



SPRAWL ATLANTA:



Social Equity Dimensions of Uneven Growth and Development



The Environmental Justice Resource Center (EJRC) at Clark Atlanta University was founded in 1994 to assist, support, train, and educate people of color professionals and grassroots community leaders with the goal of facilitating their inclusion into the mainstream of environmental decision-making.

Responsibility for the contents of this report lies solely with the authors and opinions expressed herein do not necessarily represent the views of the Turner Foundation.

Editors: Robert D. Bullard, Glenn S. Johnson, and Angel O. Torres (Clark Atlanta University)

Contributors: Robert D. Bullard, Clark Atlanta University; Glenn S. Johnson, Clark Atlanta University; Angel O. Torres, Clark Atlanta University; Charles Jaret, Georgia State University; Elizabeth P. Ruddiman, Georgia State University; Kurt Phillips, Georgia State University; Carla J. Robinson-Barnes, University of Georgia; Arthur M. Cole, Jr., NAACP's Community Development Resource Center; Duane A. Francis, Atlanta Neighborhood Development Partnership, Inc.; Russell Irvine, Georgia State University; James Chapman, Georgians for Transportation Alternatives; William W. Buzzbee, Emory University; Dennis Creech, Southface Energy Institute; Natalie Brown, Southface Energy Institute

For More Information, Contact:

Environmental Justice Resource Center

Clark Atlanta University

223 James P. Brawley Drive

Atlanta, Georgia 30314

(400) 880-6911 (ph)

(404) 880-6909 (fx)

Email: ejrc@cau.edu

Website: <http://ejrc.cau.edu>

Copyright 1999 Environmental Justice Resource Center, Clark Atlanta University (Atlanta, Georgia)

ACKNOWLEDGMENTS

There are a number of persons and organizations we wish to thank for making this report possible. We are especially grateful to Peter Bahouth of the Turner Foundation who supported the work of the Environmental Justice Resource Center and this research undertaking. We all are grateful for the support we received from Cynthia Renfro whose tireless and enthusiastic work kept us on schedule. We offer special thanks to the contributors who endured the constant nagging about deadlines. We are especially grateful to our contributors who worked long hours researching, preparing papers, and taking time out of their extremely busy schedules to collaborate with us on this project. Their persistence, patience, and good will were key to bringing this report to fruition. Thanks go out to my colleagues in the Center who provide valuable assistance to the research undertaking. The staff includes Glenn S. Johnson, Angel O. Torres, Chad G. Johnson, Lisa Sutton, Tuere Bowles, Marie Green, and Kim Hoyt. It has been a year since we began this study. During this period, we have received valuable assistance, comments, and suggestions from numerous individuals, groups, and organizations working on sprawl issues.

PREFACE

Urban sprawl cuts across political jurisdictions and has unintended consequences that are not randomly distributed. It will take a host of public players to arrest sprawl--including city, county, regional, state, and federal government players. Sprawl fuels urban disinvestment, depresses property values, stagnates business opportunities in central cities, and exacerbates environmental problems. Public tax dollars subsidize central city infrastructure decline, deterioration of services, limited home and business ownership opportunities, and out migration of middle-income residents and businesses. Since sprawl cuts across jurisdictional boundaries, everyone has a stake in seeing that this problem is favorably resolved.

This study uses a multi-disciplinary approach to analyze and critique the emerging crisis resulting from urban sprawl in the ten-county Atlanta metropolitan region. A series of policy papers were commissioned from an interdisciplinary team of local experts. The contributors to the paper series include sociologists, lawyers, urban planners, economists, educators, and health care professionals. All of the contributors examined institutional constraint issues that are imbedded in urban sprawl. The study is written in a non-technical readable style that should be useful to policy analysts, government officials, community leaders, and other individuals working on urban and minority issues.

Among the topics examined include environmental consequences of sprawl, fair housing, residential patterns, racial polarization, economic opportunity, community development, transportation, energy consumption, public health, and schools. The study is directed at urban planners, practitioners, public officials, community leaders who are interested in understanding urban sprawl from a holistic perspective.

Our analysis illuminates the rising class and racial divisions underlying the uneven growth and development in the Atlanta region. We expect the study will be of special interest to the mainstream environmental groups and the growing environmental justice movement. The activities of many environmental justice leaders cut across the issues that are addressed in this study. The study may also appeal to the individuals working on social equity, racial justice, and civil rights, i.e., Title VI of the Civil Rights Act of 1964 that prohibits discrimination in the use of federal funds.

Local and national media have featured the region's sprawl problem. Nevertheless, most of the reports on the topic gloss over or minimize the social equity implications of sprawl. Atlanta's history is steep in racial politics. Both race and class are intricately linked to the Atlanta's sprawl dilemma. It has been difficult to erase this legacy. Atlanta's regional growth policies are implicated in land-use patterns and unhealthy air that lowers everyone's quality of life. Clearly, addressing urban sprawl must be elevated to a top priority.

Robert D. Bullard
Environmental Justice Resource Center

TABLE OF CONTENTS

Introduction

I Backdrop of the Atlanta Study

Study Area

Study Design and Focus

II Widening Disparities

Concentration of Poverty

Uneven Development and Racial Polarization

School Segregation

III Atlanta's Regional Growth Machine

Economic Activity and Employment Centers

Housing Discrimination

Insurance Redlining

Working Across Political Jurisdictions

IV Environmental Quality

Endangered Communities

Loss of Greenfields

Zoning and land use

The Cost of NIMBY

Paying for Water Pollution

The "Dirtiest" Zip Codes

The Right to Breathe Clean Air

Running Out of Breath

V Regional Transportation Needs

Legacy of Poor Planning

Confronting Transportation Racism

Transportation Equity

Regional Transit

VI Resources

Books and Reports

Organizations and Websites

Videos

VII Endnotes

INTRODUCTION

Sprawl is a fact of life in urban America. Whether we like it or not, it is real and must be addressed with the urgency that the problem demands. Ask ten people to define sprawl, and you will probably get ten different definitions. In this report, we define sprawl as random unplanned growth. Sprawl is characterized by inadequate accessibility to essential land uses such as housing, jobs, and public services like schools, hospitals, and mass transit. Sprawl-driven development has “literally sucked population, jobs, investment capital and tax base from the urban core.”¹

Typically, strip centers, low-density residential housing, and other isolated, scattered developments leapfrog over the landscape without any rhyme or reason. However, it is clear that in order to access these new suburban developments one must have access to an automobile since public transit is usually inadequate or nonexistent. Sprawl creates a car-dependent citizenry. Urban sprawl is consuming land faster than population is growing in many cities across the country.

Why should we be alarmed about sprawl? Is sprawl an unavoidable byproduct of growth and a booming economy? It is quite clear that growth and sprawl are not synonymous. Nevertheless, suburban sprawl has been the dominant growth pattern for nearly all metropolitan areas in the United States for the past five decades.² Historically, the decentralization of employment centers has had a major role in shaping metropolitan growth patterns. Government policies buttressed and tax dollars subsidized this decentralization through new roads and highways at the expense of public transit.³ Tax subsidies made it possible for new suburban employment centers to become dominant outside of cities, and to pull middle-income workers and home owners from the urban core.⁴

Everyone needs to be concerned about the consequences of sprawl. Sprawl need not accompany metropolitan growth. An increasing number of Americans are challenging the wisdom of sprawl-driven development that creates potential environmental and public health threats. Sprawl is costly. Planners are now questioning the costs and benefits of allowing central city core areas to deteriorate, while pushing urban and suburban pollution further into rural areas, farm land, and “greenfields.”⁵

In the end, all Americans pay for sprawl with increased health and safety risks, worsening air and water pollution, urban decline, disappearing farmland and wildlife habitat, racial polarization, city/suburban disparities in public education, lack of affordable housing, and the erosion of community.⁶

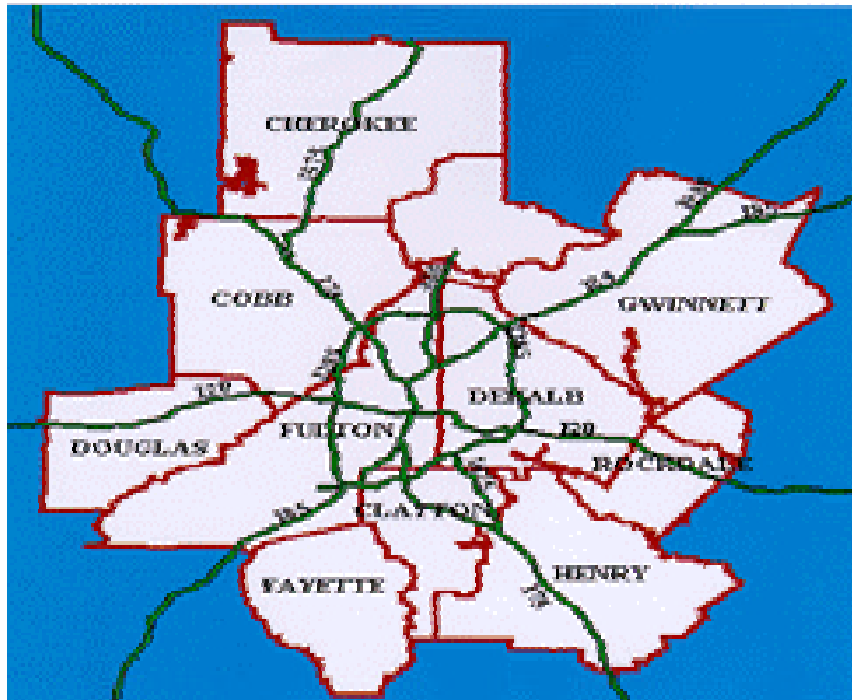
Residential options that are available to most Americans were shaped largely by: (1) federal housing policies, (2) individual and institutional discrimination in housing markets, (3) geographic changes that have taken place in the nation's metropolitan areas, and (4) limited incomes because of historical job discrimination. Decades of federal government policies have played a key role in the development of spatially differentiated metropolitan areas where blacks and other people of color are segregated from whites and the poor from the more affluent citizens. This has been especially so since World War II.

I. BACKDROP OF THE ATLANTA SPRAWL STUDY

Study Area

Metropolitan Atlanta has experienced constant growth since the 1900s. The 1960s were considered the boom years in which Atlanta established its regional dominance. The 1970s and 1980s were characterized as a time the city became increasingly black. During this same period, Atlanta experienced a steady decrease in its share of the metropolitan population since 1960. Metropolitan Atlanta continued to experience breakneck growth in the 1990s. An average of 69,100 people moved into the metropolitan each year during the 1990s, compared to 61,788 in the 1980s. The ten-county Metropolitan Area (Cherokee, Cobb, Douglas, Clayton, Fayette, Fulton, Henry, Gwinnett, DeKalb, and Rockdale) has a population of over 3 million persons.

FIGURE 1: Atlanta Metropolitan Area



Much of the growth in the 1990s was characterized by suburban sprawl and economic disinvestment in Atlanta's central city. Although the Atlanta Regional Commission predicts some population slowdown in the late 1990s, the large counties (i.e., Gwinnett, Cobb, and Fulton) are still adding large numbers of people. Gwinnett County added over 20,300 (6.6% increase) to its 499,200 population during the 1997-98 period; Cobb County added 15,100 persons (2.7% increase) to its 550,000 population, and Fulton County added 13,200 (1.7% increase) to its 773,000 population during the 1997-98 period.

The 1990s have seen the Atlanta metropolitan area grow at breakneck speed. The region's housing starts, job growth, and low unemployment rate are envied across many regions. However, there is a down side to the regional growth pattern: namely, urban sprawl. Sprawl-driven growth has placed the health of the region and its residents at risk. Polluted rivers and streams, clogged freeways, and fouled air are by products of random unplanned suburban growth.

The health of Atlanta is still important to the overall metropolitan region's vitality. New challenges are being raised to address imbalances resulting from sprawl. What happens outside the city affects all Atlantans. Sprawl development encourages disinvestment in housing and infrastructure decline. Moreover, these problems are not likely to go away without some renewed attention and intervention. Working together, public and private joint ventures can make a difference in the quality of life enjoyed by everyone who lives in the region. The future of the region is intricately bound to how we address Atlanta's quality of life problems. The federal government and private enforcement agencies must be encouraged to utilize the Fair Housing Act to end unjust, unfair, and illegal practices.

Study Design and Focus

This study uses a multi-disciplinary approach to analyze and critique the emerging crisis resulting from urban sprawl in the ten-county Atlanta metropolitan region. A series of policy papers were commissioned from an interdisciplinary team of local experts. The contributors to the commissioned paper series include sociologists, lawyers, urban planners, economists, educators, and health care professionals. All of the contributors examined institutional constraint issues that are imbedded in urban sprawl. The study is written in a non-technical readable style that should be useful to policy analysts, government officials, community leaders, and other individuals working on urban and minority issues.

The study includes an analysis of factors that contribute to urban sprawl and their consequences. It also outlines some policy recommendations and an action agenda. Both primary and secondary data were used in the analysis. An extensive use of geographic information system (GIS) analysis is used in mapping and graphically illustrating the environmental consequences of sprawl on low-income and people of color communities in the region.

Among the topics examined in this study include environmental impacts, housing and residential patterns, racial polarization, economic opportunity, community development, transportation, energy consumption, public health, and schools. Our analysis also illuminates the rising class and racial divisions underlying the uneven growth and development in the Atlanta region. We expect the study results will be of special interest to the environmental groups and the growing environmental justice movement. The agendas of many community based organizations cut across the various issues such as housing, education, jobs and economic development, transportation, and environmental quality issues that are addressed in this study. The study may also appeal to the individuals working on social equity, racial justice, and civil rights, i.e., Title VI of the Civil Rights Act of 1964 that prohibits discrimination in the use of federal funds.

II. WIDENING DISPARITIES

Concentration of Poverty

Although Atlanta's share of the metropolitan population has declined over the years, the health of city is still important to the overall metropolitan region's vitality. Atlanta as the "hole in the doughnut" does not bode well for the region. New challenges are being raised to address socioeconomic imbalances resulting from sprawl. The Atlanta region is experiencing a growing disparity between the "haves" and "have nots." These disparities are more pronounced between central city and suburbs.

- The 1990 poverty rate for the Atlanta region was 7.7% vs. 24.6% for the city of Atlanta
- The city of Atlanta contains only 12 percent of the region's population and 65% of the area's public housing
- Over 88% of the Atlanta region's poor blacks lived in Fulton and DeKalb Counties, 62% in the city of Atlanta, and 6% lived in Cobb and Gwinnett Counties
- On the other hand, 40% of the metro area's poor whites lived in Fulton and DeKalb Counties, 13% in Atlanta, and 34% in Cobb and Gwinnett Counties
- Over 84.1% and 44.1% of Atlanta's poor live high poverty neighborhoods and extreme poverty neighborhoods, respectively
- Comparatively, 44.4% and 18.8% of the region's poor live in high poverty neighborhoods and extreme poverty neighborhoods, respectively

Uneven Development and Racial Polarization

Most of the literature on race and the city focuses on the underclass and the underlying theoretical underpinning akin to a type of market-centered economics.⁷ Racial issues are reduced to economic issues. But race must be treated as an independent variable. The modern American city has its roots in racism. Racism can be seen in its basic ecological form. Racial segregation in housing, as well as schools and jobs, is fundamental to the geography of the modern American city.⁸ Spatial mobility and social mobility are interrelated. Sociologists Douglas Massey and Nancy Denton contend that "segregation constitute a powerful impediment to black socioeconomic progress."⁹

The Atlanta metropolitan area continues to be racially separate and unequal. Sprawl-driven development fueled this pattern and affected the racial and ethnic makeup of residential areas and public schools. African Americans are still the most racially segregated ethnic minority group in the region. The growing concentration of African Americans in the urban core of Atlanta, combined with the disproportionate poverty, has resulted in remarkable economic, social, and cultural isolation. In the meantime, the most affluent people of the region have continued a pattern of segregation by relocating to exclusive, amenity-rich suburbs. While suburbanization largely meant out-migration of whites, some black Atlantans also made the move to the suburbs. Black expansion into Atlanta's suburbs occurred largely after 1970 and quite often reflected the segregated housing pattern typical of central-city neighborhoods.

\$ From 1990 to 1996, the population outside Atlanta's city limits increased almost 40 percent,

- while it only increased 2 percent within the city limits
- \$ The city of Atlanta share of the region's jobs dropped from 40% in 1980 to 29.5 in 1990
- \$ Atlanta's Northern suburbs share of jobs rose from 40% in 1980 to 52% in 1990
- \$ Nearly one third of the region's people of color live in Atlanta, compared to only 6.3% of the region's whites
- \$ Twelve of the region's "superdistricts" had majority black and other population in 1996
- \$ These 12 superdistricts accounted for 61.6% of the region's people of color population

Sprawl has unintended consequences that are not randomly distributed. Federal mortgage subsidies still facilitate middle-income home owners flight out of the central city into outlying suburbs and rural areas while at the same time many Atlanta central city neighborhoods are starving for investment capital. Some government policies, i.e., education, housing, transportation, environmental, and lending, have actually exacerbated sprawl-related problems. Sprawl development in the suburbs creates disinvestment incentives, depresses property values, and stagnates business opportunities in older inner city areas where African Americans and other people of color are concentrated. Flight of whites and middle-income families to the suburbs contributed to and exacerbated both economic and racial polarization in the region.

School Segregation

The drift toward racially segmented metropolitan areas is most pronounced in public education. Author Myron Orfield contends that "schools are the first victims and the most powerful perpetrator of metropolitan polarization."¹⁰ Most urban public schools are more segregated today than they were in the 1970's. Nationally, over a third of black children attend schools where the enrollment is 90 percent to 100 percent minority.¹¹ Urban and suburban schools are not created equal. Huge disparities exist between affluent suburbs and poor inner-city schools. These disparities are buttressed by the archaic school financing method: namely, property taxes. Our current taxing system encourages speculation, creates artificial land scarcity, rewards infrastructure abandonment, fosters scattered development, and promotes urban sprawl.¹²

Segregated housing patterns also affect racial and ethnic composition of public schools. Atlanta public schools is clearly a majority black system. Where one lives can also impact ones accessibility to quality libraries and other nonresidential amenities. The education gap between and within urban and suburban schools is widening. The "haves" and "have nots" follow a distinct racial and geographic line.

- Clear racial patterns emerge in both Fulton and DeKalb County Schools with African Americans concentrated in the southern portion of the two counties with whites concentrated in the north
- An increasing number of African American, Asian, and Latino students now comprise a growing student population in the suburban school systems
- Who gets into college and who qualifies for HOPE scholarships have a lot to do with access to quality public schools
- The nature of Atlanta's economy is expected to place the greatest demand on individuals with advanced or collegiate degrees

- There is currently in the region a vast over-supply of un-skilled or semi-skilled workers, unemployment will almost exclusively be a problem for those who hold high school diplomas and below
- Many suburban employers are hesitant to hire minority workers from inner-city neighborhoods because of stereotypical concerns about their work ethic, character, language skills, and educational preparation

III. ATLANTA'S REGIONAL GROWTH MACHINE

Economic Activity and Employment Centers

Atlanta has emerged as the commercial and financial center of the southeastern United States. The region is the center for federal operations as well as the center of communications and transportation. From its Atlanta home base, CNN is beamed around the world. Atlanta's Hartsfield International Airport is one of the busiest of the world.

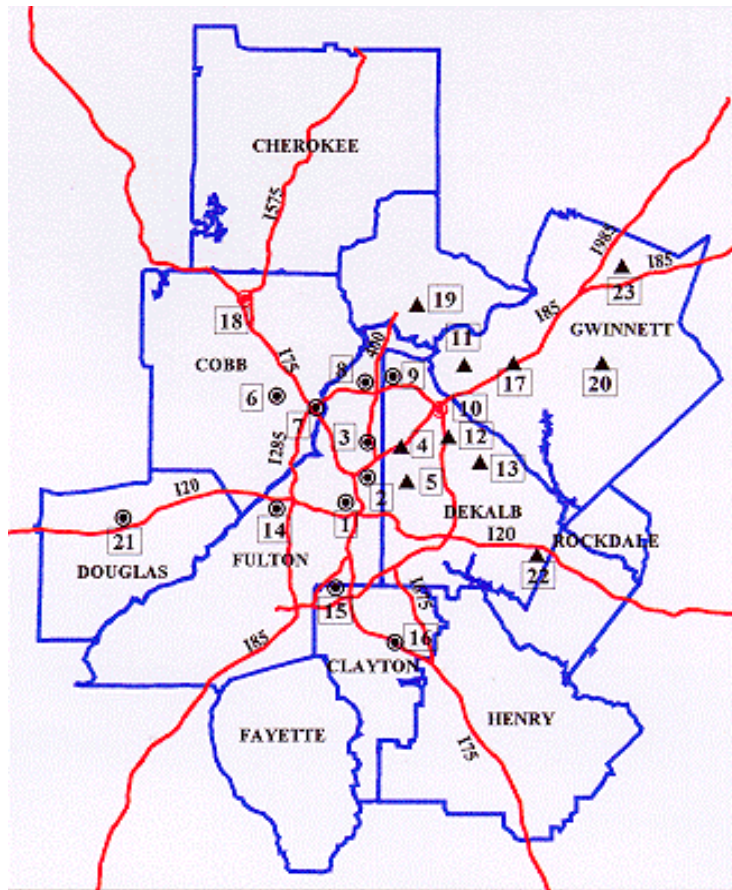
The Atlanta regional economy boomed in the 1990s. Unemployment remained low and job growth remained strong. Most new jobs, new homes, and newcomers were located outside the city. Sprawl development accelerated urban core disinvestment, infrastructure decline, and housing segregation by race and income. Help wanted signs proliferate in the region's northern suburbs. In most cases, public transit is either inadequate or nonexistent. In order to access these major employment centers one nearly always has to have access to an automobile.

According to the Atlanta Regional Commission (Atlanta's metropolitan planning organization), the metro area's population grew by 324,700 between 1990 and 1995. Between 1990 and 1996, all but two of fifteen census tracts adding more than 5,000 people were located in Atlanta's northern suburbs. Between 1995 and 2020, it is projected to add another 1.29 million people. Atlanta's urban land area expanded 47 percent between 1990 and 1996, following a 25 percent expansion between 1980 and 1990. The Atlanta regional growth machine has produced some startling:

- An average of 69,100 persons moved to the Atlanta region in the 1990s
- Atlanta's urban land area expanded 47% between 1990 and 1996
- Atlanta is the least dense of all U.S. metro areas with 1,366 persons per square mile
- In 1996, Atlanta led the nation in residential construction with 48,262 building permits
- Between 1990 and 1996, over 420,000 jobs were added to the region
- In 1996, the Atlanta region ranked 1st as a metro area for investment potential
- In 1998, it ranked only 16th among 18 metropolitan areas for potential investments in 1999

The region's economic activity centers and emerging activity centers are concentrated in the northern suburbs. Fifteen of the eighteen activity centers are located north of the I-20 Freeway, a freeway that historically divided the region racially and geographically. Only one of the five emerging activity centers is located south of the I-20 Freeway.

FIGURE 2: Major Activity Centers



Activity Centers

1. Atlanta Central Business District
2. Midtown/Pershing Point
3. Buckhead
4. North Druid Hills/I-85
5. Emory/CDC
6. Lockheed/Dobbins
7. Cumberland/Galleria
8. Sandy Springs
9. Perimeter
10. Doraville/I85
11. Peachtree Corners
12. Northlake
13. Mountain Industrial District
14. Fulton Industrial District
15. Hartsfield International Airport
16. Southlake

17. Gwinnett Place

18. Town Center at Cobb

Emerging Activity Centers

19. North Point
20. Lawrenceville
21. Arbor Place
22. Stone Crest
23. Mall of Georgia

Housing Discrimination

Studies over the past three decades have clearly documented the relationship between redlining and disinvestment decisions and neighborhood decline.¹³ Redlining accelerates the flight of full-service banks, food stores, restaurants, and other shopping centers in inner-city neighborhoods. In their place, inner-city neighborhoods are left with check-cashing stations, pawn shops, storefront grocery stores, liquor stores, and fast-food operations--all well buttoned up with wire mesh and bullet-proof glass.

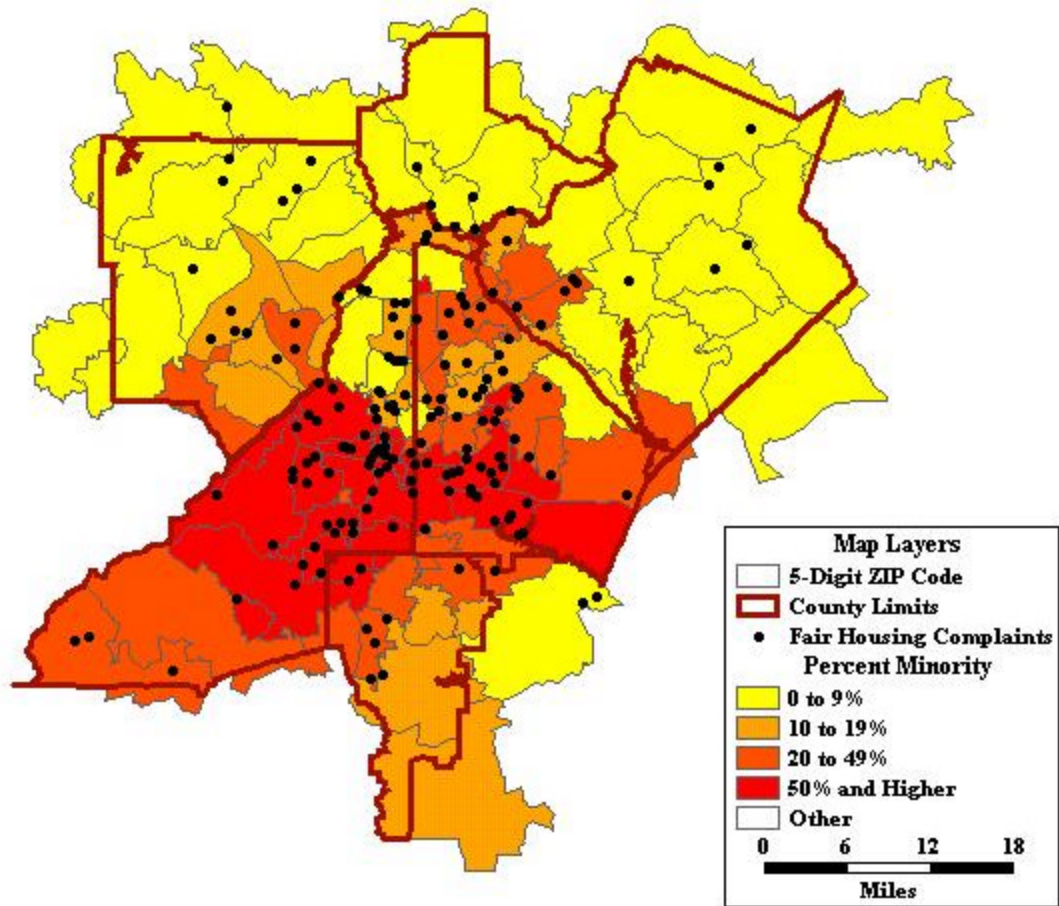
African Americans, Latino Americans, and Native Americans do not have full access to lending by banks and saving institutions as their white counterparts. African Americans are three times more likely to be rejected for home mortgages compared to whites. Yet, federal regulators continue to ignore discrimination in lending. These alarming loan rejection statistics still leave some government and industry officials in doubt as to whether the culprit is a function of discrimination or neutral “market forces.” Nevertheless, discriminatory lending practices subsidize the physical destruction of communities of color.

A number of obstacles still keep many blacks out of the suburbs, including low income, housing discrimination, restrictive zoning practices, inadequate public transportation, and fear. Housing barriers still persist for many people of color in the Atlanta region. Discrimination by banks, mortgage companies, and real estate brokers limit housing options for thousands of Atlanta area residents. Housing discrimination remains greatest among African Americans in the region.

Housing discrimination denies a substantial segment of the African American community a basic form of wealth accumulation and investment through home ownership. The number of African American homeowners would probably be higher in the absence of discrimination by lending institutions. Only about 59 percent of the nation’s middle-class African Americans own their homes, compared with 74 percent of whites. On the other hand, some \$50 to \$90 billion dollars a year tax subsidies underwrite suburban homeowners. This middle-class entitlement is by far “the broadest and most expensive welfare program in the U.S.A.”¹⁴ Results from Atlanta Metro Fair housing indicate that discrimination is alive and well in the region.

- African Americans are twice as likely to experience housing discrimination in Atlanta’s suburbs than in the city of Atlanta
- Results from fair housing “testers” reveal that African Americans are treated less favorably than whites 30% of the time in Atlanta and 67% of the time in Atlanta’s suburb

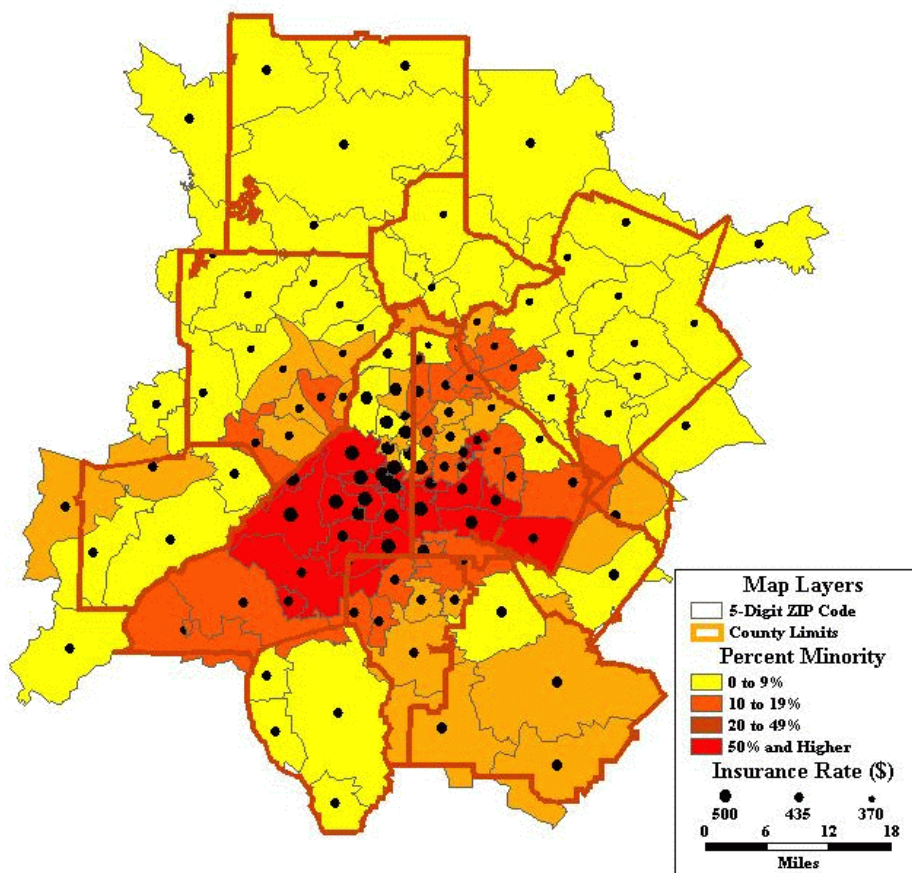
FIGURE 3: Minority Population and Fair Housing Complaints by Zip Code



Insurance Redlining

Racial redlining by insurance companies deprives a large segment of Atlanta's minority population major investments through home ownership and business development. Home owners in mostly African American neighborhoods are especially vulnerable to insurance redlining. For example, Fulton and DeKalb residents have the highest insurance rates in the region. The highest rate paid in the region was \$618. Residents in thirty-five percent of Fulton County Zip codes paid \$618. On the other hand, All of the zip codes in Cherokee, Clayton, Cobb, Douglas, Fayette, and Gwinnett Counties paid less than the region's average rate of \$430.¹⁵

FIGURE 4: Minority Population and Insurance Rates by Zip Code



Working Across Political Jurisdictions

Urban sprawl cuts across political jurisdictions and has unintended consequences that are not randomly distributed. Sprawl fuels urban disinvestment, depresses property values, stagnates business opportunities in central cities, and exacerbates environmental problems. Since sprawl cuts across jurisdictional boundaries, everyone has a stake in seeing that this problem is favorably resolved. These diverse group of allies agree that sprawl is costly and the bill is being paid by ordinary citizens. Sprawl critics have now amassed allies from inner-city neighborhoods, suburban homeowners, rural farmers, environmentalists, academics, civil rights activists, and even some business leaders. It will take city, county, regional, state, and federal government players to arrest sprawl.

IV. ENVIRONMENTAL QUALITY

Endangered Communities

Studies, dating back to the seventies, reveal that low-income persons and people of color have borne greater health and environmental risk burdens than the society at large.¹⁶ Pollution takes its toll on individual and community health. For example, elevated health risks are found in some population even when income is held constant as in the case of childhood lead poisoning.¹⁷ Race has been found to be independent of income in the distribution of municipal landfills, incinerators,¹⁸ abandoned toxic waste dumps,¹⁹ smelters, and other polluting industries.²⁰ Generally, federal efforts to reduce childhood lead poisoning can be deemed a real success story. In October 1991, the Centers for Disease Control issued a statement, *Preventing Lead Poisoning in Young Children*, lowering the acceptable blood level from 25 ug/dl to 10 ug/dl. The average blood lead level has dropped for all children with the phasing out of leaded gasoline.

A 1997 CDC report, *Morbidity and Mortality Weekly Report*, indicates that the “risk for lead exposure in children is primarily determined by environmental conditions of the child’s residence.”²¹ Lead-based paint (chips and dust) is the most common source of lead exposure for children. Children may also be exposed through soil and dust contamination built up from vehicle exhaust, lead concentration in soils in urban areas, and lead dust brought into the home on parents work clothes. Too many poor children are still trapped in older inner-city homes with lead paint that endangers their health. The health (mental and physical) for the millions of lead poisoned urban youth has been written off as expendable. Instead of a haven, home takes on the meaning of hostile environment.

The social, economic, and financial costs associated with pollution are great. However, the costs and benefits associated with growth and industrial development are not borne equally by all residents. Costs are more localized, while benefits are more dispersed. Negative environmental and health impacts of sprawl-driven growth, fall heaviest on individuals, groups, and communities at the lower end of the socio-economic spectrum.

Generally, unplanned urban growth has contributed to more cars, roads, traffic jams, garbage, landfills, incinerators, pollution, and threats to public health. Sprawl is in an unwanted, though predictable, consequence of uncontrolled random growth. Who pays for sprawl? We all pay in dollars, decreased mobility, and diminished quality of life.

Loss of Greenfields

Sprawl development encourages the destruction of forests, farm land, and wildlife habitat outside the central city. Sprawl also supports wasteful energy consumption associated with commuting from distant suburban subdivisions. Sprawl-fueled deforestation occurs at the rate of 50 acres per day. Loss of tree cover translates into a larger heat island, increased energy consumption, higher electric bills, more pollution, and more soil erosion and flooding.²² Sprawl supports wasteful energy consumption associated

with commuting from distant suburban subdivisions. Sprawl also fuels deforestation and loss of green vegetation and increases the heat island and energy consumption. Growth in the Atlanta region typifies this pattern.

- Every week, 500 acres of green space, forest, and farmland in the Atlanta region are plowed under to make way for new housing subdivisions, strip malls, shopping centers, and highways
- Data from NASA Landsat Satellite show that from 1988 to 1998, the Atlanta metro area lost about 190,000 acres of tree cover

Zoning and Land Use

For the most part, zoning is considered a local matter. Implementation of zoning ordinances and land-use plans have a political, economic, and racial dimension. Competition often results between special interest groups (i.e., real estate interests, developers, civic clubs, neighborhood associations, environmentalists, etc.) for what these groups regard as more advantageous land use. Real estate interests generally have a great deal of influence over zoning boards and local officials who make the decisions.

In their quest for quality neighborhoods, residents often find themselves competing for desirable neighborhood amenities (i.e., good schools, police and fire protection, quality health care, parks, open space, and recreational facilities, etc.) and resisting outputs that are viewed as having negative consequences (i.e., landfills, incinerators, sewage treatment facilities, polluting industries, chemical plants, etc.). The differential residential amenities and land uses assigned in the region cannot be explained by class alone. Generally, government officials have done a miserable job protecting low-income, working-class, and people of color communities from pollution assaults, industrial encroachment, and environmental degradation.

Zoning has not been able to protect some communities from environmental assaults. Race underlies and interpenetrates with the other factors in explaining the socio-spatial layout of the Atlanta metropolitan area, including housing patterns, streets and highway configuration, commercial development, and industrial facility siting. Poor whites and poor blacks do not have the same opportunities to “vote with their feet” and escape undesirable physical environments. People of color and low-income residential areas are disproportionately and adversely affected by unregulated growth, ineffective regulations of industrial toxins, and public policy decisions authorizing locally unwanted land uses (LULUs) that favor those with political and economic clout.

The Cost of NIMBY

The middle-class dominated environmental movement built an impressive political base for environmental reform and regulatory relief. Few environmentalists, however, realized the sociological implications of the NIMBY (not in my backyard) phenomenon. Given the political climate of the times, hazardous-waste facilities, garbage dumps, and polluting industries were likely to end up in somebody's backyard. But

whose backyard? More often than not, these LULUs end up in poor, powerless, people of color communities rather than in affluent suburbs. This pattern has proven to be the rule, even though the benefits derived from industrial production are directly related to affluence.

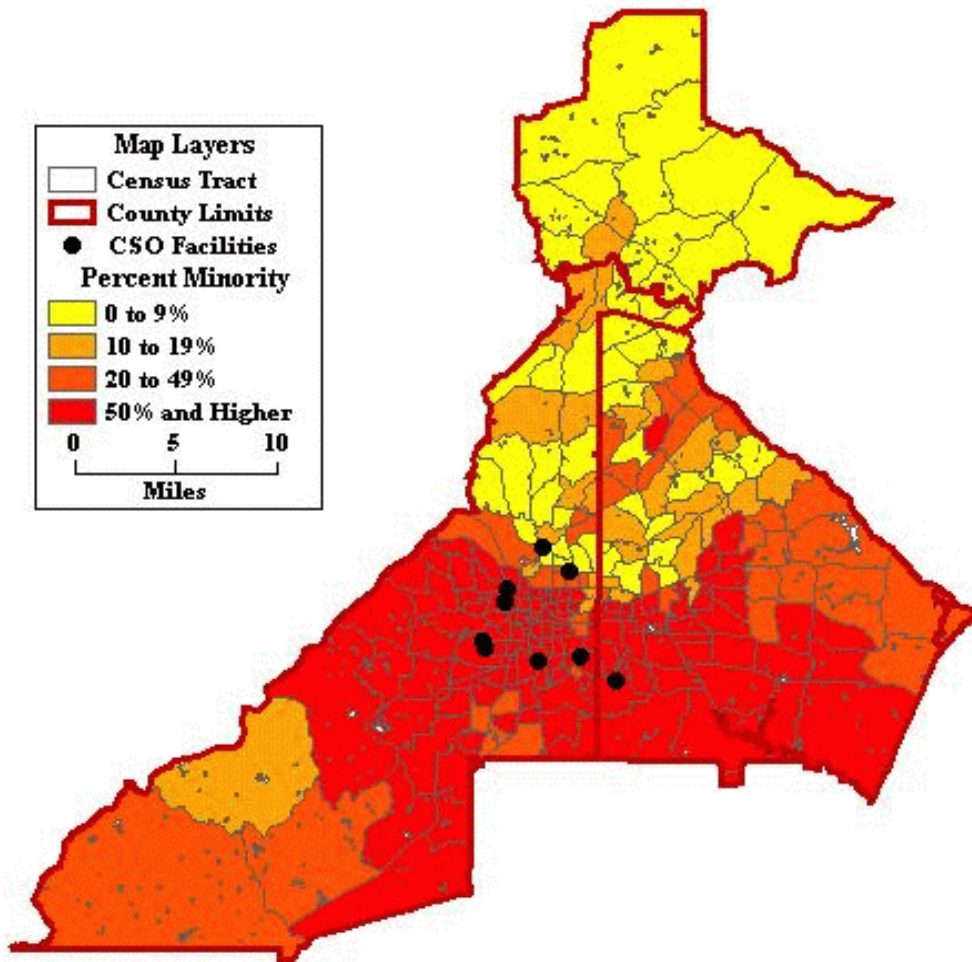
Paying for Water Pollution

According to the environmental group American Rivers, the Chattahoochee River is under severe stress from “untreated sewage, tons of sediment, storm water runoff from both city and agricultural areas, and a general lack of enforcement of clean water laws on all levels.”²³ All along its 526-mile journey to the Gulf of Mexico, the Chattahoochee River shoulders the burden of overbuilding of new developments, industrial wastes, pollution from poultry and hog farms, and poorly treated or raw human sewage.²⁴

In an attempt to comply with clean water regulations, Atlantans have had to pay for the city’s infrastructure neglect and burdens caused by overloaded wastewater treatment systems. Water pollution problems are exacerbated broken city pipes, antiquated sewer treatment plants, and combined sewer overflows or CSOs. CSOs represent sewers that combine storm water with raw sewage and overflow into city creeks or onto streets during heavy rains.²⁵ CSOs pose health risks since many contain heavy metals, organic compounds and petroleum products as well as viruses and fecal coliform bacteria from humans and animals.²⁶

- Atlanta’s CSO are more likely to occur in low-income and mostly African American neighborhoods
- Seven of the nine (77.7%) CSOs in Atlanta are located in mostly African American neighborhoods where home values fall well below the median.

FIGURE 5: Location of CSO's in Atlanta and Minority Concentration



The deficiencies in the city's sewer pipes and treatment plants led to a crackdown by EPA and EPD on Atlanta's discharges into the Chattahoochee River. From October 1990 to March 1994, the city was fined \$1.72 million for wastewater violations.²⁷ Most of the fines were assessed because of combined sewer overflows or CSOs. In 1998, the city signed a consent order to pay a \$2.5 million fine for water quality violations. In July 1999, EPA imposed a \$700,000 fine on the city of Atlanta for spills and leaks from its overloaded sewer system. The combined fines represent the largest Clean Water Act penalty ever assessed against a municipality. In a federally-mandated order, the city of Atlanta is required to implement a rigorous program to improve its sewer pipes and treatment plants that will cost local taxpayers more than \$1 billion during the next 14 years.²⁸

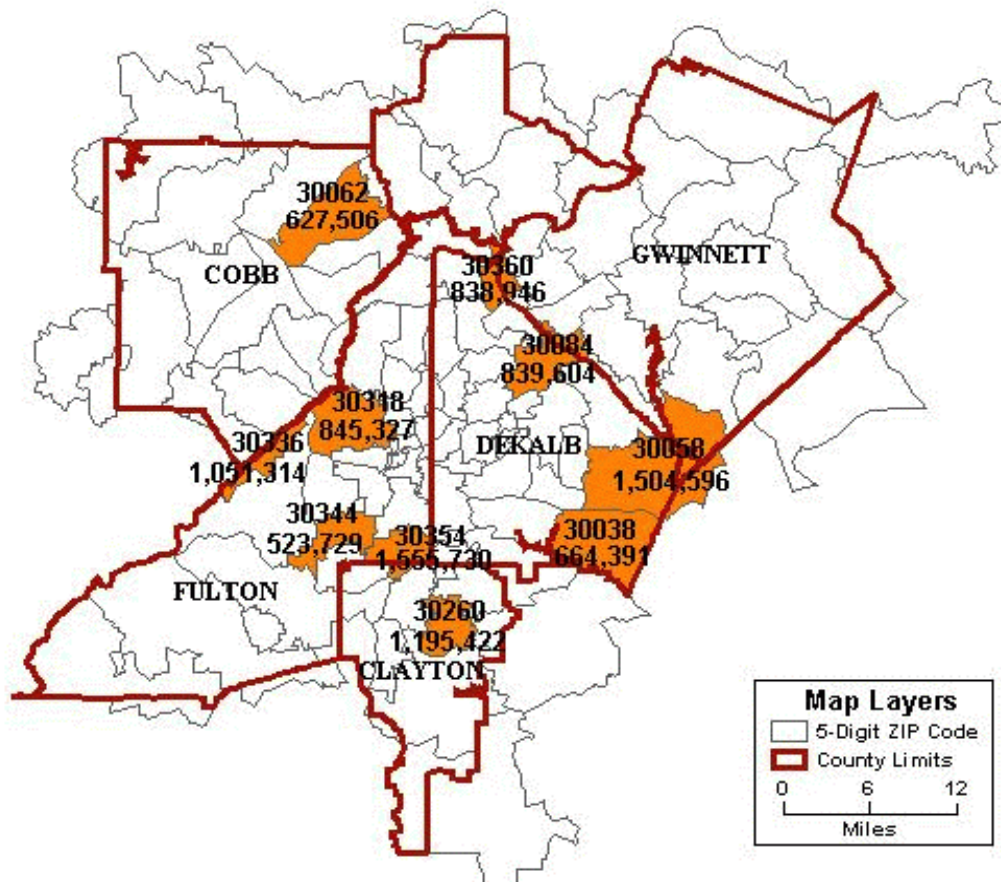
The “Dirtiest” Zip Codes

Toxic time bombs are not randomly scattered across the urban landscape. These facilities are often located in communities that have high percentages of poor, elderly, young, and people of color residents.²⁹ The nonrandom pattern of waste facility siting is not due to chance or the luck of the draw. Location decisions for polluting industries often involve cooperation between government and industry officials. Clearly, health and environmental risks fall heaviest on poor neighborhoods and their residents who are least able to escape unhealthy physical assaults.

African Americans and other people of color are disproportionately represented in the Atlanta region’s “dirtiest” zip codes using EPA’s toxic release inventory data. While people of color comprise 29.8 percent of the population in the five largest counties contiguous to Atlanta (Fulton, DeKalb, Cobb, Gwinnett, and Clayton Counties), they represent the majority of residents in five of the ten “dirtiest” zip codes in these large counties.

- Nearly 83 percent of Atlanta’s African American population compared to 60 percent of whites live in zip codes that have an uncontrolled hazardous waste site.
- Atlanta metro residents (five most populous counties contiguous to Atlanta) in majority white zip codes are exposed to an average of 38.2 pounds of toxic releases per person annually compared to an average of 208.6 pounds of toxic releases per person in majority people of color zip codes
- The “dirtiest” zip code (i.e., 30354) in the five-county area is located in Fulton County and receives over 1.55 million pounds of toxic releases annually; people of color make up 69.1 percent of the population in zip code 30354
- Residents in zip code 30336 are subjected to 873.9 pounds of toxic releases per person annually; zip code 30336 is 98.2% black

FIGURE 6: Ten “Dirtiest” Zip Codes and TRI Releases in Pounds



The Right to Breathe Clean Air

Clean air is everyone's dream. This sentiment cuts across race, class, gender, geographic, and political lines. Urban air pollution problems have been with us for some time now. Before the federal government stepped in, issues related to air pollution were handled primarily by states and local governments. Because states and local governments did such a poor job, the federal government set out to establish national clean air standards. Congress enacted the Clean Air Act (CAA) in 1970 and mandated the U.S. Environmental Protection Agency (EPA) to carry out this law. Subsequent amendments (1977 and 1990) were made to the CAA that forms the current federal program. The CAA was a response to states unwillingness to protect air quality. Many states used their lax enforcement of environmental laws as lures for business and economic development.³⁰

African Americans and Latinos are more likely to live in areas with reduced air quality than are whites. For example, National Argonne Laboratory researchers discovered that 437 of the 3,109 counties and independent cities failed to meet at least one of the EPA ambient air quality standards. Specifically, 57

percent of whites, 65 percent of African Americans, and 80 percent of Hispanics live in 437 counties with substandard air quality. Nationwide, 33 percent of whites, 50 percent of African Americans, and 60 percent of Hispanics live in the 136 counties in which two or more air pollutants exceed standards. Similar patterns were found for the 29 counties designated as nonattainment areas for three or more pollutants. Again, 12 percent of whites, 20 percent of African Americans, and 31 percent of Hispanics resided in the worse nonattainment areas.³¹

Running Out of Breath

The Atlanta metropolitan region is a nonattainment area for ozone, one of the six criteria pollutants listed under the National Ambient Air Quality Standards (NAAQS). There is a price to be paid for nonattainment. Costs include future federal funding assistance (i.e., transportation dollars are often tied to states conforming with requirements of Clean Air Act) and public health concerns (rising asthma and other respiratory illnesses). In the Atlanta nonattainment area, motor vehicles account for the primary source for both volatile organic compounds (VOCs) and nitrogen oxides (NOx).³²

Asthma is an emerging epidemic in the United States. The annual age-adjusted death rate from asthma increased by 40% between 1982 through 1991, from 1.34 to 1.88 per 100,000 population,³³ with the highest rates being consistently reported among blacks aged 15-24 years during the period 1980-1993.³⁴ Poverty and minority status are important risk factors for asthma mortality. The age-adjusted prevalence rate of self-reported asthma increased 42% between 1982 and 1992, from 3470 to 4940 per 100,000.

Children are at special risk from ozone.³⁵ Children also represent a considerable share of the asthma burden. It is the most common chronic disease of childhood. Asthma affects almost 5 million children under 18 years of age. Although the overall annual age-adjusted hospital discharge rate for asthma among children under 15 years old decreased slightly from 184 to 179 per 100,000 between 1982 and 1992, the decrease was slower compared to other childhood diseases³⁶ resulting in a 70% increase in the proportion of hospital admissions related to asthma during the 1980's. Inner city children have the highest rates for asthma prevalence, hospitalization, and mortality.³⁷ In the United States, asthma is the fourth leading cause of disability among children aged less than 18 years.³⁸

The public health community has insufficient information to explain the magnitude of some of the air pollution-related health problems. However, they do know that persons suffering from asthma are particularly sensitive to the effects of carbon monoxide, sulfur dioxides, particulate matter, ozone, and nitrogen oxides.³⁹ Ground-level ozone may exacerbate health problems such as asthma, nasal congestions, throat irritation, respiratory tract inflammation, reduced resistance to infection, changes in cell function, loss of lung elasticity, chest pains, lung scarring, formation of lesions within the lungs, and premature aging of lung tissues.⁴⁰

Poor air quality translates into increased public health risks. Although air pollution is not thought to cause asthma and related respiratory illnesses, it is a major trigger. A 1996 report from the federal Centers for

Disease Control shows hospitalization and deaths rates from asthma increasing for persons twenty-five years or less.⁴¹ The greatest increases occurred among African Americans. African Americans are two to six times more likely than whites to die from asthma.⁴² Similarly, the hospitalization rate for African Americans is 3.4 times the rate for whites.⁴³

Asthma has reached epidemic proportions in the Atlanta region. Atlanta area residents are paying for sprawl with their hard-earned dollars as well with their health. A 1994 CDC-sponsored study showed that pediatric emergency department visits at Atlanta Grady Memorial Hospital increased by one-third following peak ozone levels. The study also found that asthma rate among African American children is 26 percent higher than the asthma rate among whites.⁴⁴ Since children with asthma in Atlanta may not have visited the emergency department for their care, the true prevalence of asthma in the community is likely to be higher.

The American Lung Association estimates that 73,610 people out of a population of 1.3 million suffer from chronic obstructive pulmonary disease (COPD).⁴⁵ Of this total, 44,258 are adults and 23,011 are children suffering from asthma. Four counties in the Atlanta metropolitan region (DeKalb, Douglas, Fulton, and Rockdale Counties) exceed national ozone standards. The incidence of childhood asthma by county reveals the following: Fulton (11,234), DeKalb (9,509), Douglas (1,272), and Rockdale (996). It is important to note that a disproportionate large share of the childhood asthma cases (90.1 percent) in the Atlanta region occur in Fulton and DeKalb counties--two counties with the largest share of people of color.

Given the heavy dependence on the automobile in the region and the limited role of public transit in the region, it is doubtful that emission-control technologies adopted under the 1990 Clean Air Act Amendments (CAAA) are adequate to ensure that transportation fairly contributes to attainment of healthful air quality in the region.

V. REGIONAL TRANSPORTATION NEEDS

Legacy of Poor Planning

Transportation touches nearly every aspect of our lives. Most Americans use some form of motorized travel in carrying out their daily routine, whether it be shopping, visiting friends, attending church or going to the doctor. The decision to build highways, expressways, and beltways has far-reaching effects on land use, energy policy, and the environment. Transportation also profoundly affects residential and industrial growth, and physical and social mobility.

Today, Americans spend over 2 billion hours a year in their cars. They also waste \$53 billion a year from tie-ups in traffic gridlock. Over the past seventy-five years, automobile production and highway construction have multiplied, while urban mass transit systems have been dismantled or allowed to fall into disrepair. The American automobile culture was spurred on by massive government investments in roads (3 million miles) and interstate highways (45,000 miles). Just 20 percent of the gasoline tax goes to mass transit, while 80 percent goes to highways. The end result has meant more pollution, traffic, congestion, wasted energy, residential segregation, social disruption, and urban sprawl.

Federal tax dollars help build or subsidized many of the roads, freeways, and public transit systems in our nation. Many of these transportation activities had unintended consequences of dividing, isolating, disrupting, and imposing different economic, environmental, and health burdens on some communities. Writing in the Foreword to *Just Transportation*, longtime civil rights activist and Georgia Congressman John Lewis states:

Even in a city like Atlanta, Georgia--a vibrant city with a modern rail and public transit system--thousands of people have been left out and left behind because of discrimination. Like most other major American cities, Atlanta's urban center is worlds apart from its suburbs. The gulf between rich and poor, minorities and whites, the "haves" and "have-nots" continues to widen.⁴⁶

Some communities accrue benefits from transportation development projects, while other communities bear a disproportionate burden and pay the costs in diminished health. Generally, benefits are more dispersed, while costs or burdens are more localized. For example, having a seven-lane freeway next door may not be a benefit to someone who does not even own a car.

Such negative impacts or disamenities include transportation infrastructure that physically isolate communities; inequitable distribution of environmental "nuisances" such as maintenance and refueling facilities (air quality), airports (noise); lack of sufficient mitigation measures to correct inequitable distribution of negative impacts such as noise or displacement of homes, parks, and cultural landmarks; diversity of modal choices available to access key economic activity and employment locations; the transit headways and age and condition of the transit fleet; the availability and condition of facilities and services at transit stations such as information kiosks, seating, cleanliness, rest rooms; condition of the roadways that service lower-income and people of color communities; and major transportation

investment projects and the community economic development “spillover” effect.

Transportation decision making--whether at the federal, region, state, or local level--often mirrors the power arrangements of the dominant society and its institutions. Some transportation policies distribute the costs in a regressive pattern while providing disproportionate benefits for individuals who fall at the upper end of the education and income scale. All transportation modes are not created equal. Federal transportation policies, taxing structure, and funding schemes have contributed to the inequity between the various transportation modes, i.e., private automobile, rail, buses, air, etc. Most state departments of transportation (DOTs) have become *de facto* road building programs that buttress the asphalt and construction industry. On the other hand, funding for efficient, clean, regional mass transportation systems has been spotty at best.

Confronting Transportation Racism

For more than a century, people of color have resisted transportation racism, linking unequal treatment on buses and trains with violation of constitutionally-guaranteed civil rights. History has shown the stakes are high. In 1896, in *Plessy v. Ferguson*, the U.S. Supreme Court upheld Louisiana’s segregated “white” and “colored” seating on railroad cars, ushering in the infamous doctrine of “separate but equal.” *Plessy* not only endorsed apartheid on transportation facilities, but served as the legal basis for segregation in education until it was overturned by the 1954 court case, *Brown v. Board of Education of Topeka*.

In 1953, nearly four decades after the *Plessy* decision, relegated blacks to the back of the bus, African Americans in Baton Rouge, the capital of Louisiana, stages the nation’s first successful bus boycott. Two years later, on December 1, 1955, Rosa Parks refused to give up her seat at the front of a Montgomery, Alabama, city bus to a white man, igniting the modern civil rights movement. By the early 1960s, young “Freedom Riders” were riding Greyhound buses into the deep South, fighting segregation in interstate travel at risk of death.⁴⁷

Today, transportation is no less a civil rights issue. From New York to California, grassroots groups are demanding an end to unjust, unfair, and unequal transportation. A new wave of community activists are taking to the streets and making their voices heard at city halls and in the court rooms. West Harlem Environmental Action or WHEACT, a grassroots environmental group based in Harlem, challenged that city’s placement of bus barns in their community. Seven of the eight New York MTA bus barns in Manhattan are located in the mostly African American and Latino Harlem community. The group teamed up with the Natural Resources Defense Council in a “Dirty Diesel Campaign” aimed at replacing the diesel fleet with clean-burning compressed natural gas buses. WHEACT’s transportation initiatives also focus on health since their Harlem community has one of the highest asthma rates in the entire country. Their work is about saving lives.

Transit racism killed 17-year old Cynthia Wiggins of Buffalo, New York because some official decided not to build a city bus stop at an upscale suburban shopping mall. The black teenager was crushed by a

dump truck while crossing a seven-lane highway because Buffalo's Number Six bus, an inner-city bus used mostly by African Americans, was not allowed to stop at the suburban Walden Galleria Mall (located in Cheektowaga, NY). Cynthia could not find a job in Buffalo, but was able to secure work at a fast-food restaurant in the suburban mall. The Number Six bus stopped about 300 yards short of the mall. Don Chen, a planner with the Surface Transportation Policy Project, summed up the Cynthia Wiggins tragedy:

Cynthia's story tells us much about ways in which racism continues to manifest itself in America's metropolitan areas--through geographic separation and concealed discrimination by private institutions. With little public accountability or scrutiny, mall officials found it easy to shut out inner-city bus riders.⁴⁸

Residents in Los Angeles led a successful frontal assault on transit racism. Residents and their lawyer from the NAACP Legal Defense and Education Fund (NAACP LDF) challenged the inequitable funding and operation of bus transportation used primarily by low-income and people of color residents. A class action lawsuit was filed on behalf of 350,000 low-income, people of color, bus riders represented by the Labor/Community Strategy Center, the Bus Riders Union, Southern Christian Leadership Conference, Korean Immigrant Workers Advocates, and individuals bus riders. In *Labor/Community Strategy Center v. Los Angeles Metropolitan Transportation Authority*, the plaintiffs argue that the MTA has used federal funds to pursue a policy of raising costs of bus riders (who are mostly poor and people of color) and reducing quality of service in order to fund rail and other projects in predominately white, suburban areas.

In September, 1996, the Labor Community Strategy Center and their lawyers won an historic out-of-court settlement against the MTA.⁴⁹ The group was able to win major fare and bus pass concessions from the Los Angeles MTA. They also forced the MTA to spend \$89 million on 278 new clean compressed natural gas buses. The struggle led by Los Angeles Bus Riders Union epitomizes grassroots groups challenging transit racism.⁵⁰ In the Summer of 1998, the Bus Riders Union began a "No seat, no fare" campaign against crowded buses and second-class treatment by the MTA.⁵¹ Eric Mann, who directs the Labor Community Strategy Center, writes:

There is a causal relationship between mobility and a potential escape from poverty. The MTA bus system is a critical link in ameliorating or exacerbating that situation. For many years, the city's previous "two-tiered" transit system was divided between private transportation (cars) and public transportation (buses). . . .Even within the bus system. . . racial discrimination was reflected in policy.⁵²

Transit racism is also under siege in Macon, Georgia, a city whose population is evenly divided between blacks and whites.⁵³ Over 90 percent of the bus riders in Macon are African Americans. African Americans in Macon filed a class action lawsuit challenging Macon and Bibb County use of federal funds under the Intermodal Surface Transportation Efficiency Act or ISTEA. Over 28 percent of Macon's African Americans are carless compared to only six percent of the city's whites. Mercer University law professor David Oedel reports that a disproportionate share of transportation dollars in Macon and Bibb

County go to road construction and maintenance at the expense of the bus system. In 1993, Macon and Bibb County devoted over \$33.65 million of federal, state, and local funds for roads, streets, and highways, of which some \$10 million coming from federal funds. During the same year, local officials accepted no federal funds for the Macon-Bibb County Transit Authority and budgeted only \$1.4 million for public transportation. Overall, the bulk of federal transportation monies received by Macon and Bibb County are accepted to support road construction in mostly white suburban areas outside the reach of many African Americans.⁵⁴

Transportation Equity

Atlanta's regional transportation policies are implicated in land-use patterns, unhealthy air, and sprawl. The Atlanta region is a nonattainment area for ground level ozone with cars, trucks, and buses as the largest source of this pollution. Transportation and land-use plans have contributed to and exacerbated social and economic inequities. Freeway congestion tells the story. Building roads to everywhere is the problem--not the solution. Despite decades of transportation investments, residents of the region face severe congestion, drive further, breathe unhealthy air, and are more automobile dependant than ever before.

- On average, people in the region drive 34 miles per day--more than anyone else on the face of the planet (50 percent further than Los Angeles area residents)
- Atlantans lead the nation in miles driven per day (over 100 million miles per day on the region's 15,000 miles of roads)
- The region has more than 2.5 million registered vehicles
- Georgia's motor fuel tax is the lowest in the nation (7.5 cents per gallon) and currently can only be used for roads and bridges.

Local community leaders are beginning to question the distribution of costs and benefits of the region's transportation planning and investments. For example, the ARC provides no information demonstrating compliance with Title VI of the Civil Rights Act of 1964, which ensures nondiscrimination in federal transportation dollars spent in the region.

Regional Transit

The Atlanta metropolitan area has a regional public transit system only in name. The Metropolitan Atlanta Rapid Transit Authority or MARTA serves just two counties, Fulton and DeKalb. In the 1960's, MARTA was hailed as the solution to metro Atlanta's growing traffic and pollution problem. Just how far MARTA lines would extend proved to be a thorny issue. Most Metro Atlanta counties opted not to join MARTA. This decision was tinged with racial overtones. Today, local residents are still questioning where MARTA lines go and where they do not go. Even who pays the tab for MARTA is questioned. Only Fulton and DeKalb County residents pay for the up keeping and expansion of the system with a one-cent MARTA sales tax. Many urban neighborhoods have waited decades for the economic benefits associated with transit oriented development.

It is becoming increasingly difficult to find a parking space in some MARTA lots. More than a third of the cars parked in the lots are from counties outside Fulton and DeKalb. It appears that Fulton and DeKalb County tax payers are subsidizing people who live in outlying counties (non-MARTA taxpayers) who park their cars at the park/ride lots and ride on MARTA trains into the city.

Cobb County operates Cobb Community Transit (CCT) that has limited links to MARTA. The system carries 10,000 daily passengers. Recently, several Cobb County elected officials complained about bus patrons, many of them retail or fast food workers, littering their communities. The officials also charged CCT with bringing Atlanta youth and crime to the suburban malls.

In September 1998, Gwinnett County officials voted to build their own public transit system. It is too early to tell at this time what shape Gwinnett's public transit system will take. Getting people out of their cars and into some form of coordinated and linked public transit may well be the key to solving a major part of the region's transportation problem.

- Only three of the 13 non-attainment counties (Fulton, DeKalb, and Cobb) have public transit
- Only 4.7% of the region's workers commute by public transit
- The percentage of commuters into Fulton County is 70% compared to 29% of those commuting outside Fulton County for work
- Over 34.9% of Atlanta's black females and 24.3% of black males use public transit to get to work
- For whites, 5.2% females and 4.2% males use public transit to get to work

POLICY RECOMMENDATIONS

Communities are not sitting back waiting for government or business to come up with the “silver-bullet” solution to urban sprawl. Some communities are taking action on their own. Whether urban, suburban, or rural, it will take a coordinated effort among the divergent interest groups to fix the Atlanta region’s sprawl problem. A long-term commitment is needed to address the legacy of neglect and procedural, geographic, social, and intergenerational inequities that are exacerbated by sprawl.

A major challenge facing the region is to create meaningful forms of collaboration among the regional actors. The following policy recommendations are offered as a start:

- ! **Broad Coalitions and Alliances.** The sprawl issue has the potential for bringing diverse community based organizations, home owners associations, civic clubs, academic institutions, activists, and government to form broad coalitions and alliances. The seamy side of sprawl may serve as a unifying theme to groups whose history has been characterized more as conflict rather than cooperation. Working together, neighborhood groups from Atlanta, the suburbs, and surrounding rural areas can band together to arrest sprawl.
- ! **Proactive Race Relations Strategy.** Race still matters in the United States. The Atlanta metropolitan region is no exception. Improving race relations needs to be an explicit priority in the region. Racial polarization is impeding community and economic development within Atlanta. Attracting middle-income residents, addressing regional transportation, creating a 24-hour downtown, and in general maximizing the city and the region's potential will require examining racial issues and resolving related conflict. Dismantling racial barriers would go a long way in boosting financial incentives and reinvestment in central city neighborhoods.
- ! **Plans to Narrow Public Education Gap.** Education is an investment in the future and public schools remain an integral part of our nation’s future. All public schools are not created equal. Disparities exist within the Atlanta Public Schools and county schools as well as between central city and suburban schools. Innovative approaches need to be taken to equalize inherent funding inequities resulting from an outdated taxing system. A number of strategies are proposed that include working to assure equitable distribution of state resources; working with the business community, setting high expectations for all students; making recruitment of quality teachers a top priority; encouraging a culture of learning; providing a safe and secure learning environment; adopting a philosophy that all children can learn. In addition, increased funding, better accountability, improved opportunities for adult learning and continuing education, better planning, master teacher recruitment, innovation, and improved technology are all means to providing quality education in the region.
- ! **Regional Fair Housing Initiatives.** Discrimination is still a major barrier to open housing in the region. Discrimination costs. A targeted regional fair housing strategy could maximize housing, employment, and educational opportunity options for low-income persons and people

of color in the region. Private fair housing efforts, i.e., Atlanta Metro Fair Housing Program, should be expanded and better coordinated with state fair housing initiatives. An annual county-by-county fair housing “Report Cards” could be issued as one tool for evaluating and reporting progress toward open housing in the region.

- ! **Energy Efficient Housing.** Improving energy efficiency in housing is a money saver and could play a major role in improving the region’s air quality. Reduction in energy consumption benefits all households. It is especially pertinent for low-income residents since efficiency measures save money, improve human health, reduce air pollution, increase building durability, and enhance property values.
- ! **Vegetation and Green Space.** The region’s timberlands and forests are severely threatened by deforestation. Too many trees are flattened to make way for strip centers, outlet malls, and subdivisions. Trees need to be an integral part of all community planning since they increase the shade around buildings and parking lots, and lower air temperatures surrounding vegetation.
- ! **In-Fill Development.** In-fill development should be encouraged in place of uncontrolled sprawl. In-fill and higher density development will improve infrastructure efficiency by taking advantage of existing capacity; save costs for roads and utilities; require less automobile dependence; reduce auto emissions; improve air quality; locate closer to stores, school, work and other activities; and provide access to pedestrian-friendly communities with sidewalks.
- ! **Enforcing Existing Laws.** We currently have sufficient environmental, housing, health, transportation, land use, and employment laws on the books to protect all citizens and communities. However, laws and regulations are only as good as their enforcement. The city, county, regional, state, and federal government need to take bold steps to ensure that no federal funds or tax dollars are being used in a discriminatory manner. Title VI of the Civil Rights Act of 1964 compliance reviews and equity analysis must be analyzed and scrutinized.
- ! **Land Use Reform and Brownfields Redevelopment.** Current land-use decision making favors development in the suburbs or “greenfields” rather than inner city areas. Some policies even foster abandonment and infrastructure decline. Alternatively, existing policies, such as criteria for funding water/sewer infrastructure could be modified to favor existing, rather than new development. In addition, “brownfields,” or abandoned or underutilized property or buildings, need to be reclaimed and brought back into production. Residents in neighborhoods with brownfields sites must be an integral part of the redevelopment process.
- ! **Regional Transportation Authority.** The time is long overdue for the creation of a regional transportation authority that will plan, administer, link, and coordinate mass transit services in the Atlanta region. Innovative and creative strategies are needed by this regional authority to link existing and new public transit services (i.e., buses, light rail, and commuter rail) in an effort to maximize resources, increase access and mobility, and reduce air pollution and congestion.

- ! **Transit-Oriented Development.** Transit stations can become more than a place where commuters pass through on their way to somewhere else. Planners can shape land uses and development that are amenable to walking, bicycling, and transit use. One measure to combat sprawl is transit-oriented development that promotes more dense, mixed land uses combined with location efficient mortgages. The idea is that money saved from lower transportation costs (and thus boosting ones disposable income) could be used to qualify a greater number of lower and moderate income households for home mortgages. The spillover effect is increased home ownership in inner-city neighborhoods.
- ! **Streets for Walking, Bicycles, and Transit.** As a rule, sprawl development is not pedestrian, bicycle, or transit friendly. Infrastructure enhancements and service improvements are needed to get people out of their homes and cars. Walking and biking are two major travel modes that produce zero pollution. In addition, sidewalks, bike lanes, jogging paths all encourage physical activity, enhance public health, and promote social interaction and a sense of “community.”
- ! **Gas Tax Reform.** Georgia’s has the lowest gasoline tax in the country (i.e., 7.5 cents per gallon). The state limits the use of the gas tax to roads and bridges. It is recommended that the state constitution be changed to allow for Georgia’s gas tax to be used for alternative transportation modes.
- ! **Equity Analysis and Transportation Planning.** In compliance with Title VI of the Civil Rights Act, President Clinton’s Executive Order on Environmental Justice, and U.S. Department of Transportation (USDOT) Order on Environmental Justice, USDOT should require planning agencies to conduct regular analysis of transportation decision-making, policies, investments and impacts to determine whether decisions have been made in an equitable fashion. It should also enforce the disclosure of geographic distribution of investments. These types of analysis should be an integral part of Transportation Improvement Programs, Major Investment Studies, Regional Transportation Plans, and State Implementation Plans. They should be used as evaluation criteria for the Atlanta Regional Commission (ARC) certification and the approval of state plans.
- ! **Air Quality.** USDOT should enforce air quality conformity requirements at all stages of the transportation planning process. It should also encourage the spending of investments to benefit low-income communities and communities of color, especially if these areas exhibit disproportionately high levels of criteria pollutants. USDOT should work closely with EPA and the Centers for Disease Control and Prevention to monitor air quality levels in the region.
- ! **Public Health and Safety.** USDOT should encourage the National Highway Traffic Safety Administration and other agencies to focus on neighborhood safety issues, particularly pedestrian safety. It should also ensure that a reasonable amount of transportation safety funds are spent on pedestrian-related projects.

- ! **Investment in Low-Income Communities and Communities of Color.** USDOT should encourage investment in transportation funds in low-income communities and communities of color to support job creation and economic development.
- ! **Improving Access to Jobs.** Improving low-income residents mobility, particularly for those making the transition from welfare to work, may be the difference between employment and unemployment. Public transportation improvements go hand-in-hand with expanding jobs opportunities. The region should create Transportation Pilot Programs to improve transportation efficiency, reduce the impacts of transportation on the environment, reduce the need for infrastructure investment, provide efficient access, examine development patterns and involve the private sector in such efforts. Some of these pilot projects will need to be based in low-income communities and communities of color, and focus on environmental justice issues.
- ! **Needs Assessment.** The regional transportation planning process needs to include a thorough and comprehensive assessment of current and future travel needs. This assessment should incorporate transportation options such as transit, walking, and bicycling based on the location and demographics of forecasted population and employment trends. The assessment will also need to quantify the various infrastructure changes which may be needed, e.g. miles of new roads, sidewalks, and bicycle lanes, public transit and van pool service expansion, congestion pricing, and parking management, etc.
- ! **Uniform Local Public Involvement Processes.** The ARC should quickly move to formally create a citizen advisory group to provide reaction, guidance, recommendations and outreach to the public on current and future issues related to transportation, air quality, and growth in the region. The group should have formal membership that is representative of the population, user, and interest groups in the region.
- ! **Outreach to Atlanta's Urban Core Stakeholders.** It makes little sense to have only "white men in suits" talking to each other about solving the Atlanta region's air pollution, transportation, sprawl, and overall quality of life problems. One needs only turn on the television or turn to the local newspaper to see this one-race scenario play itself out. African Americans and other people of color organizations and institutions are not invisible. They have much to contribute if only given the opportunity.
- ! **Title VI and Environmental Justice.** ARC should demonstrate that its TIP and Plan comply with Title VI of the Civil Rights Act of 1964, which assure transportation investments promote greater equity in access to opportunities in the Atlanta region. The assessment will also need to address equity, environmental justice, and adequacy and appropriateness of current data, computer modeling capabilities, process for assessing needs and developing projects, and use of performance measures. The region's congestion relieving strategies will also need to meet Title VI and environmental justice requirements.

! Performance Measures and Public Information. It is also important that alternative investment and growth scenarios be analyzed by the ARC in order to give people a sense of the costs and benefits of various growth futures.

Finally, the Atlanta metropolitan area is faced with some major challenges ahead. How it handles the challenges created by sprawl in the next few years may well determine the area's future as a desirable and livable region. Sprawl is not a necessary byproduct of urban growth and economic development. Growth can be planned and managed. However, it will take a concerted effort on many fronts to arrest the runaway sprawl pattern that typifies the Atlanta metropolitan region and most major American urban centers. To continue down the current road of sprawl is too costly for everyone. Working together, public and private joint ventures can make a difference in the quality of life enjoyed by everyone who lives in the region. The future of the region is intricately bound to how government, business, and community leaders address Atlanta's quality of life issues.

VI. RESOURCES

Books and Reports

Aspen Institute. *Suburbs and Cities: Changing Patterns of Metropolitan Living*. Washington, DC: The Aspen Institute Domestic Strategy Group, 1995.

Beaumont, Constance. *Smart States, Better Communities: How State Governments Can Help Their Citizens Preserve Their Communities*. Washington, DC: National Trust for Historic Preservation, 1996.

Benfield, F. Kaid, Matthew D. Raimi, and Donald D.T. Chen. *Once There Were Greenfields: How Urban Sprawl Is Undermining America's Environment, Economy and Social Fabric*. Washington, DC: Natural Resources Defense Council and Surface Transportation Policy Project (NRDC & STPP), 1999.

Bennett, Tom and Cynthia Renfro, eds. The Atlanta Journal-Constitution. *Managing Sprawl*. Atlanta, Georgia: Turner Foundation, 1997.

David Bollier. *How Smart Growth Stop Sprawl: A Fledging Citizen Movement Expands*. Washington, DC: Essential Books, 1998.

Bullard, Robert D. *Dumping in Dixie: Race, Class, and Environmental Quality*. 2nd ed., Boulder: Westview Press, 1994.

Bullard, Robert D. and Glenn S. Johnson, eds., *Just Transportation: Dismantling Race and Class Barriers to Mobility*. Gabriola Island, BC: New Society Publishers, 1997.

Camph, Donald H. *Transportation and the Changing Face of America*. Washington, D.C.: Surface Transportation Policy Project, 1995.

Coalition for Smart Growth. *Highway Robbery: Board of Trade's Highway Proposals Will not Solve Our Traffic Woes*. Washington, DC., 1997.

Conservation Law Foundation (CLF). *City Routes, City Rights: Building Livable Neighborhoods and Environmental Justice by Fixing Transportation*. Boston, Massachusetts, 1998

Council on Environmental Quality, Department of Housing and Urban Development and Environmental Protection Agency. *The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe*. Washington, D.C.: Government Printing Office, 1974.

DiStefano, Joe and Matthew Raimi. *Five Years of Progress: 110 Communities Where ISTEA is Making a Difference*. Washington, D.C.: Surface Transportation Policy Project, 1996.

Downs, Anthony. *New Visions for Metropolitan America*. Washington, D.C.: The Brookings Institution and Cambridge, Massachusetts: Lincoln Institute of Land Policy, 1994.

Environmental Justice and Transportation: Building Model Partnerships Proceedings Document. Atlanta, Georgia: Clark Atlanta University, 1996.

Forkenbrock, David J. and Lisa A. Schweitzer. *Environmental Justice and Transportation Investment Policy*. Public Policy Center University of Iowa, 1997.

Frank, Lawrence D. *Land Use Impacts on Household Travel Choice and Vehicle Emissions in the Atlanta Region*. Atlanta, Georgia: Georgia Institute of Technology, 1999.

Greene, David L.. *Transportation and Energy*. Landsdowne, Va: Eno Transportation Foundation, 1997.

Kay, Jane Holtz. *Asphalt Nation: How the automobile Took Over America and How We Can Take It Back*. New York: Crown Publishers, Inc., 1997.

Kunstler, James Howard. *The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*. New York: Simon & Schuster, 1993.

Kunstler, James Howard. *Home from Nowhere: Remaking Our Everyday World for the Twenty-First Century*. New York: Simon & Schuster, 1996.

Logan, Michael F. *Fighting Sprawl and City Hall: Resistance to Urban Growth in the Southwest*. Tucson: University of Arizona Press, 1995.

Logan, Michael, F. *Metro Futures: A High Wage, Low-Waste Democratic Development Strategy for America's Cities and Inner Suburbs*. Madison, Wisconsin: Center on Wisconsin Strategy, 1995.

Mann, Eric with the Planning Committee of the Bus Riders Union. The Labor/Community Strategy Center. . Los Angeles, CA. *A New Vision for Urban Transportation: The Bus Riders Union Makes History at the Intersection of Mass Transit, Civil Rights, and the Environment*, 1996.

Marx, Julie and Pricilla Salant. *Rural Communities in the Path of Development: Stories of Growth, Conflict and Cooperation*. Washington, DC: The Aspen Institute Rural Economic Policy Program, 1996.

Michael F. Logan. *Fighting Sprawl and City Hall: Resistance to Urban Growth in the Southwest*.

Tucson: University of Arizona Press, 1995.

Moe, Richard and Carter Wilkie. *Changing Places: Rebuilding Community in the Age of Sprawl*. New York: Henry Holt & Co., 1997.

Orfield, Myron. *Atlanta Metropolitcs: A Regional Agenda for Community and Stability*. Brookings Institution Press, 1997.

Porter, Douglas R.. *Managing Growth in America's Communities*. Washington, D.C.: Island Press, 1997.

Roodman, David Malin. *Paying the Piper: Subsidies, Politics and the Environment*. Washington, DC: Worldwatch Paper 133, 1996.

Rusk, David. *Cities without Suburbs*. Washington, D.C.: Woodrow Wilson Center Press, 1995.

Russonello, Belden and Stewart Research and Communications. *Choices Between Asphalt and Nature: Americans Discuss Sprawl*. Washington, DC., 1998.

Sierra Club. *The Dark Side of the American Dream: The Costs and Consequences of Suburban Sprawl*. College Park, Maryland: Sierra Club, 1998.

Southern Environmental Law Center and Environmental Law Institute. *Smart Growth in the Southeast: New Approaches to Guiding Development*. Charlottesville, Virginia: Southern Environmental Law Center and Environmental Law Institute, 1999.

Taxpayers for Common Sense and Friends of the Earth. *Road to Ruin: The 50 Worst Road Projects in America That Would Waste Tax Dollars, Harm Our Communities and Damage the Environment*. Washington, DC: Taypayers for Common Sense, 1999.

Thompson, Edward. *An Unevel Playing Field: How Public Policies Favor Suburban Sprawl Over Downtown Development in Metropolitan Atlanta*. Washington, DC: American Farmland Trust and The Georgia Conservancy, 1999.

Transportation Research Board/National Research Council. *Transportation Research Circular. Environmental Research Needs in Transportation*. Washington, DC., 1997.

U.S. Department of Transportation Federal Highway Administration. *Community Impact Assessment: A Quick Reference for Transportation*, 1996.

U.S. Department of Transportation Federal Highway Administration. *Public Involvement Techniques for Transportation Decision-making*. Washington, D.C. Prepared by Howard/Stein-Hudson Associates, Inc., and Parsons, Brinckernoff, Quade and Douglas, 1996.

Urban Habitat Program. *What if we shared?* San Francisco, California: Urban Habitat Program, 1998.

Wachs, Martin and Margaret Crawford. *The Car and the City: The Automobile, the Built Environment and Daily Urban Life*. Ann Arbor: University of Michigan Press, 1992.

Organizations and Websites

Center for Community Change.. <http://www.communitychange.org>. The Center for Community Change has launched the Transportation Equity Network at the University of Toledo Urban Affairs Center. The monitoring project is design to determine whether Metropolitan Planning Organizations or MPOs are taking into account environmental justice and civil rights in their decision making.

Conservation Law Foundation. <http://www.clf.org>. The Conservation Law Foundation works to solve the environmental problems that threaten the people, natural resources and communities of New England. CLF's advocates use law, economics and science to design and implement strategies that conserve natural resources, protect public health, and promote vital communities in our region. Founded in 1966, CLF is a nonprofit member-supported organization.

Deep South Center for Environmental Justice. <http://www.xula.edu/dscej>. The Deep South Center for Environmental Justice (DSCEJ) was developed in 1992 in collaboration with community environmental groups and other universities within the region to address environmental justice issues. The DSCEJ provides opportunities for communities, scientific researchers, and decision makers to collaborate on programs and projects that promote the rights of all people to be free from environmental harm as it impacts health, jobs, housing, education, and a general quality of life.

Environmental Justice Resource Center. <http://www.ejrc.cau.edu>. The Environmental Justice Resource Center (EJRC) at Clark Atlanta University, founded in 1994, serves as a major resource, database, and information clearinghouse on environmental justice, environmental racism, transportation equity, urban land use, suburban sprawl, and civil rights.

Labor Community Strategy Center. <http://www.jgc.apc.org/lctr/>. The Labor/Community Strategy Center is a multiracial anti-corporate "think-tank/act-tank" committed to building democratic internationalist social movements. The Strategy Center's work encompasses all aspects of urban life: it emphasizes rebuilding the labor movement, fighting for environmental justice, truly mass transit, and immigration rights, as well as actively opposing the growing criminalization, racialization, and feminization of poverty. Through direct grassroots organizing by the Strategy Center's WATCHDOG environmental project, Bus Riders Union, and Urban Strategies Group, and through research, policy development, strategy formation, and publication, the Labor/Community Strategy Center is generating a creative and aggressive response to the growing power of the corporate-led political Right.

New York Environmental Justice Alliance. <http://www.nyceja.org>. Founded in 1991, the New York City Environmental Justice Alliance is a city-wide network that links grassroots organizations, low-income neighborhoods and communities of color in their struggle against environmental racism. The NYCEJA also produces a bi-weekly *Transportation Justice* newsletter.

Sierra Club. <http://www.sierraclub.org>. The mission of The Sierra Club Foundation is to advance the preservation and protection of the natural environment by empowering the citizenry, especially democratically based grassroots organizations, with charitable resources to further the cause of environmental protection. The Sierra Club is the vehicle through which the Sierra Club Foundation generally fulfills its charitable missions.”

Sprawl Watch Clearinghouse. <http://www.sprawlwatch.org>. The Sprawl Watch Clearinghouse mission is to make the tools, techniques, and strategies developed to manage growth, and to be accessible to citizens, grassroots organizations, environmentalists, public officials, planners, architects, the media and business leaders. At the Clearinghouse we identify, collect, compile and disseminate information, on the best land use practice for those listed above.

Surface Transportation Policy Project. <http://www.transact.org>. The goal of Surface Transportation Policy Project is to ensure that transportation policy and investments help conserve energy, protect environmental and aesthetic quality, strengthen the economy, promote social equity, and make communities more livable. They emphasize the needs of people, rather than vehicles, in assuring access to jobs, services, and recreational opportunities.

Urban Habitat Program. <http://www.igc.apc.org/uhp/>. Founded in 1989, the Urban Habitat Program is dedicated to building multicultural urban environmental leadership for socially just, ecologically sustainable communities in the San Francisco Bay Area. UHP has played a leadership role in broadening environmental justice’s national agenda. At the metropolitan regional scale—through actions, networking, conferences, publications, teaching, and advocacy----UHP has assisted over a hundred organizations working on environmental justice issues: health, food security, recycling, energy, military base conversion, arts and culture, education, immigration and population, parks and open space.

Videos

Just Transportation, 45 min. Running time, Clark Atlanta University: EJRC-CAU Television (1996). This video includes highlights from the “Environmental Justice and Transportation: Building Model Partnerships Conference” that was held in Atlanta, Georgia in 1995. The Atlanta conference brought together grassroots organizers, civil rights activists, local, state, tribal, and federal transportation planners, public officials, legal experts, and academics to discuss strategies for building livable and just communities. Transportation Issues in people of color communities are explored and shot on location in Atlanta, Chicago, Los Angeles, San Francisco, Harlem (New York City), and Washington, DC. For

more information contact: Environment Justice Resource Center Clark Atlanta University Atlanta, GA 30314 (404) 880-6911 (404) 880-6909 fax, E-mail: ejrc@cau.edu, <http://www.ejrc.cau.edu>.

Bus Riders Union Film , 86 min. Running time, The Labor/Community Strategy Center (2000), This video is a new documentary of Academy Award cinematographer Haskell Wexlers' that traces three years in the life of the Los Angeles Bus Riders Union as it forges a powerful multiracial movement to fight transit racism, clean up LA's lethal auto pollution, and win billion-dollar victories for real mass transit for the masses. For more information contact: The Labor/Community Strategy Center 3780 Wilshire Boulevard , Suite 1200 Los Angeles, CA 90010 (213) 387-2800 (213) 387-3500 fax, E-mail: laborctr@igc.apc.org, <http://www.igc.org/lctr>.

Divided City: The Route to Racism. 22 minutes Running time, Films for the Humanities and Science (2000). This video is from the *ABC News Nightline* where the death of Cynthia Wiggins from Buffalo, New York is discussed. Ms. Wiggins was killed by a dump truck while crossing a seven-lane highway to get to her job at the Walden Galleria Mall. The mall's operators and planners were charged with racism because the bus route that served inner-city residents were prevented from stopping at the shopping mall. For more information contact: Films for the Humanities & Sciences, P.O. Box 2053, Princeton, NJ 08543-2053, 1-800-257-5126 or (609) 275-1400 (609) 275-3767 (fax), E-mail: custserv@films.com, <http://www.films.com>

Tango 73: A Bus Riders Diary. 28 min. Running time, New Day Films. A documentary film by Gabriela Quiros that illustrates the importance of public transportation. The documentary uncovers the social rituals of bus riders who travel the number 73 bus line along the east shore of the San Francisco Bay Area. Contact New Day Films, 22-D Hollywood Avenue, Hohokus, NJ 07423 or 1-888-367-9154, (201) 652-1973 fax, Email: orders@newday.com.

VII. ENDNOTES

-
1. Carl Anthony, "Suburbs are Making Us Sick: Health Implications of Suburban Sprawl and Inner City Abandonment on Communities of Color." *Environmental Justice Health Research Needs Report Series*. Atlanta: Environmental Justice Resource Center, 1998.
 2. Myron Orfield, *Metropolitics: A Regional Agenda for Community and Stability*. Washington, DC: Brookings Institution Press, 1997, p. 2.
 3. James J. MacKenzie, Roger C. Dower and Donald T. Chen, *The Going Rate: What It Really Costs to Drive*. World Resources Institute, June 1992, p. vii; Mark E. Hanson, "Automobile Subsidies and Land Use," *Journal of the American Planning Association* 58 (1992), pp. 60-71; R.D. Bullard and G.S. Johnson, "Just Transportation," in R.D. Bullard and G.S. Johnson, eds., *Just Transportation: Dismantling Race and Class Barriers to Mobility*. Gabriola Island, British Columbia: New Society Publishers, 1997, pp. 7-21; Conservation Law Foundation, *City Routes, City Rights: Building Livable Neighborhoods and Environmental Justice by Fixing Transportation*. Boston: Conservation Law Foundation, 1998, p. 5.
 4. Charles W. Schmidt, "The Specter of Sprawl," *Environmental Health Perspective* 106 (June, 1998), p. 274.
 5. American Farmland Trust, *Living on the Edge: The Costs and Risks of Scatter Development*. Washington, DC: American Farmland Trust, 1998.
 6. David Bollier, *How Smart Growth Can Stop Sprawl: A Fledgling Citizen Movement Expands*. Washington, DC: Essential Books, 1998, p. 1.
 7. William Julius Wilson, *The Truly Disadvantaged: The Inner City, the Underclass and Public Policy*. Chicago: Review Press, 1987.
 8. R.D. Bullard and Joe R. Feagin, "Racism and the City," in Mark Gottdiener and C.V. Pickvance (eds.), *Urban Life in Transition*. Newbury Park, CA: Sage, 1991, pp. 55-76.
 9. Massey and Denton, *American Apartheid*, p. 14.
 10. Myron Orfield, *Metropolitics*, p. 3.
 11. James S. Kunen, "The End of Integration," *Time*, April 29, 1996.
 12. James Howard Kunstler, *Home from Nowhere: Remaking Our Everyday World for the Twenty-First Century*. New York: Simon & Shuster, 1996, p. 27.

-
13. Bill Dedman, "The Color of Money," *The Atlanta Journal and Constitution* (May, 1988); Gary Dymski and John M. Veitch, "Taking It to the Bank: Race, Credit, and Income." Pp. 150-179 in Los Angeles, in R.D. Bullard, J. E. Grigsby, and C. Lee, eds., *Residential Apartheid: The American Legacy*. Los Angeles: UCLA Center for African Studies Publication, 1994.
 14. Douglas Kelbaugh, *Common Place: Toward Neighborhood and Regional Design*. Seattle: University of Washington Press, 1997, p. 31.
 15. Shelly Emling, "Black Areas in City Pay Steep Rates," *Atlanta Journal and Constitution*, June 30, 1996.
 16. Robert D. Bullard, "Solid Waste Sites and the Black Houston Community." *Sociological Inquiry* 53 (Spring, 1983): 273-288; United Church of Christ Commission for Racial Justice, *Toxic Wastes and Race in the United States* (New York: United Church of Christ, 1987); Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Boulder: Westview Press, 1990); Eric Mann, *L.A.'s Lethal Air: New Strategies for Policy, Organizing, and Action* (Los Angeles: Labor/Community Strategy Center, 1991); D. R. Wernette and L. A. Nieves, "Breathing Polluted Air: Minorities are Disproportionately Exposed." *EPA Journal* 18 (March/April, 1992): 16-17; Robert D. Bullard, "In Our Backyards: Minority Communities Get Most of the Dumps." *EPA Journal* 18 (March/April, 1992): 11-12; Bryant and Mohai, *Race and the Incidence of Environmental Hazards* (Boulder: Westview Press, 1992), pp. 163-176; Robert D. Bullard, ed., *Unequal Protection: Environmental Justice and Communities of Color* (San Francisco: Sierra Club, 1996).
 17. Agency for Toxic Substances Disease Registry, *The Nature and Extent of Lead Poisoning in Children in the United States: A Report to Congress*. Atlanta: U.S. Department of Health and Human Services, 1988, pp. I-12; James L. Pirkle, Debra J. Brody, Elaine W. Gunter, Rachel A. Kramer, Daniel C. Paschal, Katherine M. Flegal, Thomas D. Matte, "The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Survey (NHANES III)," *Journal of the American Medical Association* 272 (July 27, 1994): 284-291.
 18. Robert D. Bullard, "Environmental Racism and Land Use." *Land Use Forum: A Journal of Law, Policy & Practice* 2 (Spring, 1993): 6-11.
 19. United Church of Christ Commission for Racial Justice, *Toxic Wastes and Race*; Paul Mohai and Bunyan Bryant, "Environmental Racism: Reviewing the Evidence," pp. 163-176.
 20. Bunyan Bryant and Paul Mohai, eds., *Race and the Incidence of Environmental Hazards*. Boulder: Westview Press, 1992.
 21. Centers for Disease Control and Prevention, "Update: Blood Lead levels - United States, 1991-1994." *Morbidity and Mortality Weekly Report* 46, no. 7 (February 21, 1997), pp. 141-146.
 22. Charles Seabrook, "Scalping of the Land Makes Atlanta Hot," *Atlanta Journal and*

Constitution, February 19, 1999, p. A1.

23. See Scott Bronstein, "Chattahoochee Cleanup: How Far Do to Go," *Atlanta Journal and Constitution*, April 20, 1993.

24. Charles Seabrook, "A Dirty, Dangerous Journey," *Atlanta Journal and Constitution*, November 23, 1997, p. Q1.

25. Sherrie Russell and Goro Mitchell, "Atlanta's Environment and the Black Community," pp. 98-139 in Bob Holmes, ed., *The State of Black Atlanta, 1994*. Atlanta: Southern Center for Studies in Public Policy, Clark Atlanta University, 1994.

26. *Ibid.*, pp. 101-102.

27. State of Georgia, Environmental Protection Division, "Listing of Wastewater Enforcement Actions Against the City of Atlanta 1990-1994," EPD, 1994.

28. Julie B. Hairston, "Atlanta Will Pay Larger Pollution Fine," *Atlanta Journal and Constitution*, July 30, 1999, D1.

29. See Robert D. Bullard, *Dumping in Dixie: Race, Class and Environmental Quality*. Boulder: Westview Press, 1994; Robert D. Bullard, *Unequal Protection: Environmental Justice and Communities of Color*. San Francisco: Sierra Club Books, 1996; B. Bryant and P. Mohai, *Race and the Incidence of Environmental Hazards*. Boulder: Westview Press, 1992.

30. Arnold W. Reitze, Jr., "A Century of Air Pollution Control Law: What Worked; What Failed; What Might Work," *Environmental Law* 21 (1991), p. 1549.

31. D.R. Wernette and L.A. Nieves, "Breathing Polluted Air: Minorities are Disproportionately Exposed," *EPA Journal* 18 (March 1992): 16-17.

32. Research Atlanta, Inc. *The Costs of Nonattainment: Atlanta's Ozone Imbroglio*. Atlanta: Georgia State University, 1997, p. 20.

33. CDC, "Asthma - United States, 1982 - 1992." *MMWR* 43 (1995): 952-955.

34. CDC, "Asthma mortality and hospitalization among children and young adults - United States, 1980-1993." *MMWR* 45 (1996): 350-353.

35. Anna E. Pribitkin, "The Need for Revision of Ozone Standards: Why Has the EPA Failed to Respond?" *Temple Environmental Law & Technology Journal* 13 (1994), p. 104.

36. CDC/NCHS. *Health United States 1994*. DHHS Pub.No.(PHS) 95-1232; Tables 83, 84, 86, & 87.

-
37. CDC, "Asthma - United States, 1982 - 1992." *MMWR* 43 (1995): 952-955.
 38. CDC, "Disabilities among children aged less than or equal to 17 years - United States, 1991-1992." *MMWR* 44 (1995): 609-613.
 39. See Mann, *L.A.'s Lethal Air*.
 40. U.S. EPA, *Review of National Ambient Air Quality Standards for Ozone, Assessment of Scientific and Technical Information, OAQPS Staff Paper*. Research Triangle Park, NC: EPA, 1996; Haluk Ozkaynak, John D. Spengler, Marie O'Neil, Jianping Xue, Hui Zhou, Kathy Gilbert, and Sonja Ramstrom, "Ambient Ozone Exposure and Emergency Hospital Admissions and Emergency Room Visits for Respiratory Problems in Thirteen U.S. Cities," in American Lung Association, *Breathless: Air Pollution and Hospital Admissions/Emergency Room Visits in 13 Cities*. Washington, DC: American Lung Association, 1996; American Lung Association, *Out of Breath: Populations-at-Risk to Alternative Ozone Levels*. Washington, DC: American Lung Association, 1995.
 41. Centers for Disease Control and Prevention, National Center for Environmental Health, Division of Environmental Hazards and Health Effects, Air Pollution and Respiratory Branch, "Asthma Mortality and Hospitalization Among Children and Young Adults - United States, 1980-1993," *Morbidity and Mortality Weekly Report*, 45 (1996).
 42. Centers for Disease Control, "Asthma: United States, 1980-1990," *MMWR* 39 (1992): 733-735.
 43. See H. P. Mak, H. Abbey, and R.C. Talamo, "Prevalence of Asthma and Health Service Utilization of Asthmatic Children in an Inner City." *Journal of Allergy and Clinical Immunology* 70 (1982): 367-372; I.F. Goldstein and A.L. Weinstein, "Air Pollution and Asthma: Effects of Exposure to Short-Term Sulfur Dioxide Peaks." *Environmental Research* 40 (1986): 332-345; J. Schwartz, D. Gold, D.W. Dockery, S.T. Weiss, and F.E. Speizer, "Predictors of Asthma and Persistent Wheeze in a National Sample of Children in the United States." *American Review of Respiratory Disease* 142 (1990): 555-562; F. Crain, K. Weiss, J. Bijur, et al., "An Estimate of the Prevalence of Asthma and Wheezing among Inner-City Children," *Pediatrics* 94 (1994): 356-362.
 44. Mary C. White, Ruth A Etzel, Wallace D. Wilcox, and Christine Lloyd, "Exacerbations of Childhood Asthma and Ozone Pollution in Atlanta," *Environmental Research* 65 (1994), p. 56.
 45. American Lung Association, *Out of Breath: Populations-at-Risk to Alternative Ozone Levels*. Washington, DC: American Lung Association, November, 1995, Table 6.
 46. John Lewis, "Preface," in Bullard and Johnson, *Just Transportation*, pp. xi-xii.
 47. Bullard and Johnson, *Just Transportation*, pp. 7-21.

48. Don Chen, "Linking Social Equity with Livable Communities," in Bullard and Johnson, eds., *Just Transportation*, p. 39.

49. Robin D.G. Kelly, "Freedom Riders (the Sequel)," *The Nation*, February 6, 1996.

50. Eric Mann, "Confronting Transit Racism in Los Angeles," in Bullard and Johnson, eds, *Just Transportation*, pp. 68-83.

51. Steve Lopez, "The Few, the Proud, the Bus Riders," *Time*, August 31, 1998, p. 8.

52. Ibid., p. 69.

53. David Oedel, "The Legacy of Jim Crow in Macon, Georgia," in Bullard and Johnson, eds., *Just Transportation*, pp. 97-109.

54. Ibid., p. 100.