (2005). The air is always cleaner on the other side: Race, space, and ambient air toxics exposures in California. *Journal of Urban Affairs*, 27(2), 127–148.
- Powell, L. M., Slater, S., & Chaloupka, F. K. (2004). The relationship between community physical activity settings and race, ethnicity, and socioeconomic status. *Evidence-based Preventive Medicine*, 1(2), 135–144.
- Roskie, J. B., Orenstein, E., Henderson, J. R., Keith, M. A., Ehnert, J. J., Wurzel, K., . . . Greenberg, A. (2008). *Health, environmental, and quality of life impacts: Newtown Community, Gainesville, GA*. Retrieved from <http://www.law.uga.edu/landuseclinic/research/newtown.pdf>
- Sister, C., Wilson, J., & Wolch, J. (2007). *The green visions plan for 21<sup>st</sup> century Southern California–17: Park congestion and strategies to increase park equity*. Retrieved from [http://www.greenvisionsplan.net/html/documents/17\\_access\\_parks\\_and\\_park\\_facilities\\_in\\_the\\_green\\_visions\\_plan\\_region\\_081508.pdf](http://www.greenvisionsplan.net/html/documents/17_access_parks_and_park_facilities_in_the_green_visions_plan_region_081508.pdf)
- Sister C., Wilson, J., & Wolch, J. (2008). The green visions plan for 21st century Southern California–17: Access to parks and park facilities in the green visions plan region. Retrieved on from [http://www.greenvisionsplan.net/html/documents/17\\_access\\_parks\\_and\\_park\\_facilities\\_in\\_the\\_green\\_visions\\_plan\\_region\\_081508.pdf](http://www.greenvisionsplan.net/html/documents/17_access_parks_and_park_facilities_in_the_green_visions_plan_region_081508.pdf).
- Sister, C., Wolch, J., & Wilson, J. (2010). Got green? Addressing environmental justice in park provision. *GeoJournal*, 75(3), 229–248.
- Smith, B. E., & Winders, J. (2008). “We’re here to stay”: Economic restructuring, Latino migration, and place-making in the U.S. South. *Transactions of the Institute of British Geographers*, 33(1), 60–72.
- Smith, H. A., & Furuseth, O. J. (2006). *Latinos in the new south: Transformations of place*. Burlington: Ashgate.
- Stanis, S. A. W., Schneider, I. E., Chavez, D. J., & Shinew, K. J. (2009). Visitor constraints to physical activity in park and recreation areas: Differences by race and ethnicity. *Journal of Park and Recreation Administration*, 27(3), 78–95.
- Stodolska, M., & Santos, C. A. (2006). “You must think of familia”: The everyday lives of Mexican migrants in destination communities. *Cultural and Social Geography*, 7(4), 627–647.
- Suro, R., & Singer, A. (2002). *Latino growth in metropolitan America: Changing patterns, new locations*. Retrieved from <http://pewhispanic.org/files/reports/10.pdf>
- Talen, E. (1997). The social equity of urban park service distribution: An exploration of park access in Pueblo, Colorado, and Macon, Georgia. *Urban Geography*, 18(6), 521–541.

- Taylor, D. E. (2000). The rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. *American Behavioral Scientist*, 43(4), 508–580.
- Taylor, A. F., Wiley, A., Kuo, F. E., & Sullivan, W. C. (1998). Growing up in the inner city: Green spaces as places to grow. *Environment & Behavior*, 30(1), 3–27.
- Taylor, W., Floyd, M. F., Whitt-Glover, M., & Brooks, J. (2007). Environmental justice: A framework for collaboration between the public health and recreation and parks fields to study disparities and physical activity. *Journal of Physical Activity & Health*, 4(1), S50–S63.
- United Church of Christ Commission for Racial Justice. (1987). *Toxic wastes and race in the United States*. New York: United Church of Christ.
- U.S. Census Bureau. (1990). *Persons of Hispanic origin*. Retrieved from <http://factfinder.census.gov>
- U.S. Census Bureau. (2000a). *2000 census of total population, summary file 1*. Retrieved from <http://factfinder.census.gov>
- U.S. Census Bureau. (2000b). *2000 census of total population (for census tracts 5 and 11)*. Retrieved from <http://factfinder.census.gov>
- U.S. Census Bureau. (2000c). *Hispanic or Latino by specific origin [31], summary file 1*. Retrieved July 19, 2008, from <http://factfinder.census.gov>
- U.S. Census Bureau. (2000d). *Sex by age (Hispanic or Latino) [49], summary file 1*. Retrieved from <http://factfinder.census.gov>
- U.S. Census Bureau. (2000e). *Average household size and average household size (Hispanic or Latino householder) [1], summary file 1*. Retrieved from <http://factfinder.census.gov>
- U.S. Census Bureau. (2011a). *National Population by Race, United States: 2010*. Retrieved from <http://2010.census.gov/2010census/data/>
- U.S. Census Bureau. (2011b). *2010 Census redistricting data (public law 94-171) summary file, Tables P1 and P2*. Retrieved from <http://2010.census.gov/2010census/data/>
- Weitz, J., & Weitz, J. (2005). *Neighborhood planning framework: City of Gainesville, Georgia*. Retrieved from <http://www.gainesville.org/pdfs/planningdevelopment.NPU%20Framework.pdf>
- Winders, J. (2005). Changing politics of race and region: Latino migration to the U.S. South. *Progress in Human Geography*, 29(6), 683–699.
- Wolch, J., Wilson, J., & Fehrenbach, J. (2005). Parks and park funding in Los Angeles: An equity mapping analysis. *Urban Geography*, 26(1), 4–35.
- Yarbrough, R. A. (2007). Becoming “Hispanic” in the “New South”: Central American immigrants’ racialization experiences in Atlanta, GA, USA. *GeoJournal*, 75(3), 249–260.
- Zúñiga, V., & Hernández-León, R. (2001). A new destination for an old migration: Origins, trajectories, and labor market incorporation of Latinos in Dalton, Georgia. In A. D. Murphy, C. Blanchard, & J. A. Hill. (Eds.), *Latino workers in the contemporary south* (pp. 126–135). Athens, GA: University of Georgia Press.

## Endnotes

<sup>1</sup>The Southern Black Belt includes counties in Virginia down through the Carolinas and into Louisiana and east Texas with African American populations at least equal to the national average (Wimberley & Morris, 1997).

<sup>2</sup>Black and African American are used interchangeably.

<sup>3</sup>Type of park, whether neighborhood, community, regional, or state, is not distinguished.

<sup>4</sup>Environmental equity and justice are used interchangeably.