



ANALYSIS OF IMPEDIMENTS TO FAIR HOUSING IN DANE COUNTY, WI

FORWARD

An Analysis of Impediments to Fair Housing Choice (AI) is a comprehensive review of a state or entitlement jurisdiction's laws; regulations; and administrative policies, procedures and practices. The AI involves an assessment of how these laws, regulations, policies, and procedures affect the location, availability, and accessibility of housing. It also assesses how conditions, both private and public, affect fair housing choice. Although AIs are not submitted to or approved by HUD, HUD recommends that jurisdictions maintain their AIs and update periodically, but at least once every five years. Dane County last updated its AI in 2011.

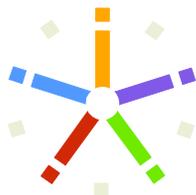
Geography of Opportunity: A Fair Housing Equity Assessment for Dane County, Wisconsin explores the distribution of opportunities, and barriers to opportunities in Dane County. The report (enclosed) is part of coalition of 27 public and private entities that came together as the Capital Region Sustainable Communities (CRSC). The CRSC initiative started with the award by U.S. Department of Housing and Urban Development (HUD) of a Sustainable Communities Regional Planning Grant. A purpose of Geography of Opportunity is to advance a CRSC priority challenge: ensuring equitable access to opportunity for all. HUD has determined that fulfilling the requirements of the Fair Housing Equity Assessment (FHEA) satisfies requirements under the federal Fair Housing Act, including HUD requirements to "affirmatively further fair housing choice."

Effective in 2016, HUD imposed a new rule/ process for conducting an analysis of impediments to fair housing choice. The new document, the Assessment to Fair Housing (AFH), is to be submitted 270 days prior to the submission of the next Consolidated Plan. HUD is encouraging grantees to take a regional approach to addressing fair housing by collaborating with other local jurisdictions and organizations that administer HUD Community Planning and Development (CPD) programs. Dane County has been in discussions with other entities who receive direct funding for a HUD CPD program, including the City of Madison; local Housing Authorities; and the Community Development Authority, to prepare and submit a joint AFH. Upon adoption by the CDBG Commission, the *Equity Assessment* contained within will be the new working AI document for Dane County until the AFH is submitted as part of the next Consolidated Planning process.

A summary of the findings can be found in the Executive Summary section of the report contained within.

Geography of Opportunity:

A Fair Housing Equity Assessment for Wisconsin's Capital Region



Capital Region
Sustainable Communities

[this page left intentionally blank]

Capital Area Regional Planning Commission

List of Commissioners

Joe Ball
Zach Brandon
Mark Geller
Ken Golden
Kris Hampton
Eric Hohol
Jason Kramar (Treasurer)
Peter McKeever (Vice Chair)
Ed Minihan
Warren Onken
Larry Palm (Chair)
Caryl Terrell
Evan Touchett

Acknowledgements

Contributing Staff

The following staff contributed to the FHEA:

Phineas Hanson, Intern
Sean Higgins, AICP, Community Planner
Rachel Holloway, Community Planner (former)
Kamran Mesbah, PE, AICP, Deputy Director,
and Director of Environmental Resources Planning
Dan McAuliffe, Senior Community Planner and Designer
Steve Steinhoff AICP, Director, Community and Regional Development Planning

[page left intentionally blank]

Equity Work Group for Capital Region Sustainable Communities:

Jon Becker, Earth/Art Resources and CRANES
Jordan Bingham, PHMDC
Terri Bleck, Gardens for Empowerment
Colleen Butler, YWCA
Colleen Clark, Dane County Board
Rob Dicke, Dane County Housing Authority
Jason Glozier, Madison DCR
Melissa Gombar, City of Madison Dept. of Civil Rights
Will Green, Mentoring Positives
Jeff Greger, Madison Area Transportation Board
Dana Hanaman, City of Madison DCR AA Contract Compliance
Maria Hart, Center for Freight Infrastructure Research and Education
Rachel Holloway, Village of Deforest
Eva Kubinski, Dept. of Public Instruction
Sharon Lecberg, Dane County UW Extension
Edward Lee, Urban League
David Long, UW Applied Population Lab
Jennifer Lord, Madison Out of School Time (MOST)
Michele Macky, PHMDC
Donna Magdalena, Schenk-Atwood Neighborhood Association
Salli Martyniak, Forward Community Investments
Erin McWalter, Madison Traffic Garden
Joe Mingle, Mentoring Positives
Erica Nelson, Race to Equity
Susan Ramspacher, Lussier Community Education Center
Stephanie Rearick, Dane County Time Bank
Angela Russell, PHMDC
Tariq Saqqaf, City of Madison
Julie Spears, City of Madison Community Development Division
Jim Stickels, Wisconsin Litteracy; African American Association of Madison
Paula Tran Inzeo, UW Population Health Institute
Kabzuag Vaj, Freedom Inc.
Dan Veroff, UW-Applied Population Laboratory
Bill White, Winnebago-Atwood Committee; MadREP President
Maribeth Witzel-Behl, Madison City Clerk
Denise Demarb, Alder, City of Madison
Ledell Zellers, Alder, City of Madison

University of Wisconsin, School of Medicine and Public Health

Tracy Flood, MD, PhD, Larry Hanrahan, PhD, MS, and Aman Tandias, MS. Thank you to Aman for extracting the data and Tracy for the analysis.

Public Health Madison & Dane County

City of Madison

Community Development Division, Augustin Olvera, Tom Conrad and Julie Spears
Office of Common Council, Heather Allen

Kirwan Institute

Jason Reece, Jillian Olinger, Mathew Martin, Kip Holley and David Norris

[this page left intentionally blank]

Table of Contents

Capital Area Regional Planning Commission.....	3
List of Commissioners.....	3
Acknowledgements.....	3
Contributing Staff.....	3
Equity Work Group for Capital Region Sustainable Communities:.....	5
Table of Contents.....	7
Executive Summary.....	10
A. Introduction.....	1
Place Matters.....	1
About the Sustainable Communities Regional Planning Grant.....	1
About Capital Region Sustainable Communities.....	1
CRSC Geography.....	2
About Capital Area Regional Planning Commission (CARPC).....	2
The Fair Housing Equity Assessment.....	3
FHEA versus Analysis of Impediments to Fair Housing Choice.....	3
Regional Coordination of Fair Housing.....	4
Organization of this Document.....	4
B. Context: The Dane County Region.....	5
Population Trends.....	5
Age.....	7
Race and Ethnicity.....	9
Persons with Disabilities.....	14
Economy.....	15
Labor Force, Occupations and Unemployment.....	19
Income.....	25
Households.....	28
Housing.....	30
C. Geography of Opportunity.....	35
Access to Opportunities.....	35
Barriers to Accessing Opportunities: Social and Economic.....	39
Profiles of Areas with Concentrated Barriers to Opportunity.....	52
Barriers to Opportunity: Physical.....	65
Barriers to Opportunity and Health Outcomes.....	90
Conclusion.....	99
D. What Contributes to Barriers to Opportunity?.....	100
History of Housing Discrimination.....	100
Housing Discrimination and Fair Housing.....	105
Lending Analysis.....	107
Siting of Assisted Housing.....	108
Zoning and Land Use Barriers.....	110
E. Promoting Equitable Access to Opportunities.....	116
Framework for Promoting Equitable Access to Opportunity.....	116
Action Plan.....	127

List of Appendices-Separate Documents

- Appendix A: Background Data
- Appendix B: Opportunity Mapping Atlas
- Appendix C: Measures of Segregation
- Appendix D: Measures of Disparities in Access to Opportunity
- Appendix E: Best Practices for Incorporating Equity and Inclusion in Planning
- Appendix F: FHEA Deliberation
- Appendix G: Community Building Grant Summary Report

Figures

Figure 1 – Overview of Madison Region	10
Figure 2 – Racial Composition of Age Groups: Dane County, 2010	11
Figure 3 – Childhood Opportunity Index, Dane County Wisconsin	12
Figure 4 – Count of Opportunity Barriers, Madison Area, 2010	13
Figure 5 – Interconnected Challenges and Possible Synergies	15
Figure 6 – Dane County Region	2
Figure 7 – Population Growth by Sub Region, 2000–2010	6
Figure 8 – Population Growth in Dane County by Sub-Region, 2000-2010	7
Figure 9 – Life Stage Categories	8
Figure 10 – Population of Life Stage Groups by Decade	8
Figure 11 – Projected Population Trends for Age Groups: Dane County	9
Figure 12 – Racial and Ethnic Composition US vs. WI vs. Dane County, 2000, 2010	10
Figure 13 – Racial Composition of Age Groups: Dane County, 2010	11
Figure 14 – Percent Persons of Color in Sub-Areas of Dane County, 2010	12
Figure 15 – Percent Change in Population of Whites and People of Color, 1990–2010	12
Figure 16 – Dot Map Distribution of Population by Race, Dane County 2010	13
Figure 17 – Dot Map Distribution of Population by Race, Dane County-Central Area 2010	14
Figure 18 – Average Annual Growth in Economic Output per Capita	16
Figure 19 – Dane County Employment by Sector, 2000–2010	18
Figure 20 – Dane County Occupations with High Numbers of Jobs	20
Figure 21 – Dane County Occupations with High Growth Rates and Significant Jobs	21
Figure 22 – United States Job Openings by Educational Requirement, 2010-2020	22
Figure 23 – Highest Level of Educational Attainment by Race and Ethnicity, Dane County, 2008-12*	23
Figure 24 – Estimated Percent Persons of Color by Occupation, 2006–2010	24
Figure 25 – Unemployment Rates by Race and Ethnicity, 2010–2012	25
Figure 26 – Median Annual Household Income and Benefits, 2007-2011	26
Figure 27 – Median Income and Benefits by Race and Ethnicity, 2007-2011	27
Figure 28 – Changes to Household and Family Size, 2000–2010	28
Figure 29 – Changes to Household Types, Dane County 1990–2010	29
Figure 30 – Single Parent Family Households in Dane County, 2010	29
Figure 31 – New Housing Units, 2000–2012	31
Figure 32 – Cost Burdens > 30% of Income by Household Income, 2008–2010	32
Figure 33 – Cost Burden > 50% by Household Income, 2008–2010	33
Figure 34 – Cost Burdens by Household Income, Madison and Dane County (non-Madison), 2008–2010	33
Figure 35 – Childhood Opportunity Index, Dane County	36
Figure 36 – Childhood Opportunity Index – Madison, WI Area	37
Figure 37 – Childhood Opportunity Index and Race/Ethnicity, Dane County 2010	38
Figure 38 – Childhood Opportunity Index, Race/Ethnicity, Madison Area 2010	39
Figure 39 – Barrier Thresholds, Dane County	40
Figure 40 – Barriers to Opportunity in Dane County	41
Figure 41 – Madison Area Barriers to Opportunity	42
Figure 42 – Concentration of Dane County Population in Block Groups with Barriers to Opportunity	43
Figure 43 – Childhood Opportunity Index and Barriers to Opportunity, Madison Area 2012	44
Figure 44 – Racial & Ethnic Concentrations of Poverty, Dane County	46
Figure 45 – Racially/Ethnically Concentrated Areas of Poverty, Dane County, 2005-2009	47
Figure 46 – Poverty Rate of Racially and Ethnically Concentrated Areas of Poverty, 1970–2010	47
Figure 47 – Census Tracts Close to Meeting HUD Definition of Racial and Ethnic Concentrations of Poverty (RECAP)	48
Figure 48 – Indices of Dissimilarity, City of Madison, 2010	49
Figure 49 – Indices of Dissimilarity, Dane County, 2010	49
Figure 50 – Percent Persons of Color and Dissimilarity Indices by Municipality and Municipality Type	50

Figure 51 – Summary Table Disparities in Access to Opportunity, Dane County, WI.....	51
Figure 52 – Dunn’s Marsh/Allied Drive—Census Tract 6	52
Figure 53 – Burr Oaks/Bram’s Addition/Capitol View Heights—Census Tract 14.01	54
Figure 54 – Mendota Hills—Census Tract 23.01	58
Figure 55 – Truax/Carpenter-Ridgeway Neighborhoods—Census Tract 25.....	60
Figure 56 – Arbor Hills/Leopold Neighborhoods—Census Tract 14.02.....	61
Figure 57 – Wexford Ridge Neighborhood	63
Figure 58 – Means of Transportation to Work, 2010	65
Figure 59 – Transportation to Work by Public Transit	66
Figure 60 – Transportation to Work by Carpool	67
Figure 61 – Change in Total Number of Jobs by Census Tract, 2002—2011.....	68
Figure 62 – Employment Change 2000—2035 by Traffic Analysis Zone	69
Figure 63 – Employment, Bus Routes, and Barriers to Opportunity, Madison Area 2008-12.....	71
Figure 64 – Living Wage Jobs and Areas with Opportunity Barriers, Madison Area 2011	72
Figure 65 – Change in Living Wage Jobs and Areas with Opportunity Barriers, Madison Area 2002-11	73
Figure 66 – Transit Access and Barriers to Opportunity, Madison Area, 2008-12	74
Figure 67 – Jobs Within a 45 Minute Transit Ride	75
Figure 68 – Street Intersection Density and Areas with Opportunity Barriers, Madison Area 2008-12	76
Figure 69 – Bicycle Paths and Areas with Opportunity Barriers, Madison Area 2008-12	77
Figure 70 – Estimated Annual Transportation Costs, Dane County 2009	78
Figure 71 – Estimated Annual Transportation Costs, Madison Area 2009.....	79
Figure 72 – Typical U.S. Household Budgets: All Households and Working Families	80
Figure 73 – Income, Housing and Transportation Cost Comparison, 2000-2009.....	80
Figure 74 – Housing & Transportation Costs as Percent of Income for Households at 100% of AMI, 2009	81
Figure 75 – Housing + Transportation Costs as Percent of Income for Households at 80% of AMI, 2009	82
Figure 76 – Assisted Housing Units with Opportunity Barriers, Madison	83
Figure 77 – Assisted Housing Units and Childhood Opportunity Index, Dane County	84
Figure 78 – Grocery Stores and Areas with Opportunity Barriers, Madison Area 2008-12	85
Figure 79 – Overlay: Full-Service Grocery Stores (2010) and Concentrations of Households with no Car (2007-11)	86
Figure 80 – Public School Ratings and Areas with Opportunity Barriers, Madison Area 2008-12	87
Figure 81 – Community Centers and Areas with Opportunity Barriers, Madison Area 2008-12	88
Figure 82 – Outdoor Recreation and Areas with Opportunity Barriers, Madison Area 2008-12	89
Figure 83 – Significant Correlation between Disease and Socioeconomic & Environmental Factors	91
Figure 84 – Childhood Obesity in Dane County	93
Figure 85 – Asthma Rates in Dane County.....	94
Figure 86 – Diabetes Rates in Dane County.....	95
Figure 87 – Black-White Disparity in Diabetes Death Rate, Dane County 2012.....	96
Figure 88 – Census Block Groups at “High Risk” due to Proximity to Busy Highways.....	97
Figure 89 – Rates of Chronic Disease in Low and High Risk Block Groups, Dane County.....	98
Figure 90 – Median Net Worth by Race, 1984-2009	103
Figure 91 – Fair Housing Complaints for Dane County	106
Figure 92 – Applications by Race/Ethnicity: Madison Area, 2009	107
Figure 93 – Applications by Percentage of Area Median Family Income, Dane County Outlying Communities, 2009	108
Figure 94 – Distribution of 2012 Assisted Housing Sites, City of Madison (circles added).....	109
Figure 95 – Assisted Housing Units and RECAPS Areas.....	110
Figure 96 – Multi-Family Land Uses, Madison Area 2005.....	112
Figure 97 – Multi-Family Land Uses and Concentrated Barriers to Opportunity, South Madison and Fitchburg	113
Figure 98 – Equality vs. Equity.....	117
Figure 99 – Addressing Equity at the Societal, Community, and Individual/Family Level.....	117
Figure 100 – Potential Bus Rapid Transit Corridors Considered by Transit Corridor Study (2012-2013)	122
Figure 101 – Infill and Redevelopment Potential by Corridor	123
Figure 102 – Park Street – Wingra Creek Transit Oriented Development Illustrative Plan	124
Figure 103 – CRSC Connected Priority Challenges.....	128

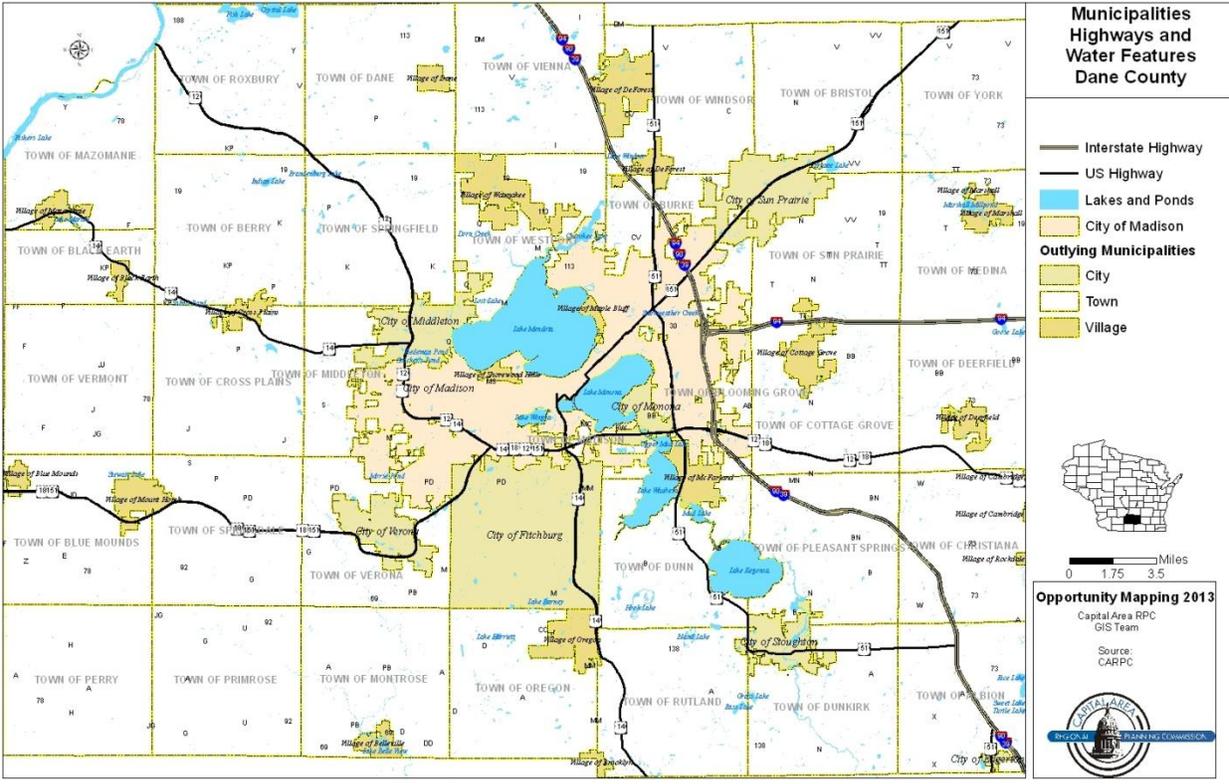
Executive Summary

Healthy, livable and affordable neighborhoods with access to good jobs, healthy food, and active living, are necessary - not only for healthy individuals and families, but also for strong communities and regions. When a neighborhood lacks some of these key ingredients, its residents access fewer opportunities, potentially reducing their well being through outcomes such as loss of income and impaired health.

When barriers to opportunity are persistently concentrated in a number of neighborhoods, those residents experience negative and compounding health, income and well being impacts. When those neighborhoods disproportionately house persons of color, race and ethnicity must be recognized and addressed as drivers of concentrated opportunity barriers. And finally, when these persons of color represent the fastest growing portion of the region – who will dominate the workforce in coming decades – the region as a whole faces potential economic hardship as it competes against peer regions better able to lift up all citizens.

Geography of Opportunity: A Fair Housing Equity Assessment for Dane County, Wisconsin explores the distribution of opportunities, and barriers to opportunities in Dane County, or the Madison, Wisconsin region. It is part of Capital Region Sustainable Communities (CRSC). The CRSC initiative started with the award by U.S. Department of Housing and Urban Development (HUD) of a Sustainable Communities Regional Planning Grant. A purpose of Geography of Opportunity is to advance a CRSC priority challenge: ensuring equitable access to opportunity for all. It also is intended to meet HUD requirements to “affirmatively further fair housing choice.”

Figure 1 – Overview of Madison Region



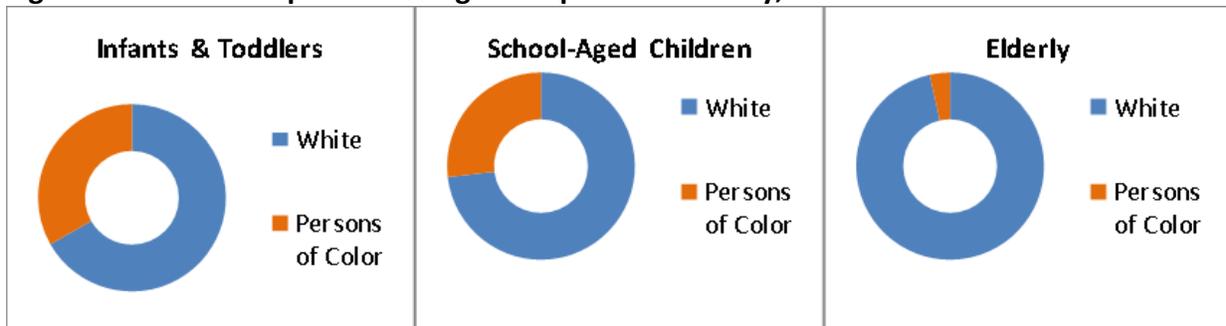
Source: Capitol Area Regional Planning Commission

The Madison Region

The Madison region benefits from an expanding and diversifying population and a healthy and diversified economy anchored by public and exporting industries of technology and finance and insurance. Income and wealth, however, is unevenly distributed; particularly along racial lines. For example, median family income for African-Americans in Dane County is two thirds that of Asian and Hispanic families and about one third of White families.

The region’s racial diversity is unevenly distributed. The City of Madison has the largest population of persons of color. Suburban populations have high percentages of White people, although populations of persons of color are growing faster in these communities. Persons of color are highly concentrated in areas including along the south beltline highway and on the north side, as well as other small areas. Within these concentrations different racial or ethnic compositions exist. Younger populations are much more racially diverse than older populations, reflecting a generational divide.

Figure 2 – Racial Composition of Age Groups: Dane County, 2010



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 2010

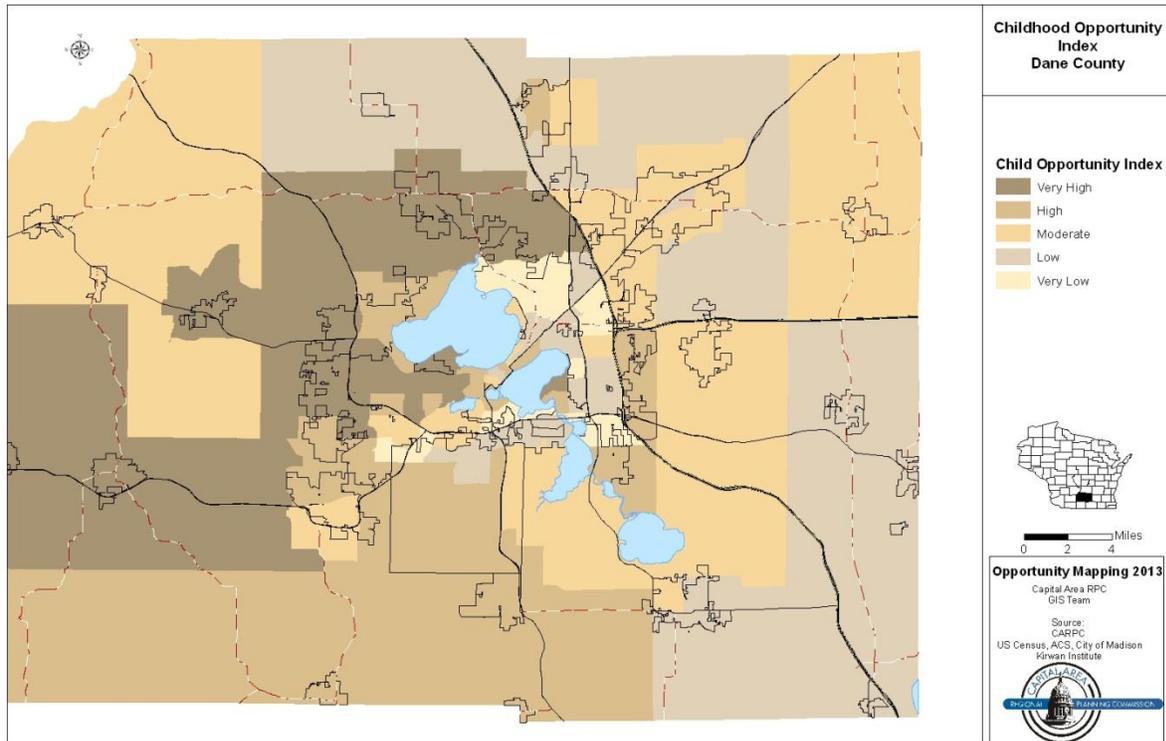
Like other U.S. regions, households in the region are becoming more diverse in composition and smaller in number of people. “Traditional” families – two parents with their own children – are declining while single persons and other combinations are increasing.

Aging baby boomers are swelling the ranks of empty nesters and senior citizens, while their children – the millennials – are young adults entering the housing market. These two groupings comprise large portions of the population and their needs and preferences are driving up demand for multi-family housing and walkable neighborhoods. This demand results in very low vacancy rates for rental units, especially in higher-demand walkable, mixed-use areas. Higher demand is also driving up housing prices, placing housing cost burdens (paying more than 30% of income for housing) on about a quarter of all households. Approximately 14% of households pay more than half of their income for housing; with very low-income renters comprising most of this group.

Geography of Opportunity

Overall, areas ranking very high for opportunity are to the west and north of the Madison area, as shown in Figure 3 below. Areas scoring very low are located around the periphery of the City of Madison to the north, northeast, southeast, south and southwest. The Childhood Opportunity Index, developed by the Kirwan Institute at Ohio State University, combines a broad range of indicators including education opportunity, health and environmental opportunity, and social and economic opportunities.

Figure 3 – Childhood Opportunity Index, Dane County Wisconsin



Source: Kirwan Institute, Ohio State University

Digging below the overall geography of opportunity reveals components that make up the composite pictures above. Jobs, including those paying living wages, and high quality schools are concentrated in portions of downtown Madison, on the west side of Madison and inner-ring suburbs. Income levels are higher in these areas, and housing tends to be less affordable. While downtown Madison remains a strong job center, employment growth primarily is occurring in suburban areas, especially inner- and first-ring suburbs.

Moderate-income households can expect to pay more than 30% of their income for housing in these high growth and opportunity areas; low-income households would likely pay more than half of their income. Transportation adds another cost burden to many of these areas, with combined housing and transportation costs often beyond the reach of low-income households.

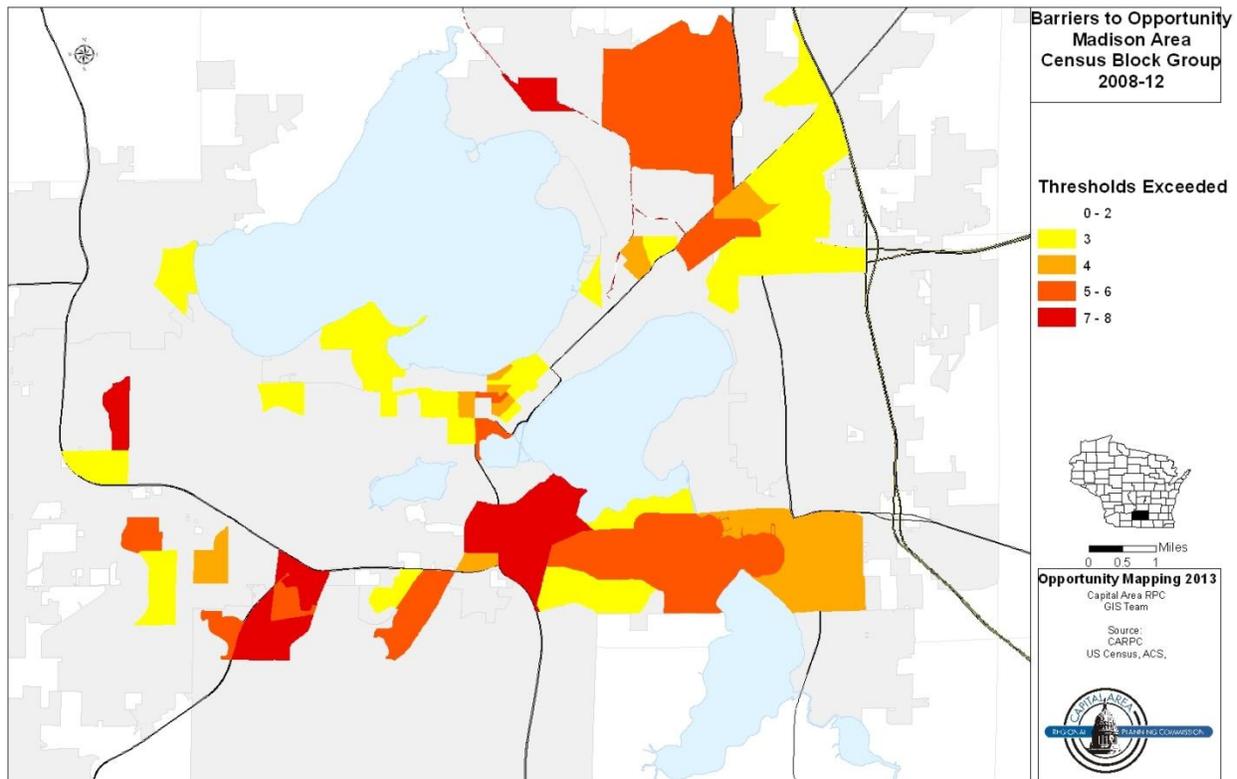
Car ownership allows regional access to jobs, while transit serves Madison and some nearby suburbs. Frequent, all-day transit service is limited to central Madison. Transit travel times from outlying areas can be long, with infrequent service. Access to healthy foods from full-service grocery stores can also be limited for those without regular access to cars. A number of “food deserts” exist, particularly in low-income areas.

Barriers to Opportunity

Concentrations of poverty and persons of color coincide along the south beltline in south Madison, southwest Madison, and Fitchburg; and north Madison. Further analysis of barriers to opportunities showed additional areas with high concentrations of barriers in southeast Madison and far west Madison. Many of the areas with many barriers to opportunity were developed as large concentrations of low-rise apartment complexes.

Over all, residents in these areas are well served by community centers. They live close to parks and outdoor recreation although access is sometimes limited by physical barriers or restrictions. Most areas are not very walkable. Some areas lack proximity and good transit access to full service grocery stores and many employment centers. Schools serving these areas tend to be rated “meets few expectations” by the Wisconsin Department of Public Instruction. Race is a significant determinant of access to opportunities, as measured by various access indices.¹ For example, holding income constant, data shows that poor White families are significantly more likely to have access to quality schools, and be engaged in the labor market, than poor Black families.

Figure 4 – Count of Opportunity Barriers, Madison Area, 2010



Source: U.S Census, American Community Survey 2008-12 and Department of Housing and Urban Development

¹ U.S. Department of Housing and Urban Development developed indices to measure, by race, access to good schools, poverty, labor engagement, housing and neighborhood stability, and access to jobs.

Barriers to Opportunity and Health Outcomes

Living in areas with many barriers to opportunity corresponds to poor health outcomes. An analysis of electronic medical record data by the University of Wisconsin, School of Medicine and Public Health found that areas with greater segregation, limited English proficiency, single-parent households, unemployment, living close to busy highways, and numbers of children experienced statistically significantly higher rates of asthma, childhood obesity and diabetes.

On the flip side, people living in areas that are walkable, have high transit use, and good access to jobs and grocery stores experience significantly lower rates of diabetes in adults. Walkability and transit use also correspond to lower rates of childhood obesity, and greater employment access also corresponds to lower rates of childhood obesity and asthma.

What Contributes to Barriers to Opportunity?

Decades of legalized housing discrimination including redlining barred persons of color from home ownership and suburban developments, resulting in large wealth gaps between African-American and white households. Following the end of legalized discrimination, ingrained habits and persistent wealth gaps continue to reinforce patterns of segregation. Fair housing complaints and evidence of disparities in lending practices continue.

Other public and private policies also contributed to such concentrations of low-income communities of color. Planning and zoning created separated enclaves of large blocks of multi-family housing along highways and arterial roadways. Such blocks of lower value land foster lower quality construction and distant ownership that, over time, lead to concentrated low-income housing. Siting of affordable housing in low-income areas adds to the concentrations.

Barriers to high opportunity areas, including higher housing prices, lack of affordable housing and planning and zoning that limits lot sizes or percentage of multi-family housing reduces availability of affordable housing in some high opportunity areas. Lack of public transportation, and consequent higher transportation costs, further limit access to many high opportunity communities. Finally, community opposition to affordable housing also limits access.

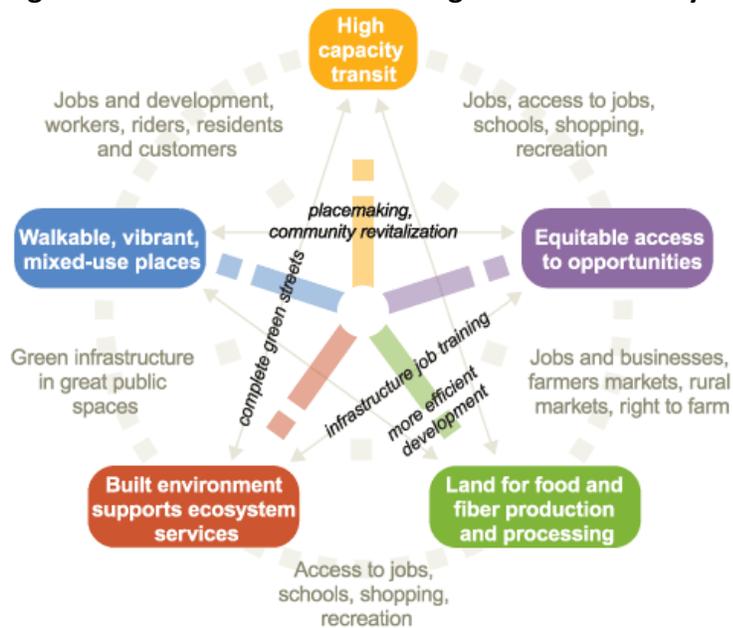
Promoting Equitable Access to Opportunity

Geography of Opportunity paints a picture of unequal access to opportunity in the Madison region – with barriers to accessing opportunity clearly demarcated along racial lines. Knowing this information, as well as some of its causes and consequences, is the first step. Determining and implementing action for change must follow.

Capital Region Sustainable Communities identified “ensuring equitable access to all” as a priority challenge for the Madison region. This equity challenge is interconnected with other priority challenges of establishing high capacity regional transit, walkable and vibrant mixed-use places, building communities that support vital ecosystem services, and preserving land for food production. Integrated approaches that build on synergies across challenges are needed instead of silo approaches that treat challenges individually. (See Figure 5)

“Upstream” approaches – changes in political and institutional structures and practices that work at societal levels – are needed for enduring change. At the same time, “mid-stream” and “downstream” approaches that focus on physical and economic conditions, and providing services to treat problems are also needed.

Figure 5 – Interconnected Challenges and Possible Synergies



Source: Capital Region Sustainable Communities

A review of best practices, for increasing equity and inclusion in planning and decision-making, identifies a three-pronged approach – of investing in places, encouraging better links, and building human capital.

Investing in places is needed to close deficits in businesses that pay living-wage jobs, grocery stores, and quality public and civic spaces. Many plans exist to meet these needs in under-resourced areas; yet implementation lags. Leveraging public and private planning and investments in local infrastructure can generate benefits for under-resourced communities.

Better access is needed from under-resourced neighborhoods to areas of employment, commerce and education opportunities. Transportation investments, viewed through an “equity lens,” offer an opportunity to increase access to opportunities. Investments in walkable, mixed-use centers throughout the region can increase affordable housing, as part of a mix of housing choices, in areas with high job and quality school access.

Building human capital is often a pre-requisite to securing investments in place and better linkages. A key aspect of human capital is increasing leadership, organizing and advocacy capacity in under-resourced neighborhoods. Such empowerment is critical to realizing higher investments and better outcomes in education, economic development and criminal justice reform. Also critical is effective coordination across multiple governmental and community-based equity initiatives. Coordination should draw upon leadership and involvement from under-resourced communities of color.

Important next steps include identifying data indicators and performance targets that specify a measurable and desired change by a specific date. Strategies and actions need to be identified; and responsible parties and timeframes established.

A. Introduction

Place Matters

Healthy, livable and affordable neighborhoods with access to good jobs, healthy food, and active living, are necessary - not only for healthy individuals and families, but also for strong communities and regions. When a neighborhood lacks some of these key ingredients, its residents access fewer opportunities, potentially reducing their well being through outcomes such as loss of income and impaired health.

When barriers to opportunity are persistently concentrated in a number of neighborhoods, those residents experience compounding health, income and well being impacts. When those neighborhoods disproportionately house persons of color, race and ethnicity must be recognized and addressed as drivers of concentrated opportunity barriers. And finally, when these persons of color represent the fastest growing portion of the region – who will dominate the workforce in coming decades – the region as a whole faces potential economic hardship as it competes against peer regions better able to lift up all citizens.

“Sustainability [also] means creating ‘geographies of opportunity,’ places that effectively connect people to jobs, quality public schools, and other amenities. Today, too many HUD-assisted families are stuck in neighborhoods of concentrated poverty and segregation, where one’s zip code predicts poor education, employment, and even health outcomes. These neighborhoods are not sustainable in their present state.”

Shaun Donovan, Secretary of Housing and Urban Development, February 23, 2010

The Fair Housing Equity Assessment (FHEA) explores the distribution of opportunities, and barriers to opportunities in Dane County, or the Madison, Wisconsin region.

About the Sustainable Communities Regional Planning Grant

The HUD Sustainable Communities Program is intended to build support for actions that will build more equitable regions. Equity and access to opportunity are critical underpinnings of the Sustainable Communities Regional Planning Grant Program. The Sustainable Communities Program represents a unique opportunity for participants to establish a more inclusive conversation on regional issues, drawing in those who have traditionally been marginalized from the community planning process. These voices can provide new insight into the disparate burdens and benefits experienced by different groups across a region.

About Capital Region Sustainable Communities

In the fall of 2010 the U.S. Department of Housing and Urban Development (HUD) awarded CRSC a \$2 million, three-year Sustainable Community Regional Planning Grant (SCRPG). Twenty-seven governmental and private entities came together as CRSC to successfully compete for these grant funds. The Capital Area Regional Planning Commission (CARPC) serves as the lead agency for the CRSC. Recognizing that regional challenges - healthy environment, mobility, economic opportunities for all, and quality of life - require collaborative and integrated approaches, CRSC fosters regional collaboration, conducts planning and pursues demonstration projects for sustainable communities.

A. Introduction

The function of the Commission is to serve as the regional planning and area wide water quality management planning entity for the Dane County region, consistent with §66.0309, Wis. Stats. and state Administrative Code NR 121. The Commission is charged with the duty of preparing and adopting a master plan for the physical development of the region, and maintaining a continuing area wide water quality management planning process in order to manage, protect, and enhance the water resources of the region, including consideration of the relationship of water quality to land and water resources and uses.

The Fair Housing Equity Assessment

As a condition of participation in the Sustainable Communities Regional Planning Grant program, all grantees must complete a Fair Housing Equity Assessment (FHEA) encompassing “activities pertaining to a Regional Analysis of Impediments to Fair Housing Choice.” HUD has determined that fulfilling the requirements of the FHEA satisfies requirements under the federal Fair Housing Act. HUD established two specific requirements for grantees:

- The findings of the FHEA must inform the regional planning effort and the decisions, priorities and investments that flow from it.
- The Regional Planning Consortium members and leaders must engage in the substance of the FHEA and understand the implications for planning and implementation.

FHEA versus Analysis of Impediments to Fair Housing Choice²

HUD currently requires all grantees to complete a Fair Housing Equity Assessment (FHEA) as a part of the scope of work for their Sustainable Communities Region Planning Grants (SCRPGs). It is advised that the required calculations and illustrations of the FHEA be interwoven with the grantee’s wider scope of work and be used to inform wider policy decisions in the region.

An Analysis of Impediments to Fair Housing Choice (AI) is a similar exercise required of State and Entitlement recipients of Federal dollars e.g. Section 8, CDBG, HOME, etc.

An Analysis of Impediments (AI) is a review of impediments or barriers that affect the rights of fair housing choice. It covers public and private policies, practices, and procedures affecting housing choice. Impediments to fair housing choice are defined as any actions, omissions, or decisions that restrict, or have the effect of restricting, the availability of housing choices, based on race, color, religion, sex, disability, familial status, or national origin. The AI serves as the basis for fair housing planning, provides essential information to policy makers, administrative staff, housing providers, lenders, and fair housing advocates, and assists in building public support for fair housing efforts.

CRSC and CARPC elected to complete an FHEA but not to complete a Regional AI because two jurisdictions covered by the scope of the planning grant, the City of Madison and Dane County, had recently completed their own Analyses of Impediments to Fair Housing Choice (AI). Discussion with Madison and Dane County representatives opened the possibility that future AI’s could be combined into a single regional AI.

² Source: http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/promotingfh

Regional Coordination of Fair Housing

The City of Madison and Dane County are both designated as Entitlement Communities by HUD. Dane County manages HUD block grant programs in the county outside the City of Madison. As Entitlement Communities, they each generate AIs for the areas under their jurisdiction, and update them every 5 years. Currently the AIs are completed separately, under different 5-year cycles. The AIs serve as the basis for fair housing planning in the region.

Both the City and County also operate Offices of Equal Opportunity (OEOs). The OEOs are the designated agencies for receiving, investigating and acting on fair housing and civil rights complaints. Section F—Barriers to Accessing Opportunities below describes the areas experience with fair housing complaints.

Organization of this Document

The FHEA presents the people of Dane County: their characteristics, their housing, and their geographies. It describes opportunities of the region, where such opportunities are found, and the barriers to opportunity. The report identifies impacts, including education, income and health, of disparate access to opportunities. It explores reasons for geographic concentrations of barriers and strategies for addressing them. Report sections are:

A. Introduction

B. Context-The Dane County Region presents population and area residents by age race, and ability. It describes economic trends, occupation and educational requirements. The section also describes how people in the county live as households, characteristics of their housing units, and housing affordability.

C. Geography of Opportunity examines the distribution of opportunities in the region. Barriers to opportunity – social, economic and physical – are explored. Areas with concentrations of barriers to opportunity are compared to geography of opportunities. Finally, the section considers the correlation between concentrated barriers to opportunity and health outcomes.

D. What Contributes to Barriers to Opportunity? identifies causes behind concentrated barriers including history of housing discrimination, siting of assisted housing, zoning and land use, land and infrastructure investments, community opposition, and local residency preferences.

E. Promoting Equitable Access to Opportunity describes equitable access and presents a framework for equitable access to opportunity: invest in place, encourage better linkages, and build human capital. It reviews current planning and investments that offer potential to benefit under-resourced communities. Existing activities to promote equitable access to opportunity, and benefits of collaboration among such efforts, are discussed.

B. Context: The Dane County Region

The following sections take a broad look at population growth trends and economic makeup and growth within Dane County and compared to Wisconsin and to the United States. They also address race and ethnicity, age, income and housing. Additional detail is provided in Appendix A.

Dane County Snapshot

Population 2010: 488,073

Estimated Population 2013: 495,921*

Population growth 2000-2010: 14.43% (61,547)

Projected population 2040: 606,620 *

Housing Units: 203,750

Employment 2011: 249,351

Employment growth: 2001-2011: 8.73%

Major Sectors: Health Care and Social Assistance, Retail Trade, Accommodation and Food Services, Manufacturing, Finance and Insurance, Professional, Scientific, and Technical Services

Major employers: UW-Madison, University of Wisconsin Hospitals, Epic Systems, Madison Metropolitan School District, American Family Mutual Insurance Company, Department of Corrections, UWWMF, Department of Health Services, City of Madison, SSM Health Care of Wisconsin Inc., Dean Medical Center, Meriter Hospital Inc., Madison Area Technical College, County of Dane, WPS

* DOA, 2013 Estimate

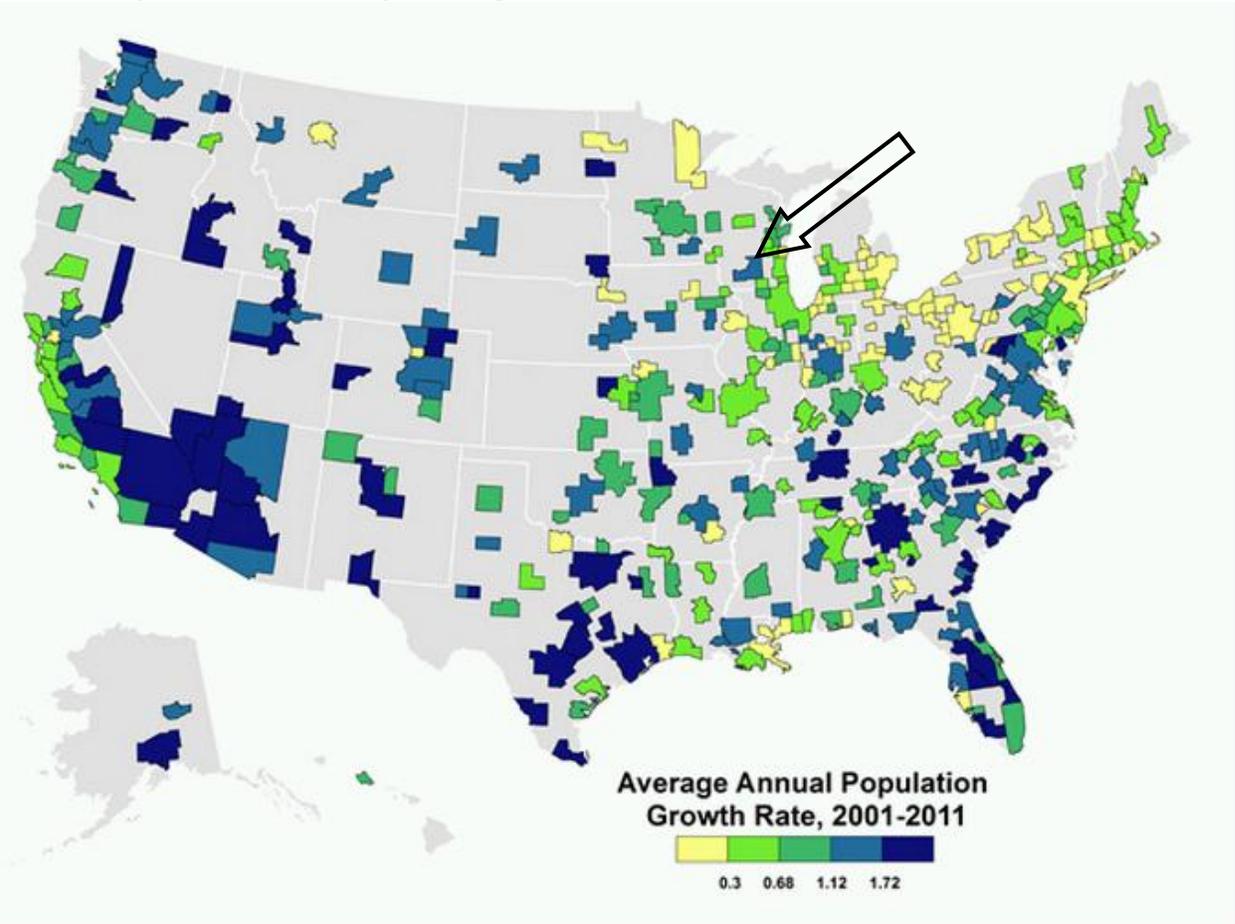
Population Trends

The Madison region (Dane, Columbia and Iowa counties) experienced higher population growth between 2001 and 2011 than the national average, as shown in Figure 7. Madison and Dane County are expected to remain the highest growth areas in the state. Going out to 2040, Dane County is expected to add 118,500 people. The next largest county increase is Milwaukee County with a 68,500 increase. Similarly, Madison will gain more people during this period than any other city. Its projected increase of 43,150 compares to 30,900 for the City of Milwaukee, the next largest increase.

Dane County experienced the largest numerical population increase in the state with 61,547 additional people during this period. Growth in Dane County also outpaced statewide growth from 2000 to 2010 at more than double Wisconsin's rate of change. While Wisconsin's population increase was around 6%, Dane County's growth rate was just over 14%.

Dane County experienced higher levels of population growth over the past decade.

Figure 7 – Population Growth by Sub Region, 2000—2010



Source: Martin Prosperity Institute, University of Toronto, September 2013

Within Dane County, the largest increase in population between 2000 and 2010 occurred in the City of Madison. Madison grew by 25,155 people, which is 41% of the total population increase in Dane County. Growth of “Second Ring Suburbs” accounted for one third of Dane County population gain, or 20,690 people.³ (See Sidebar Below) These suburbs experienced a 32% relative gain in their population—or 20,690 people in the past decade—whereas Madison only experienced an 11% gain.

“Figure 8 – Population Growth in Dane County by Sub-Region, 2000-2010” breaks down Dane County’s population into the following groups: City of Madison, First Ring Suburbs, Second Ring Suburbs, Outlying Communities, and Rural. These groups correspond to concentric rings which are further and further removed from the City of Madison, located roughly in the center of Dane County.

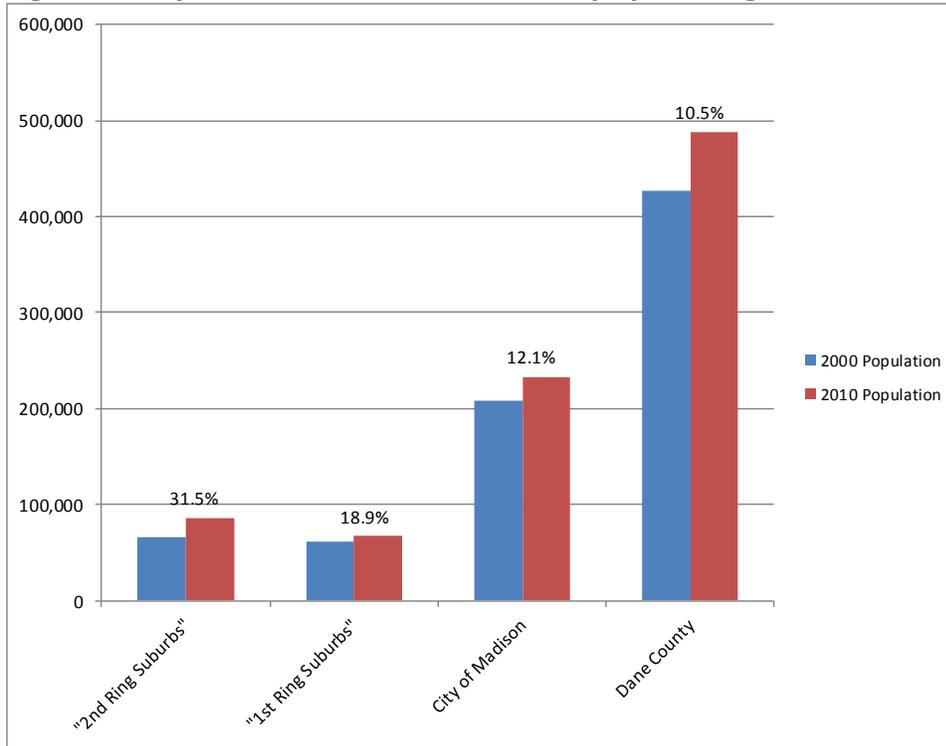
³ First Ring Suburbs are defined as those communities that are not Madison but within the Central Urban Service Area (CUSA): City of Fitchburg, Town of Madison, City of Monona, City of Middleton, Village of McFarland, Village of Maple Bluff, and Village of Shorewood Hills. Second Ring Suburbs are defined as all those within the Dane County Metropolitan Planning Organization’s (MPO) planning area excluding First Ring Suburbs and City of Madison: City of Stoughton, City of Sun Prairie, City of Verona, Village of Cottage Grove, Village of Waunakee, Town of Burke, City of Middleton, Village of DeForest, and the Town of Windsor. Outlying communities includes all other villages in the County not included in the first two groupings. Rural refers to the remaining towns within Dane County.

B. Context: The Dane County Region

“Outlying Communities” also grew faster than the county as a whole at a 19% rate of change, amounting to 7,015 additional Dane County residents. For the sake of comparison, the growth rates for the United States and for Wisconsin were 10% and 6% respectively over the same ten year period.

Suburbs in Dane County are growing at a faster rate than Madison or Dane County as a whole.

Figure 8 – Population Growth in Dane County by Sub-Region, 2000-2010



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 2000, 2010

Population Projections

Madison and Dane County are expected to remain the highest growth areas in the state. Going out to 2040, Dane County is expected to add 118,500 people. The next largest county increase is Milwaukee County with a 68,500 increase. Similarly, Madison will gain more people during this period than any other city. Its projected increase of 43,150 compares to 30,900 for the City of Milwaukee, the next largest increase.

Age

As people progress through life they play different roles in society and have different contributions and desires. Demographers group people in age categories to better understand community dynamics such as education and housing. Figure 9 below serves to illustrate a rough delineation of these groups and highlights some of their roles or needs in each stage of life.

Different generations have smaller and larger numbers of people. The “Baby Boomers” are one well-known cohort. Their children explain a swell in school enrollment through the 2000s and their retirement from the workforce will be responsible for the strong increases in the number of empty nesters and elderly Dane County residents through about 2025 and 2025—2040 respectively (See Figure 11 below).

B. Context: The Dane County Region

People play different roles and have different needs during stages in their lives.

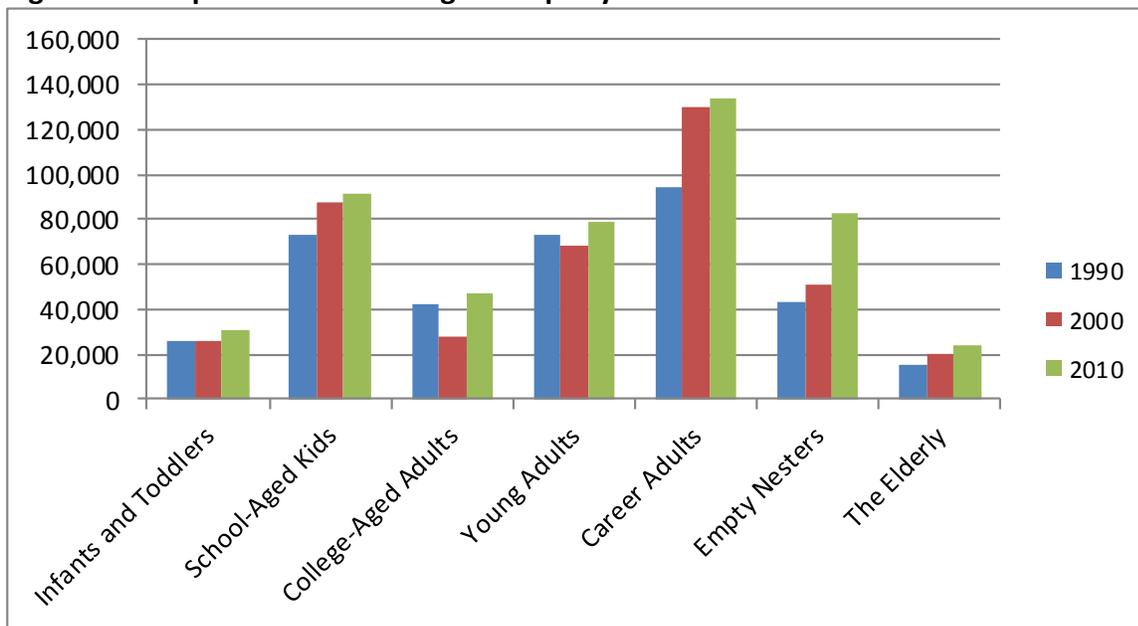
Figure 9 – Life Stage Categories

Age	Description	Role
0-4	Infants and Toddlers	Families, dependents
5-19	School-Aged Children	Families, dependents, primary through higher education
20-24	College-Aged Adults	Higher education, new household formation
25-34	Young Adults	New households, first-time homebuyers, young children
35-54	Career Adults	Highest earning, move-up homebuyers, older children
55-74	Empty Nesters	College-aged children, decreased housing needs, retiring
75+	Elderly	Increasing needs for housing and medical services

Source: CARPC

Distribution of the population in different age groups has shifted over the past three decades.

Figure 10 – Population of Life Stage Groups by Decade



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics:1990- 2010

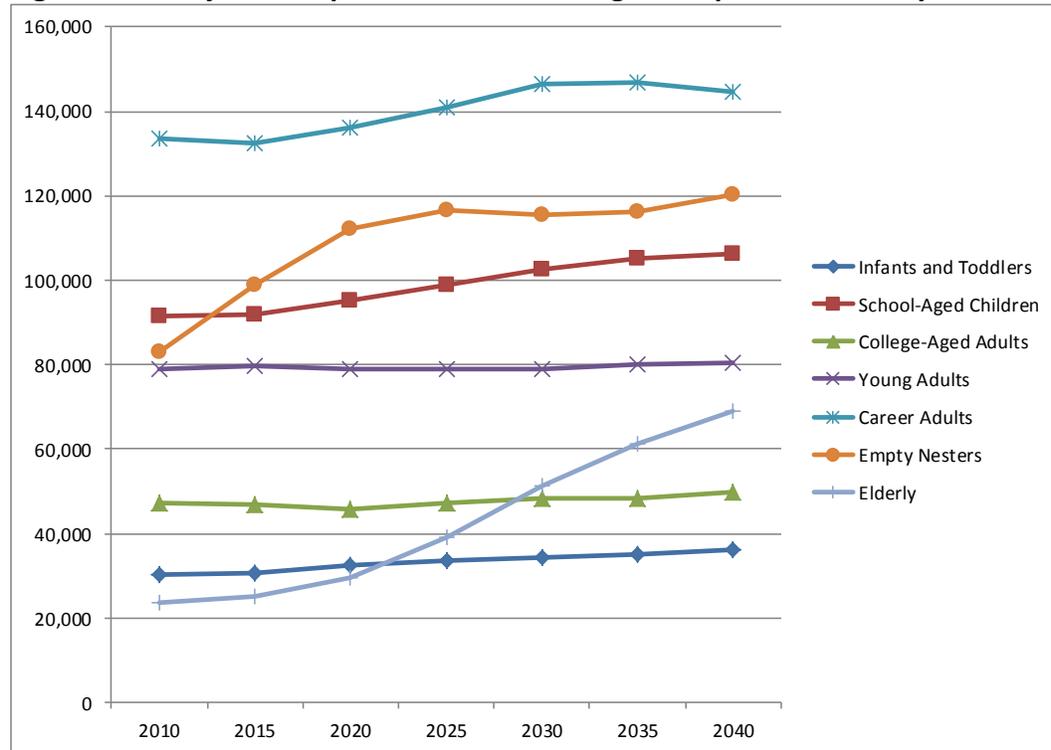
Age group distribution for Dane County is skewed by the relatively large population of students at UW-Madison (and other colleges and universities), and this high proportion of students has large impacts on statistics for the county as a whole. As an example, data from a Census Bureau working paper entitled

B. Context: The Dane County Region

“Examining the Effects of Off-Campus College Students on Poverty Rates”⁴ indicates that **Dane County’s poverty rate dropped from 13% to 9% when students living off campus, on their own were excluded from the calculation.**

Retiring Baby Boomers will be responsible for the strong increases in the number of empty nesters and elderly Dane County residents through about 2025 and 2025—2040 respectively.

Figure 11 – Projected Population Trends for Age Groups: Dane County



Source: State of Wisconsin Department of Administration Population Projections (2013)

Race and Ethnicity

A region ties people together through a shared sense of place, identity and culture. Underlying and strengthening these commonalities are diversities. This section looks at the diversities of the Dane County region based on characteristics including race and ethnicity, national origin, ability, age, and family.

Like many other communities, the face of Dane County has become more diverse as its population grows. In 2010, 18% of residents were people of color, similar to Wisconsin with just under 17% people of color. (See Figure 12) Nationally over one third of the population is people of color.

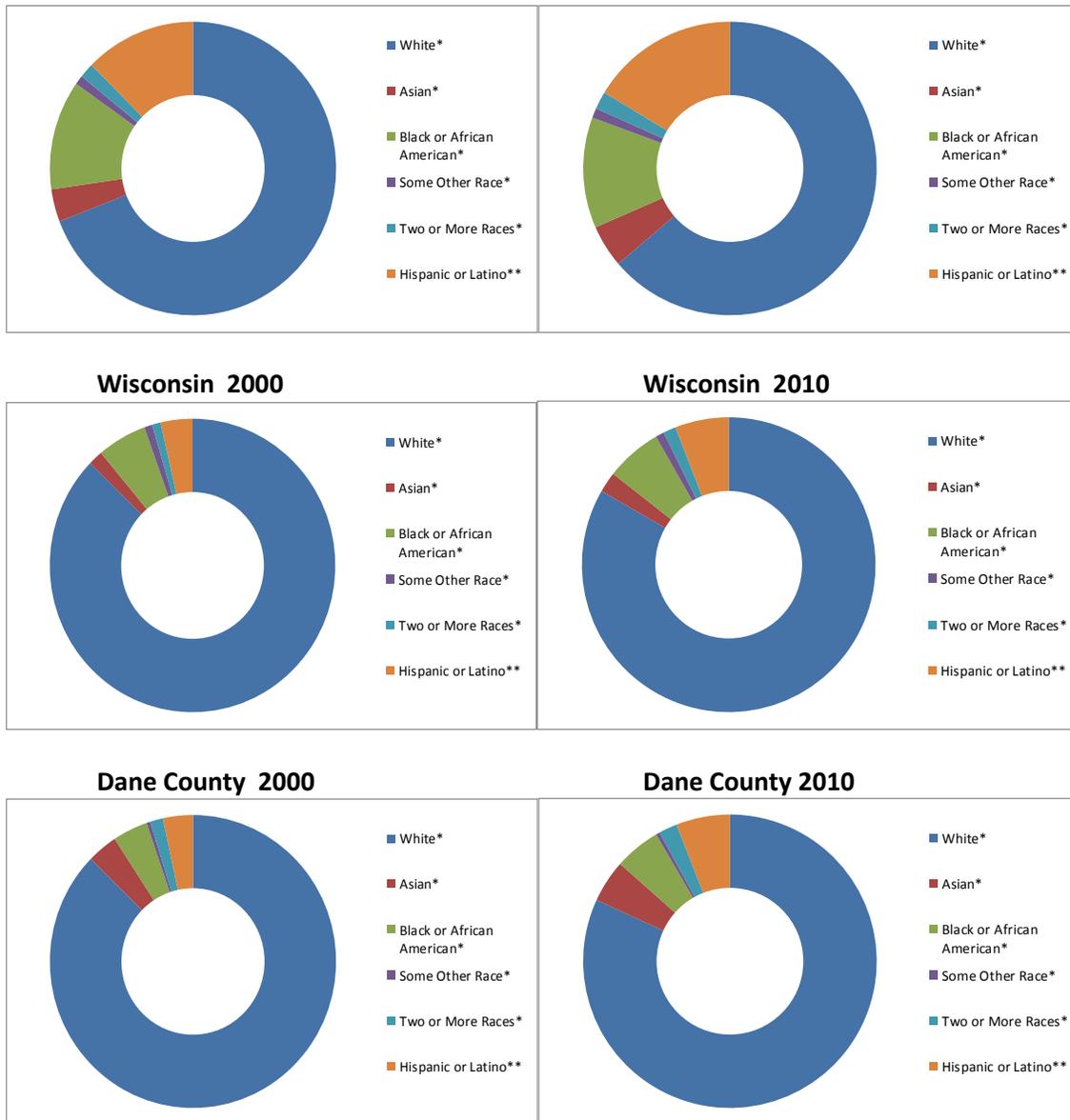
⁴ [Examining the Effect of Off-Campus College Students on Poverty Rates](#)

B. Context: The Dane County Region

Population increase is occurring at different rates among the different racial and ethnic groups. On the whole, the number of people of color increased more quickly across all of Dane County than White, non-Hispanics between 2000 and 2010. **Percent change in the White, non-Hispanic population of Dane County was around seven percent whereas people of color increased by 64%.** The single racial or ethnic group growing at the fastest rate across Dane County is Hispanic and Latino residents which doubled in the ten year period in question.

Like many other communities, the face of Dane County has become more diverse as its population grows.

Figure 12 – Racial and Ethnic Composition US vs. WI vs. Dane County, 2000, 2010



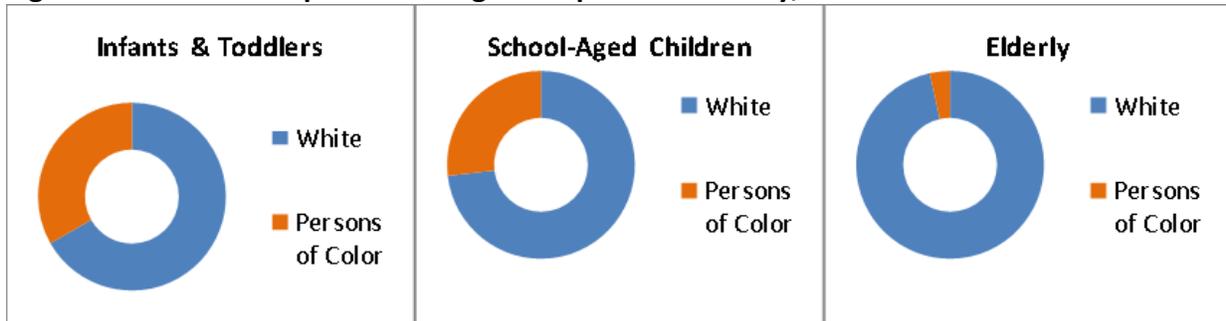
Source: U.S. Census Bureau, 2010 Decennial Census, QT-P3; QT-P4

B. Context: The Dane County Region

Figure 13 illustrates the stark contrast between the older and younger generations in Dane County in terms of racial composition. People of color make up only around five percent of adults aged 65 and older in Dane County whereas they comprise 33% of children under five years old. Generational shifts such as this will have a profound effect on the future workforce and school system.

People of color make up only around five percent of adults aged 65 and older in Dane County whereas they comprise 33% of children under five years old.

Figure 13 – Racial Composition of Age Groups: Dane County, 2010



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 2010

Dane County Asian Communities

The composition of Dane County's Asian population roughly mirrors that of the U.S. with Chinese, Filipino, Asian Indian, Vietnamese, Korean, and Japanese making up the largest segments of the population. Unlike the nation as a whole, the Vietnamese, Thai, and Filipino communities are proportionally smaller in Dane County. Additionally, Dane County's Hmong community comprises 15% of its Asian population and is the third largest subset of the Asian population, compared to the national Hmong community which accounts for only one percent of Asians. The large Hmong population in Dane County and throughout Wisconsin can be linked to immigration practice during the periods following the Vietnam War and the passage of the *Refuge Act of 1980*. Wisconsin's Hmong population was 49,240 as of the 2010 Census, making Wisconsin one of the states with the largest Hmong populations in the nation. Dane County joins Milwaukee, Marathon, Outagamie, Sheboygan, and Brown counties which also have significant populations of Hmong.

Geography of Race

Understanding racial and ethnic populations involves looking at where people live. People of different races and ethnicities are not uniformly distributed throughout Dane County, but tend to concentrate in certain communities and areas. This section examines where people of different races and ethnicities live. Later sections will explore reasons why and equity implications.

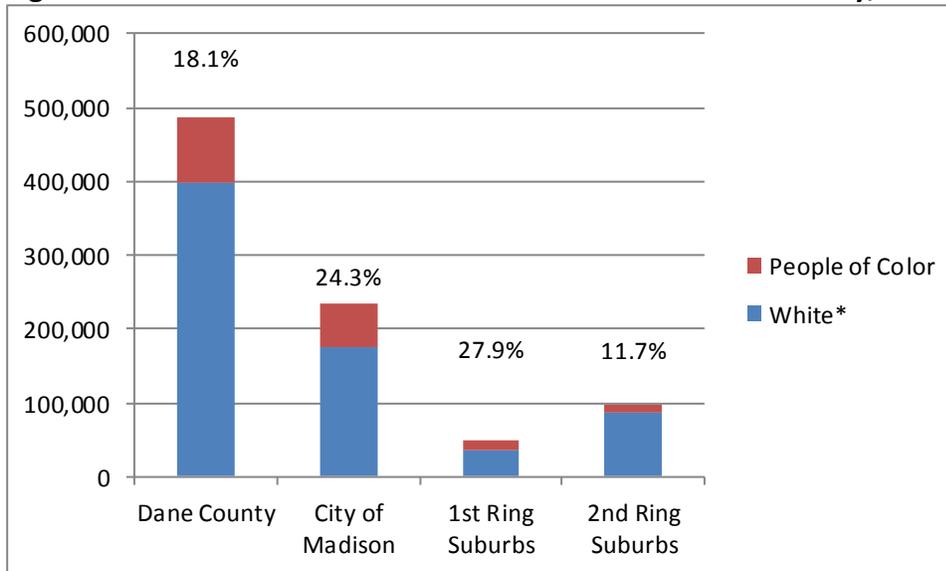
Figure 14 shows that the largest proportion of persons of color is located in the City of Madison and first ring suburbs; with approximately a fourth of the population in those communities. The City of Fitchburg accounts for most of the persons of color among first ring suburbs, with 35% of their population.

As shown in Figure 15, recent population growth of persons of color occurred throughout the county, and fastest outside of Madison. Almost all White population growth occurred outside of Madison.

B. Context: The Dane County Region

People of color make up a greater proportion of the population in Madison and first ring suburbs than the rest of the county.

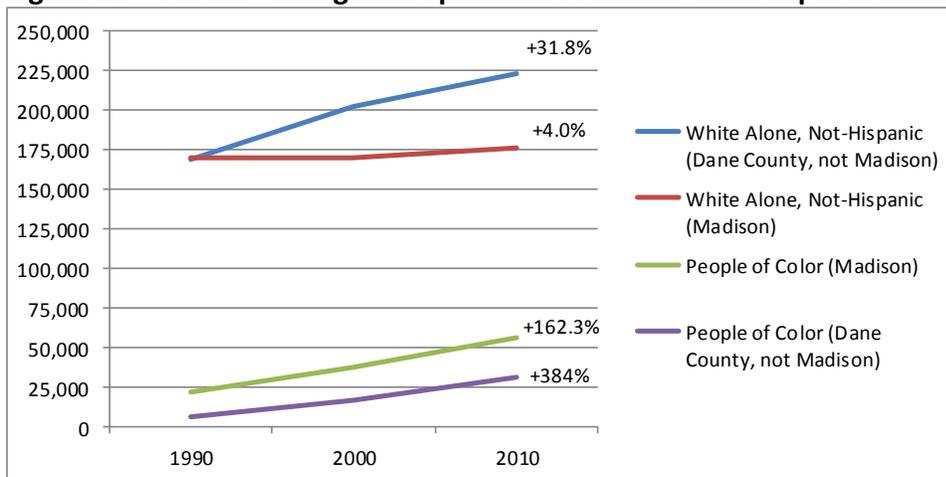
Figure 14 – Percent Persons of Color in Sub-Areas of Dane County, 2010



*Race Alone, Not Hispanic or Latino;
Source: U.S. Census Table QT-P3 & QT-P4: 2010

The population of people of color is growing at a much faster rate in outlying areas of Dane County.

Figure 15 – Percent Change in Population of Whites and People of Color, 1990—2010



*Race Alone, Not Hispanic or Latino;
Source: U.S. Census Table DP-1: 1990, 2000, And 2010

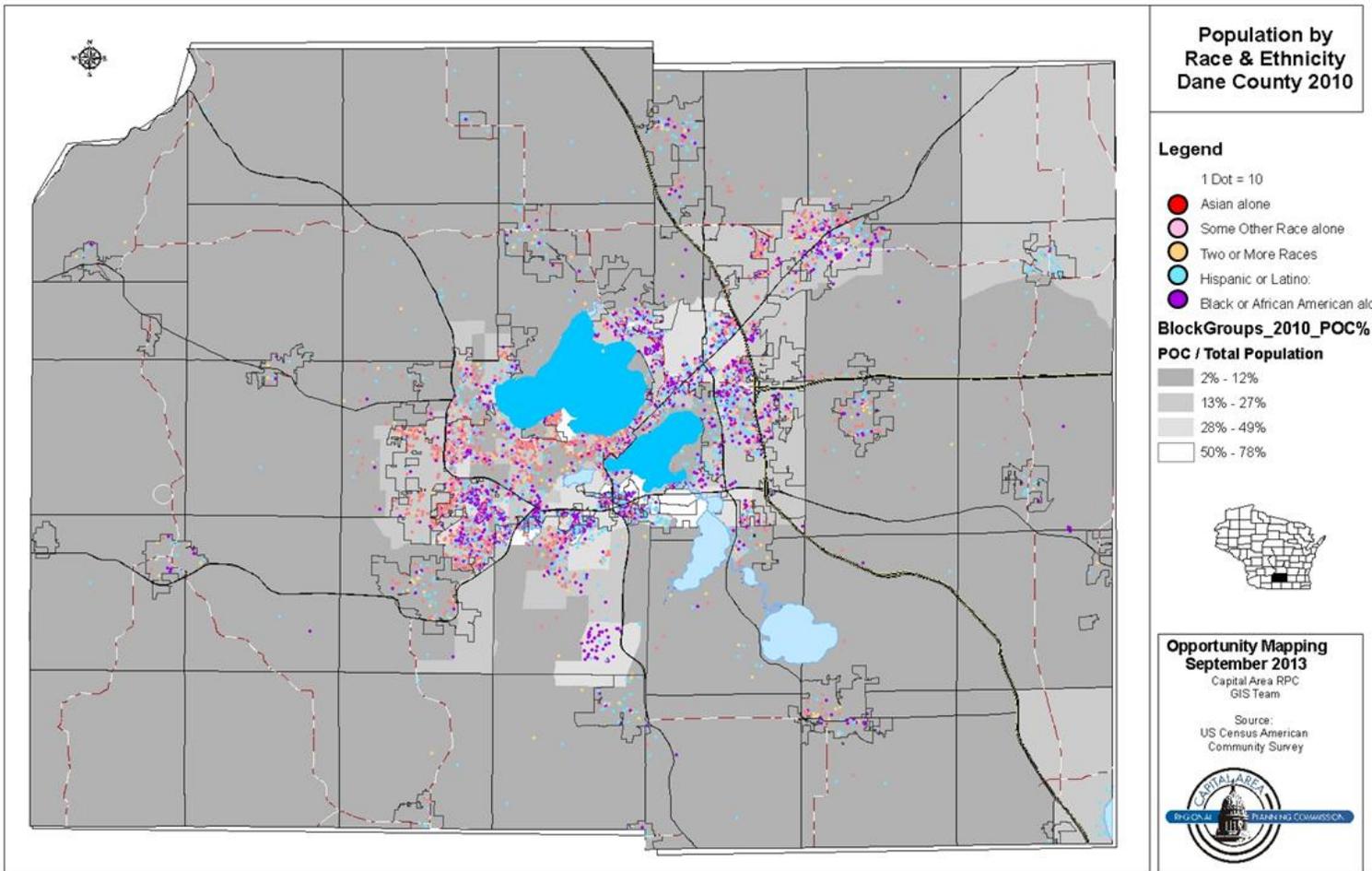
The maps below show the distribution of people within Dane County and the central urban area by race. People of color are shown by different colored dots; one dot equals 10 people. Levels of White, non-Hispanic people are shown in greyscale: darkest greyscale areas have highest percent of White persons.

B. Context: The Dane County Region

The maps show African-American persons clustered along the south beltline highway in Madison, Fitchburg and the Town of Madison, in southeast Madison and in north and east Madison. Hispanic persons are similarly concentrated and also show up in some rural areas. Asian persons are more widely dispersed with concentrations in south Madison and across west Madison. As discussed later, Asian is a broad category that combines people from different backgrounds: Hmong, Chinese, Indian and Japanese among others.

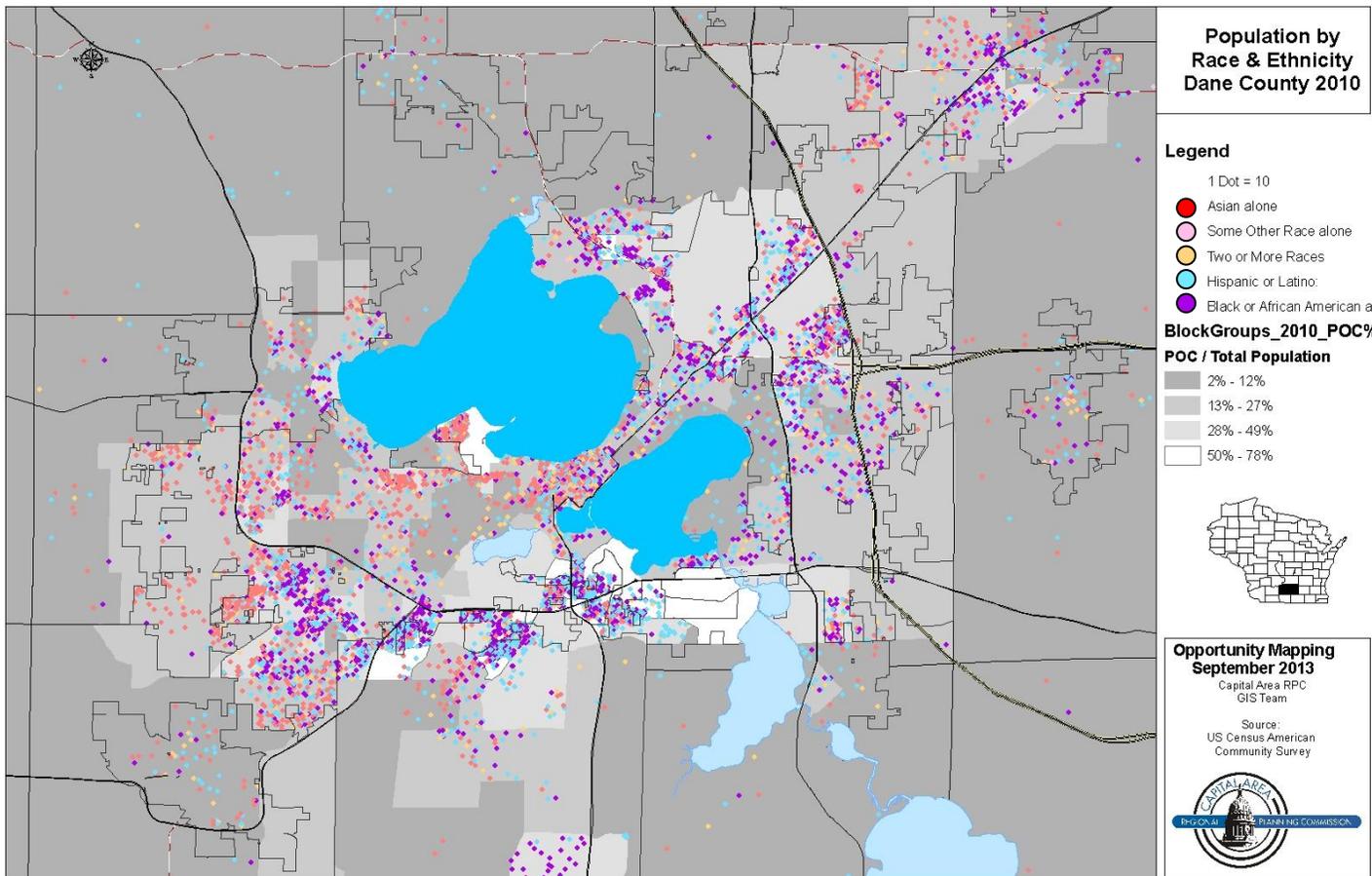
Racial and ethnic groups are distributed in different areas of the county.

Figure 16 – Dot Map Distribution of Population by Race, Dane County 2010



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 2010

Figure 17 – Dot Map Distribution of Population by Race, Dane County-Central Area 2010



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 2010

As shown in the dot maps above, areas of high concentration for Black residents include several locations south of the beltline, near Park Street, along Northport Road, Hwy 30 and near East Towne Mall. There is also a relatively large population in the southeast corner of Fitchburg (Oak Hill Prison) and Sun Prairie. Additional maps showing geography of different racial and ethnic groups are included in Appendix B.

Persons with Disabilities

It is estimated that 43,009 members of the civilian, non-institutionalized population of Dane County lived with a disability in 2011, representing 9% of the population. The proportion of the population with a disability differs with the segment of the population in question. The Census Bureau reports disability status in four large age groups: under five, 5–17, 18–64, and 65 and up. One percent, five percent, seven percent, and 30% of each of these groups (respectively) live with a disability. To avoid being misled by the data, it is useful to look at what is included in the definition of “disability.”

Disabilities for children under the age of five are only reported under two categories, “Hearing Difficulty” and “Vision Difficulty.” While hospitals and doctors are required to test for, and are able to easily discern these categories of disability at a very young age, other types of disability may not be applicable to that age group, or are difficult to discern at such a young age. Beginning at the age of five, the Census Bureau begins to record responses in the following disability categories: “Cognitive,” “Ambulatory,” and “Self-Care.” At the age of 18, “Independent Living” is added to the list of disabilities. (A disability which would not apply to a child who lives with parents.)

Under 65

Not surprising, the proportion of the population experiencing hearing, vision, or ambulatory difficulty is higher in people over 18 compared to those under 18. This is due to the natural aging process and the passage of time allowing for assessment and determination of the presence of a disability. In most cases these disabilities affect a proportion of the 18-64 population two to three times larger than the population aged 5—17. Still, no single category of disability affects more than 4% of either population. Cognitive disabilities are by far the most pervasive, affecting 4% of the population aged 5—17 and 3% of the population aged 18—64. Again, due to the natural aging process and assessment processes, ambulatory difficulties are reported as affecting 3% of the 18—64 population, as compared with 0.6% of the 5—17 population.

Over 65

While the incidence of disability among the population aged 64 and under is relatively consistent, the proportion of disabilities among the population aged 65 and older are much higher. As one might expect, aging has its effect on hearing, sight, cognitive function, locomotion, and the ability to live independently. *Almost 30% of the population over 65 lives with a disability.* Ambulatory, hearing, and independent living difficulties are the most common disabilities at 18%, 14%, and 13% respectively. As the Baby Boom generation continues to retire and as medical advances further lengthen life expectancies, the proportion of the population who are retired and, as defined previously, are elderly will continue to increase beyond levels that have previously been experienced. As a result, the proportion of the population living with a disability can be expected to increase in the coming years.

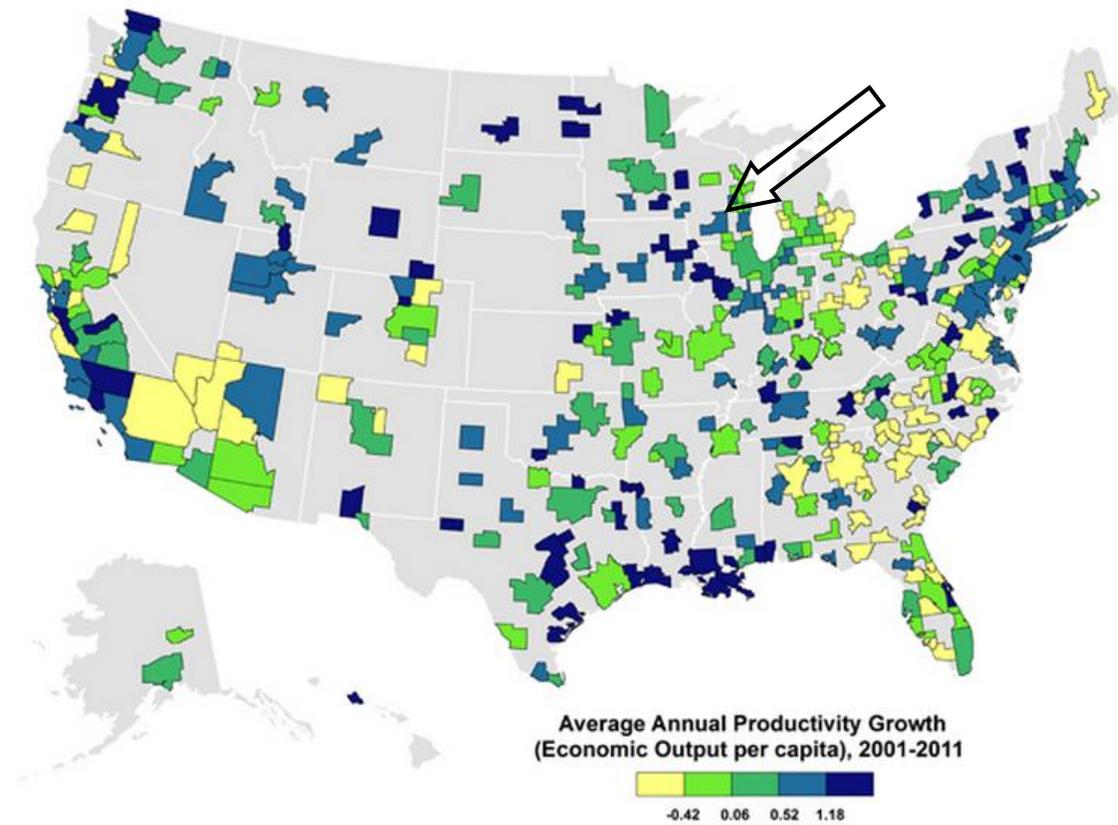
Economy

The Madison region experiences strong economic performance as measured by employment and gross domestic product.

Overall, job growth in Dane County is recovering from the 2007 recession. Strong job growth through the recession was seen in the Healthcare and Social Services sector (+37% during 2001—2011); Retail Trade, Accommodation and Food Services, Manufacturing, Finance and Insurance, Professional, Scientific, and Technical Services also continue to be areas of strong job growth.

The region had strong growth in domestic product per capita over the past decade.

Figure 18 – Average Annual Growth in Economic Output per Capita



Source: Martin Prosperity Institute, University of Toronto, September 2013

The region had strong growth in gross domestic product per capita, as shown in Figure 18. **The Madison metro area was one of the few areas experiencing both higher than average population and productivity growth.**⁵

Dane County's **major employment sectors**, and the number of jobs in 2011, are:

- | | |
|-----------------------------------|--------|
| 1. Healthcare & Social Assistance | 42,465 |
| 2. Retail Trade | 29,184 |
| 3. Accommodation & Food Services | 23,620 |
| 4. Manufacturing | 22,515 |
| 5. Finance & Insurance | 22,163 |

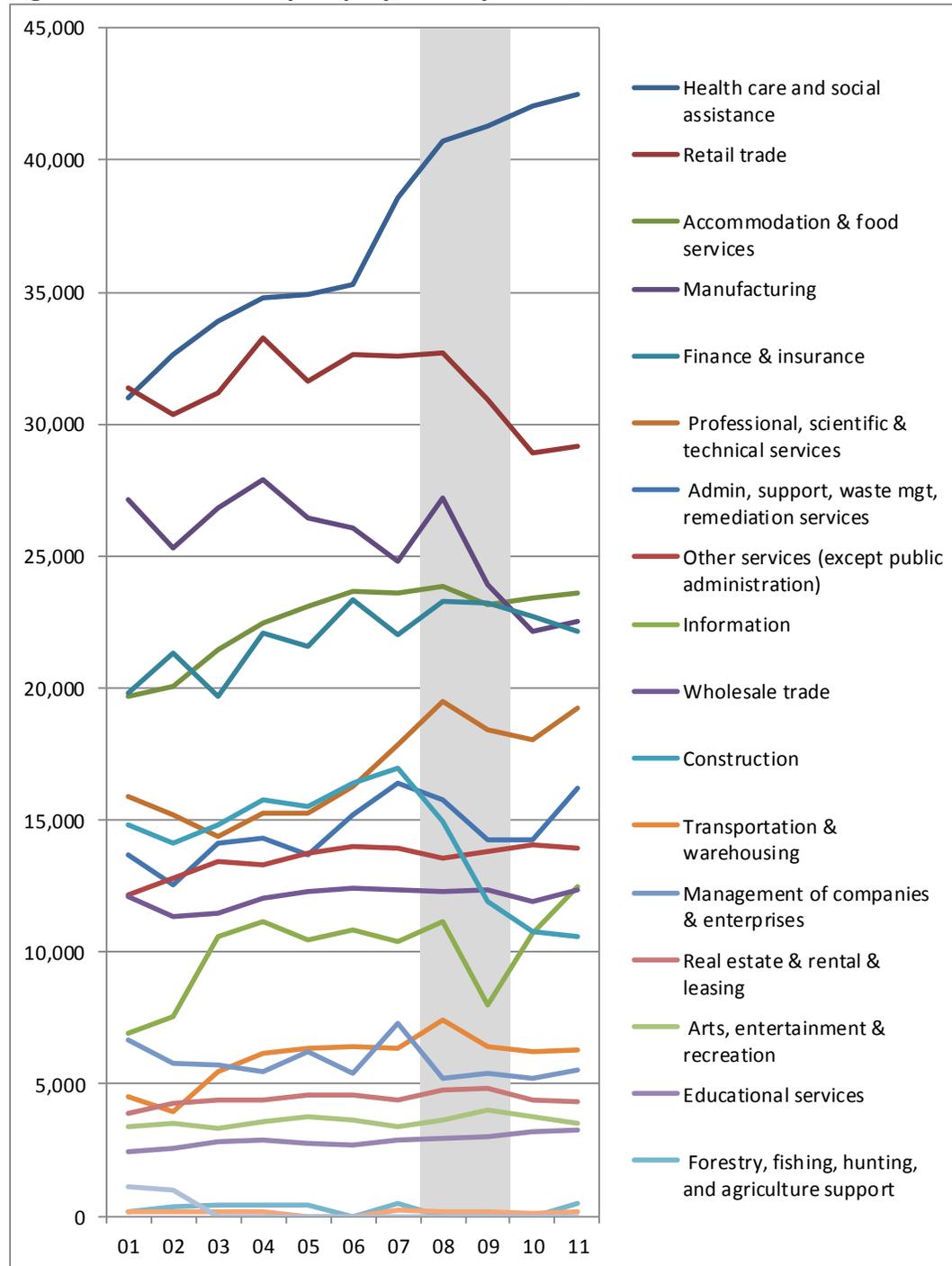
Source: U.S. Census Bureau: County Business Patterns, 2011

These five sectors⁶ accounted for 39% of total Dane County employment in 2011. They also comprise the top five sectors in Wisconsin. Figure 19 below shows employment trends from 2000 to 2010 for Dane County by sector. Overall, employment is fairly diversified across sectors. Health Care and Social Assistance jobs increased significantly approximately 31,000 to 42,500, and experienced no downturn during the recession (indicated by grey bar). In contrast, many sectors experienced job loss during the recession; especially construction, retail trade and manufacturing.

⁵ Source: Martin Prosperity Institute, University of Toronto, September 2013. See: <http://www.theatlanticcities.com/jobs-and-economy/2013/09/great-growth-disconnect-population-growth-does-not-equal-economic-growth/5860/> and http://martinprosperity.org/2013/06/06/insight-untangling-regional-gdp-and-population-growth/?utm_source=Insight%3A+Untangling+Regional+GDP+and+Population+Growth&utm_campaign=GDP-Population-Growth&utm_medium=email

⁶ The term "sector" in this document refers subsets of the whole economy inclusive of both public and private employment which are themselves often referred to as being "sectors."

Figure 19 – Dane County Employment by Sector, 2000—2010



Source: U.S. Census Bureau: County Business Patterns: 2001—2011

In addition to employment diversity, industry clusters are important to the strength of regional economies. Industry clusters reflect unique concentrations of employment, by sector, within a region.

Important industry clusters in Dane County, as measured by Location Quotients⁷, include “Information,” “Professional, Scientific, and Technical Services,” “Real Estate and Rental & Leasing ” and “Finance and Insurance.” “Agriculture, Forestry, Fishing, and Hunting” has a high LQ, but also low employment levels. **Chief among exporting sectors is “Information”** which has an LQ of 2.18 relative to Wisconsin and an LQ of 1.82 relative to the nation as a whole (LQ above 1.25 designates a potential export industry). Additionally, employment in the “Information” sector grew almost 56% in the period from 2009-2011. Much of this growth can be attributed to expansion at Epic Systems, an electronic health records software company with more than 7,000 employees in 2014.

Finally, while manufacturing does not emerge as an area with high LQ, it continues to be an important economic engine for the region. Most manufacturing businesses export products outside the region, thus importing dollars into the area. In addition, manufacturing jobs typically pay above average wages and offer entry points that do not require college degrees.

Labor Force, Occupations and Unemployment

As of 2013, there were 335,847 jobs in a wide range of occupations in Dane County. Of these jobs, close to a fourth (23%) paid median hourly wages below the City of Madison’s “livable wage,” as established by ordinance, of \$12.45 per hour. Nineteen percent of the occupations paid below Dane County’s livable wage level of \$11.33 per hour.

About a third of jobs (32%) pay more than double the City of Madison livable wage level (\$25.00 or more per hour). These high paying jobs typically require post-secondary degrees or training.

Figure 20 shows the 17 occupations in the county that comprise a third of all jobs in 2013. Occupations paying below the City of Madison and Dane County livable wage levels are highlighted, accounting for 32% of the this top tier of occupations. A third of these jobs pay more than \$25.00 per hour.

⁷ A common measure of such concentrations is Location Quotient (LQ), which measures the relative proportion of a sector in the regional economy compared to that of a larger geography, such as the nation. If the regional portion of employment in a sector is equal to the portion nationally, the LQ for that sector is 1.0.⁷ For example, if manufacturing comprises 10% of jobs within both a region and the nation, the manufacturing LQ for the region is 1.0. LQs above 1 reflect stronger regional concentrations, and hence regional strength in an industry sector. High LQs for a sector can indicate that it exports goods or services outside the region. An LQ of at least 1.25 is generally required to consider classifying an area industry as an exporter (although it could also reflect excessive local demand).

Figure 20 – Dane County Occupations with High Numbers of Jobs

Description	2001 Jobs	2013 Jobs	Change	% Change	Median Hourly Earnings	Avg. Hourly Earnings
Building Cleaning Workers	7,637	9,155	1,518	20%	\$10.74	\$11.63
Office Clerks, General	8,646	8,969	323	4%	\$15.24	\$15.52
Secretaries and Administrative Assistants	8,012	8,533	521	7%	\$18.18	\$18.45
Postsecondary Teachers	7,415	8,469	1,054	14%	\$29.22	\$33.05
Laborers and Material Movers, Hand	8,318	8,247	(71)	(1%)	\$13.15	\$13.42
Registered Nurses	6,259	7,956	1,697	27%	\$34.56	\$35.16
Retail Salespersons	8,510	7,947	(563)	(7%)	\$9.86	\$11.94
Fast Food and Counter Workers	6,008	7,884	1,876	31%	\$8.98	\$9.35
Customer Service Representatives	6,614	7,151	537	8%	\$15.50	\$16.71
Cashiers	6,294	6,429	135	2%	\$9.13	\$9.71
Nursing, Psychiatric, and Home Health Aides	4,165	5,266	1,101	26%	\$12.11	\$12.41
Waiters and Waitresses	3,868	4,752	884	23%	\$9.01	\$10.15
Software Developers and Programmers	3,034	4,609	1,575	52%	\$37.94	\$38.71
Driver/Sales Workers and Truck Drivers	5,106	4,606	(500)	(10%)	\$16.17	\$17.43
Sales Representatives, Wholesale and Manufacturing	3,973	4,547	574	14%	\$30.87	\$34.20
Bookkeeping, Accounting, and Auditing Clerks	4,088	4,371	283	7%	\$17.85	\$18.34
Computer Support Specialists	3,092	4,335	1,243	40%	\$26.55	\$26.82

Source: EMSI Analyst, QCEW Employees, Non-QCEW Employees & Self-Employed - 2014.2 "Class of Worker"
 Shaded occupations pay less than the Dane County's adopted "livable wage" of \$11.33 per hour.

Figure 21 shows the top 19 occupations in Dane County with most growth (20% or greater increase in jobs from 2001 to 2013, and that had 1500 or more jobs in 2001). These jobs represent almost a fourth (23%) of all jobs in 2013. Five of the occupations, comprising four in ten of top growing jobs, jobs paid less than Dane County's livable wage. Thus, while two of 10 jobs in the county pay below county livable wage, four in 10 jobs in top growing occupations pay below that level.

While about 2 in ten jobs in the county pay less than Dane County's livable wage, 4 in ten of the jobs in top growing occupations pay below that level.

On the other hand, a large portion (42%) of the top growing jobs pays high wages - \$25 per hour or more. In other words, almost all of the top growing jobs are either below the livable wage or are in high-paying occupations. This is consistent with overall trends towards shrinking of jobs in occupations paying middle-level wages.

Almost all of the top growing jobs are either below the livable wage or are in high-paying occupations (\$25/hour or more). This is consistent with overall trends towards shrinking of jobs in occupations paying middle-level wages.

Figure 21 – Dane County Occupations with High Growth Rates and Significant Jobs

Description	2001 Jobs	2013 Jobs	Change	% Change	Median Hourly Earnings	Avg. Hourly Earnings
Personal Care Aides	2,519	3,848	1,329	53%	\$10.88	\$11.53
Software Developers and Programmers	3,034	4,609	1,575	52%	\$37.94	\$38.71
Computer Support Specialists	3,092	4,335	1,243	40%	\$26.55	\$26.82
Computer and Information Analysts	2,015	2,661	646	32%	\$34.21	\$34.96
Fast Food and Counter Workers	6,008	7,884	1,876	31%	\$8.98	\$9.35
Miscellaneous Teachers and Instructors	2,151	2,806	655	30%	\$15.61	\$17.41
Elementary and Middle School Teachers	2,598	3,348	750	29%	\$25.04	\$25.12
Grounds Maintenance Workers	1,761	2,280	519	29%	\$14.28	\$15.06
Registered Nurses	6,259	7,956	1,697	27%	\$34.56	\$35.16
Nursing, Psychiatric, and Home Health Aides	4,165	5,266	1,101	26%	\$12.11	\$12.41
Management Analysts	2,386	2,969	583	24%	\$30.87	\$31.22
Supervisors of Food Preparation and Serving Workers	1,580	1,954	374	24%	\$15.99	\$16.56
Waiters and Waitresses	3,868	4,752	884	23%	\$9.01	\$10.15
Secondary School Teachers	1,563	1,928	365	23%	\$25.48	\$25.67
Insurance Sales Agents	1,524	1,869	345	23%	\$22.37	\$22.88
Cooks	3,035	3,709	674	22%	\$11.23	\$11.35
Miscellaneous Healthcare Support Occupations	2,082	2,513	431	21%	\$16.26	\$16.47
Database and Systems Administrators and Network Architects	1,902	2,300	398	21%	\$35.44	\$35.33
Building Cleaning Workers	7,637	9,155	1,518	20%	\$10.74	\$11.63

Source: EMSI Analyst, QCEW Employees, Non-QCEW Employees & Self-Employed - 2014.2 "Class of Worker"

* Fastest growing are occupations with 20% or greater increase in jobs from 2001 to 2013.

Shaded occupations pay less than the Dane County's adopted "livable wage" of \$11.33 per hour.

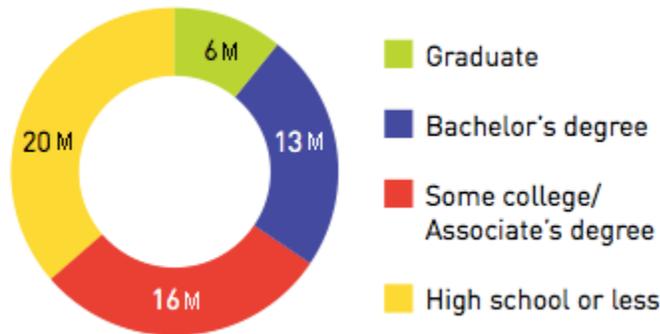
Jobs and Educational Requirements

As noted above, higher paying occupations typically require post-secondary education. Yet, a growing number of moderately paying jobs require education beyond high school.

Between 2010 and 2020, there will be a projected 55 million new job openings in the United States, with 36 million, or about two thirds, requiring some form of post-secondary education (Figure 22). It is estimated that there will be a deficit of 5 million workers nationwide due to lagging levels of post-secondary educational attainment.

About two thirds of projected jobs will require some form of post-secondary education.

Figure 22 – United States Job Openings by Educational Requirement, 2010-2020



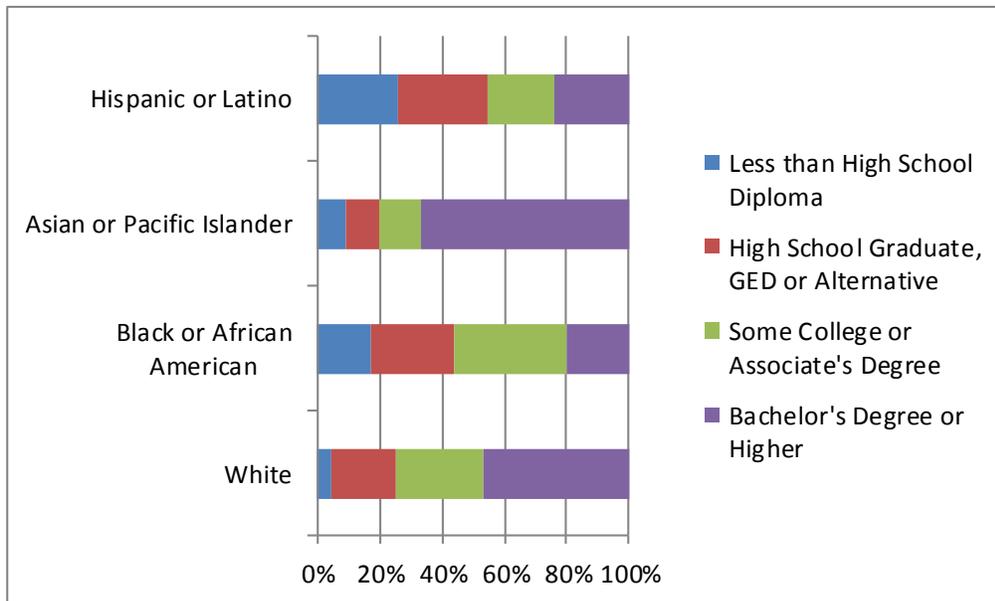
Source: Anthony Carnevale and Jeff Strohl, "Separate and Unequal": Georgetown University, Center on Education and the Workforce, July 2013 and PolicyLink "All in Nation", July 2013.

Despite the growing demand for workers with post secondary education, significant portions of the county's fastest growing populations do not meet these requirements. In Dane County 56% of Black adults and 45% of Hispanic adults have some college or associate's degree or higher that will be required for new job openings; compared to 75% of White and 80% of Asian adults. This mismatch between job educational requirements and educational attainment of persons of color in the Madison region highlights the importance of closing educational achievement gaps in the region.

The mismatch between job educational requirements and educational attainment of persons of color in the Madison region highlights the importance of closing educational achievement gaps in the region.

Fifty-six percent of Black adults and 45% of Hispanic adults have some college or associate's degree or higher that will be required for projected job openings...

Figure 23 – Highest Level of Educational Attainment by Race and Ethnicity, Dane County, 2008-12*



*Note: Highest level of educational attainment applies to all persons aged 25 and older in Dane County
Source: U.S. Census Bureau, American Community Survey 2008-12 (Five Year Estimates)

Workforce Composition

The gap in education levels between White and Black or Latino persons can also be seen in the racial and ethnic composition within low and high-paying occupations. People of color comprise 13% to 14% of Dane County’s workforce. However, people of color appear to be disproportionately either over- or under-represented in a number of occupations in the region.

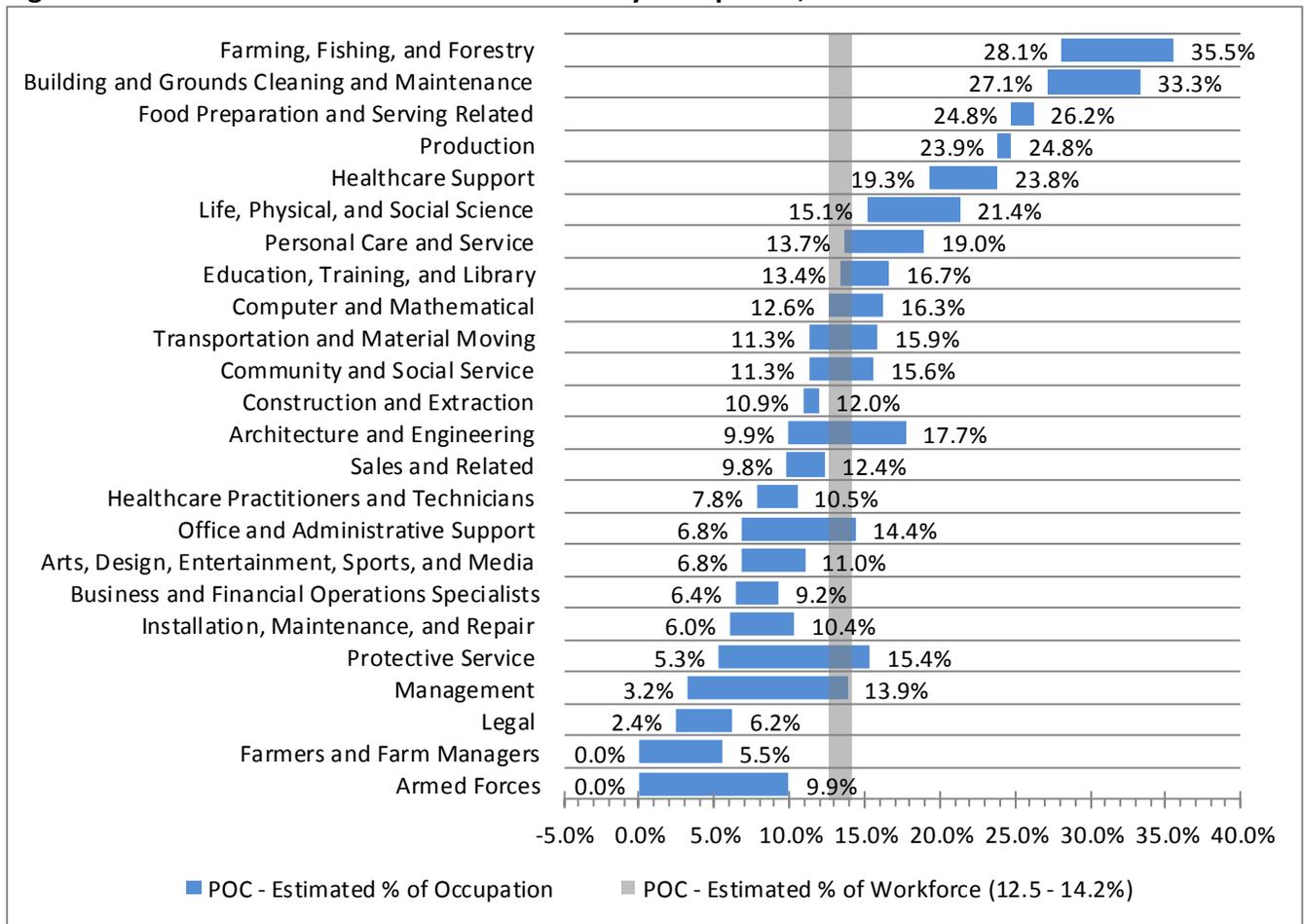
In terms of occupational categories: “Farmers and Farm Managers,” “Legal Occupations,” “Business and Financial Operations Specialists,” and “Armed Forces” all have proportionally fewer people of color than Dane County as a whole. Conversely, “Farming, Fishing, & Forestry Occupations,” “Building & Grounds Cleaning and Maintenance Occupations,” “Food Preparation and Serving Related Occupations,” “Production Occupations,” and “Healthcare Support Occupations” employ proportionally more people of color.

People of color appear to be overrepresented in lower skill, service or support work and underrepresented in those occupations described as “management/managing” as well as some of the highly credentialed, professional occupations. This is especially clear in the following occupation groups:

- Healthcare—People of color make up 19.3 to 23.8% of healthcare support staff but only 7.8 to 10.5% of healthcare practitioners and technicians. (Average hourly wages in these occupational groups were \$34.59 and \$14.00 respectively during the second quarter of 2014.⁸)
- Farming—Fewer than 5.5% of farmers and farm managers are people of color but they make up around 28 – 35% of those who work in other farming, fishing, and forestry capacities.

⁸ Source: EMSI Analyst, QCEW Employees, Non-QCEW Employees & Self-Employed - 2014.2 “Class of Worker”

Figure 24 – Estimated Percent Persons of Color by Occupation, 2006–2010



Source: U.S. Census Bureau, American Community Survey 2006-2010 Five-year estimates. Special Tabulation: Census Transportation Planning

Unemployment

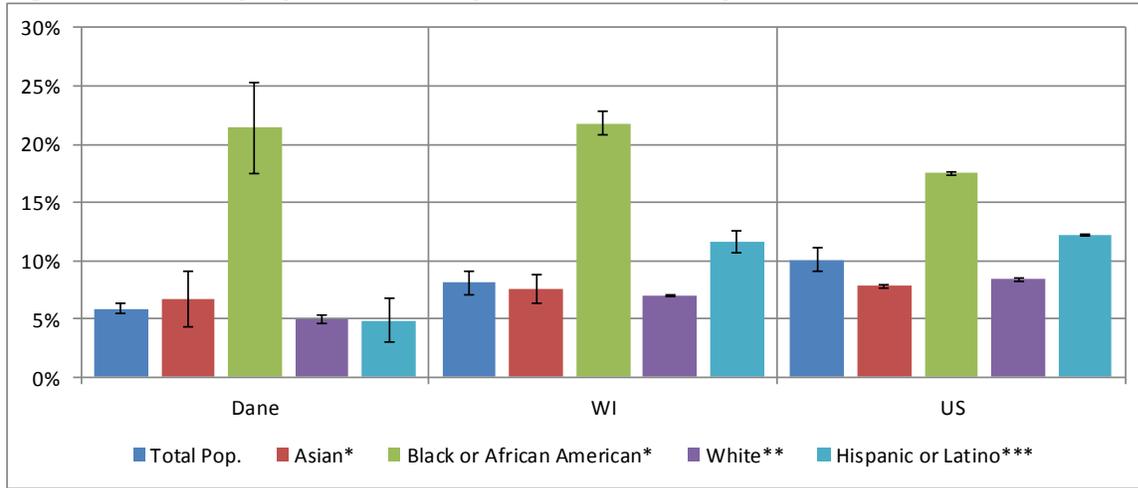
Unemployment rates in Dane County (Figure 25) were two to four percentage points below the national average and two percentage points below state unemployment levels during the period from 2006–2012, increasing by almost two percentage points to 6% total unemployment over the last three years. This is not the case across all groups.

The widest gaps in employment rates between racial and ethnic groups are the Black-White and Black-Hispanic disparities in the period from 2010–2012. Blacks were between three to five and a half times more likely than Whites or Hispanics to be unemployed. During this period it was estimated that 21% of Blacks in Dane County were unemployed (+/-4%), compared to 18% of Blacks unemployed nationally—an unemployment rate *at least 50%* higher than any of the other major racial and ethnic group in Dane County.

Blacks were between three to five and a half times as likely as Whites or Hispanics to be unemployed in 2012: 21% Black unemployment vs. less than 5% White unemployment. Black unemployment in Dane County was also higher than Black U.S. unemployment (17%).

Blacks were between three to five and a half times more likely than Whites or Hispanics to be unemployed.

Figure 25 – Unemployment Rates by Race and Ethnicity, 2010—2012



*Race Alone; **Race Alone, Not Hispanic or Latino; ***Any Race or Combination of Races

Source: U.S. Census Bureau, ACS, S2301 "Employment Status," Three Year Estimates

*Margin of Error indicators are included in these data and were taken from American Community Survey estimated values. The upper and lower whiskers on these bars represent the estimated range of values for each characteristic; the bars themselves indicate the predicted value. Unless otherwise noted data in this report are taken from Decennial Census datasets and are not published with margins of error.

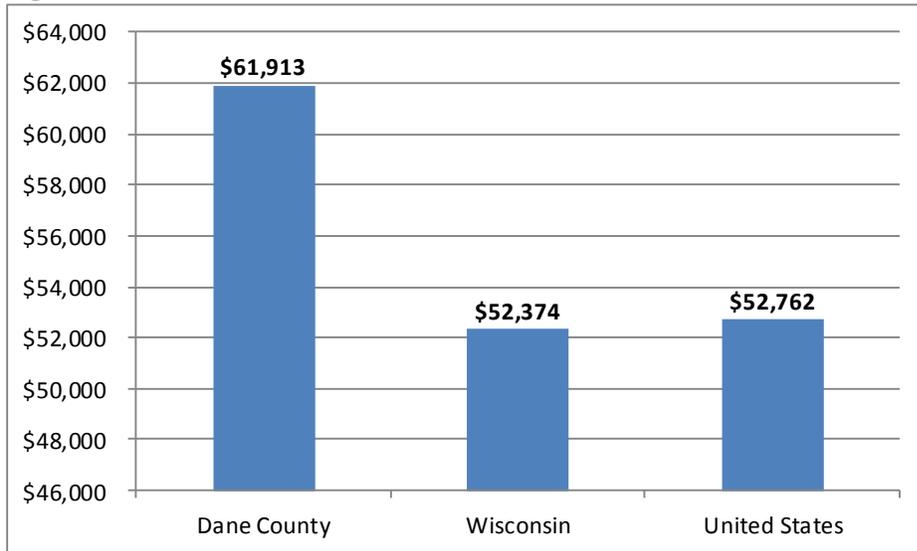
Source: Anthony Carnevale and Nicole Smith, "The Midwest Challenge": Georgetown University, Center on Education and the Workforce, September 2011.

Income

Median household income in Dane County for the period between 2007 and 2011 was \$61,913 (Figure 26), around \$9,000 higher than the median for both the Wisconsin and the United States. This higher median income in Dane County is due to economic strengths described above. Dane County's higher income and lower unemployment rates are strengths for the Madison area overall. However, this level of prosperity is not uniformly shared.

Incomes are higher on average than in Wisconsin and throughout the United States.

Figure 26 – Median Annual Household Income and Benefits, 2007-2011



Source: U.S. Census Bureau: American Community Survey: 2011 (5-Year Estimate)

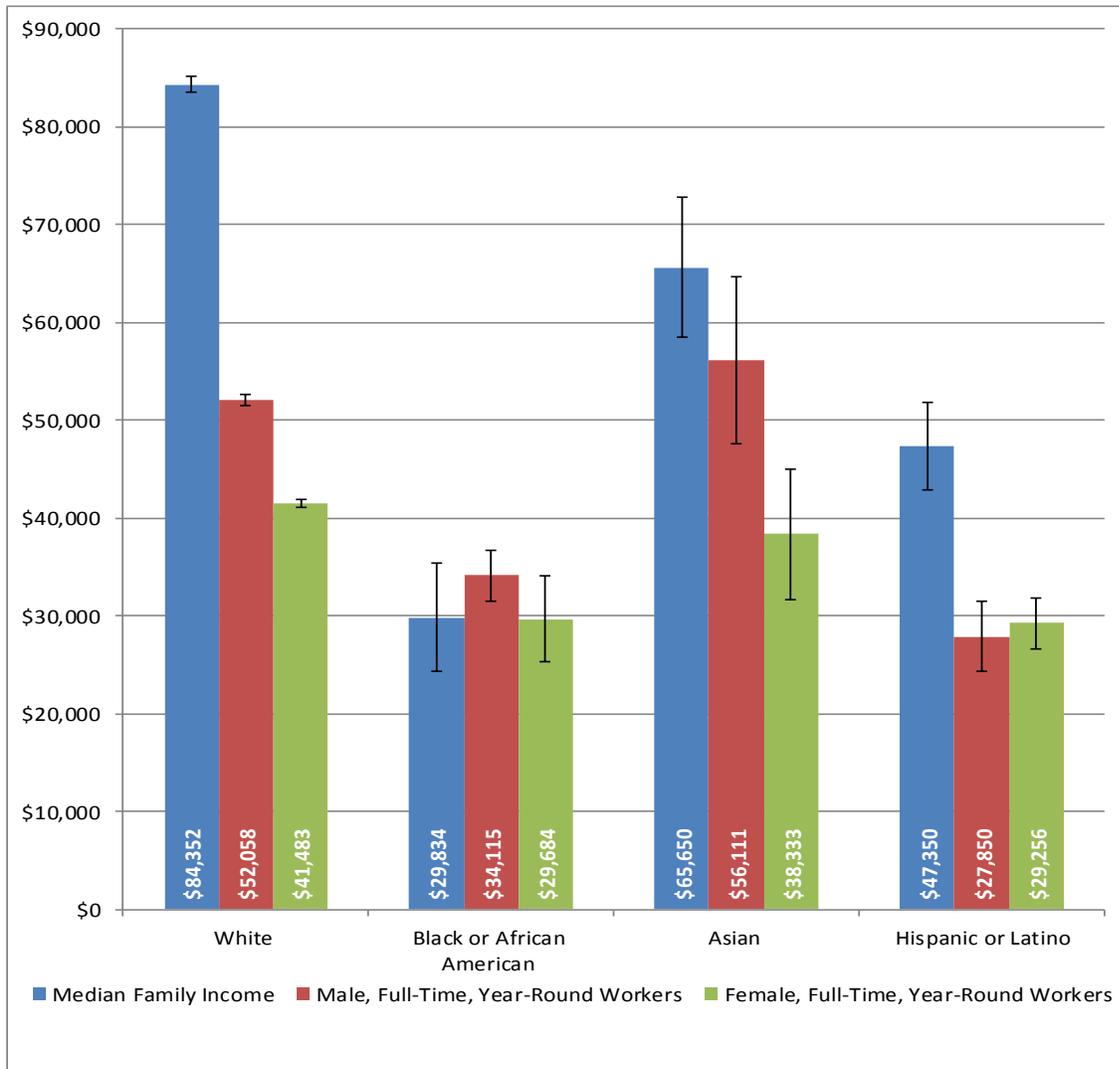
As shown in Figure 27 below, Dane County has wide racial disparity in income. Median family income (2007—2011) for Blacks in Dane County is two thirds that of Asian and Hispanic families and a little over one third that of White families.

The average Black male—working full-time, year-round—made a third less than a White or Asian male. Female, Black workers saw similar discrepancies. Male, Hispanic workers individually earned a lower median income than any other reported group: \$27,850. Median female pay is generally lower than for males of the same racial/ethnic background, the one exception being Hispanic females who earned a median yearly income \$2,000 higher than their male counterparts.

Median family income for Blacks in Dane County is two thirds that of Asian and Hispanic families and a little over one third that of White families.

Figure 27 – Median Income and Benefits by Race and Ethnicity, 2007-2011

(In 2011 Inflation-Adjusted Dollars)



Source: U.S. Census Bureau: American Community Survey: 2011 (5-Year Estimate)

*Margin of Error indicators are included in these data and were taken from American Community Survey estimated values. The upper and lower whiskers on these bars represent the estimated range of values for each characteristic; the bars themselves indicate the predicted value. Unless otherwise noted data in this report are taken from Decennial Census datasets and are not published with margins of error.

The previous sections described the people of Dane County in terms of population trends, race and ethnicity, the types of jobs they hold, occupations, and disabilities. Another important aspect to understanding a region is how people group together in living situations. This section explores how the people of Dane County live, in terms of the households they form, and the housing units they occupy.

Households

Dane County follows the national trends in household size and composition: decreasing household and family sizes, increasing numbers of single-parent families, a decline in the percentage of married couples and an increase in unmarried, cohabitating pairs. Additionally, Dane County is seeing an increasing percentage of single, never-married persons and increasing variety of family arrangements e.g. children living with grandparents, aunts, uncles, and in other guardianship arrangements.

Family and household size is decreasing in Dane County while the number and variety of household composition is increasing.

Figure 28 – Changes to Household and Family Size, 2000—2010

	1990	2000	2010
Total Number of Households	142,231	173,484	203,750
Average Household Size	2.76	2.37	2.33
Average Family Size	3.04	2.97	2.95

Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 2010

Households can be grouped into two general categories: Households with Children (Families) and Households without Children, which may or may not be “Families.” The term “family” indicates that two or more of the household’s residents are related by marriage or by blood.

Households with Children	Households without Children
Married couple families	Married-Couple families
Domestic partner families	Domestic Partner families
Single parent families	Unrelated people together
Families with other guardians	Single persons

Figure 29 below shows changes in number of different types of households between 1990 and 2010 in Dane County. Non-family households increased 59% during this period, from 54,885 to 86,998. More than three fourths of this growth was the result of increasing numbers of single-person households. Single-persons living alone accounted for 30% of households in 2012. In 1970 that figure was 17%.

While there are more family households than non-family, they increased at a slower rate (34%, from 87,346 to 116,752).

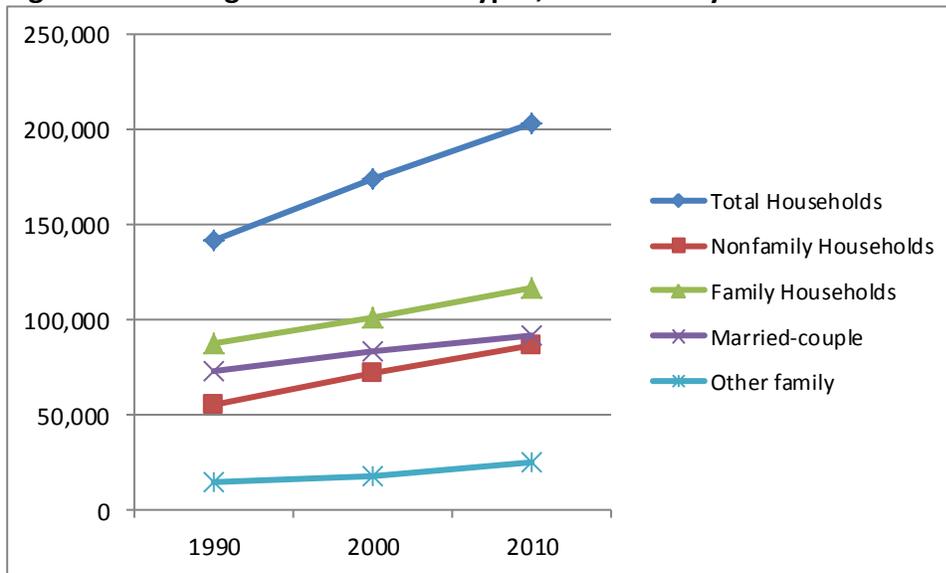
Figure 29 also shows trends in married and other family arrangements. Overall, the make-up of families is changing. Although the number of married-couple families increased, the numbers of “traditional” families – married couples with own children – is declining. From the 2005-7 to the 2010-12 periods, the number of “traditional families” declined from

Non-family households accounted for most new households from 1990-2010. The make-up of families is changing. The number of married couples with their own children is declining, while other family types are increasing.

40,333 to 39,258.⁹ They now comprise 28% of households, compared to 40% in 1970. “Non-traditional” families (see listing above), in contrast, increased 17% during this period. The proportion of single parent families increased significantly since 1980. In 2010, 2% of Dane County households were single father households and 6% were single mother households.¹⁰

Although the number of married-couple families increased, the numbers of “traditional” families—married couples with own children—is declining.

Figure 29 – Changes to Household Types, Dane County 1990—2010



Source: U.S. Census Table DP-1: Profile of General Population and Housing Characteristics: 1990, 2000, 2010

Discrepancies in the number of single parent households can be seen between racial/ethnic groups in Figure 30 below. **Almost half of African American and almost a fourth of Latino homes are single parent households.** Many of these families also encounter other challenges related to a single parent raising children, including poverty, incarceration of a parent, food insecurity, and instability due to frequent moves.

Almost half of African American households and almost a fourth of Latino households are single parent households

Figure 30 – Single Parent Family Households in Dane County, 2010¹¹

	Total Households	Single Parent Households	% of Households
Asian*	4,517	697	15.4%
Black or African American*	5,316	2,577	48.5%
White**	100,034	11,452	11.4%
Hispanic or Latino***	5,481	1,323	24.1%
*Race Alone; **Race Alone, Not Hispanic or Latino; ***Any Race or Combination of Races			

Source: U.S. Census Bureau: Decennial Census: QT-P11 “Profile of General Population and Housing Characteristics,” 2010

⁹ U.S. Census, American Community Survey 3-Year Estimates

¹⁰ Source: U.S. Census Bureau: Decennial Census: QT-P11 “Profile of General Population and Housing Characteristics,” 2010

¹¹ “female/male householder, no husband/wife present”

Under such conditions, it becomes very difficult for a single parent to fully meet the developmental needs of children. Research shows that children encountering such multiple challenges experience greater stress, and that higher stress hinders brain development, likely reducing educational and earnings potential over the course of their lives.¹² Infants born to single mothers have more adverse outcomes than infants born to married mothers across races.¹³

Research shows that single-parent homes contribute to, and combine with, other challenges to hinder childhood brain development and life outcomes.

Housing

Production of new housing units in Dane County fell from a high of more than 5,000 in 2003 to about 1,000 in 2010, due to the great recession, before rebounding slightly in 2011-12. Housing production in the county is roughly split between Madison and non-Madison, and between single-family and multi-family units (with more multi-family units being built in Madison). Median sales price peaked at close to \$220,000 before falling slightly to about \$200,000 in 2012. Low production and growing demand for apartments led to a very low vacancy rate of 2%, putting upward pressure on rents and fueling a boom in apartment construction, especially in Madison. The apartment boom also reflects shifting demand for more walkable areas, as identified in a recent CRSC-sponsored market study. See Appendix A for additional information about housing supply and demand trends.

Housing supply

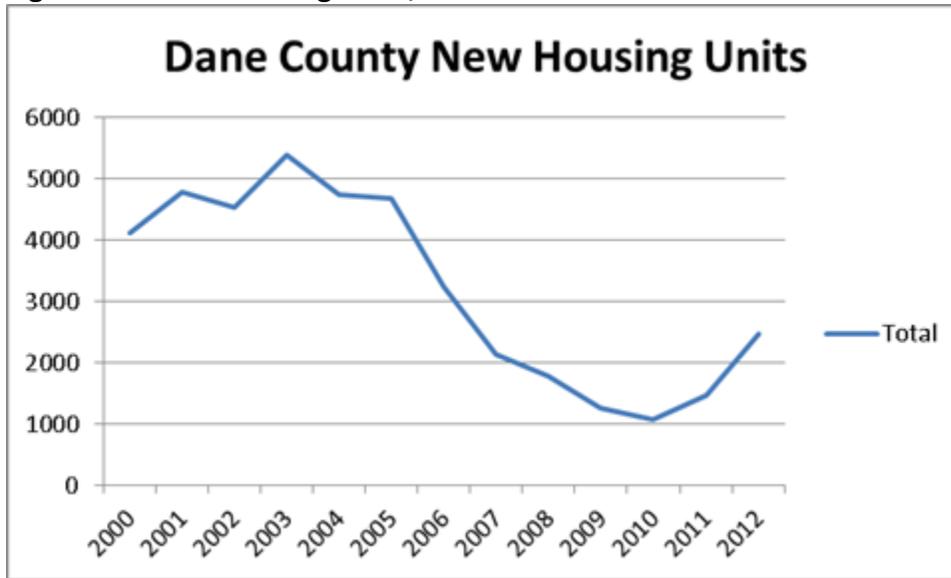
Prior to the great recession, housing production in Dane County reached a high of 5,458 new housing units in 2002 (See Figure). Production dropped precipitously to 1,070 in 2010 before rebounding during the following years.

¹² 2014 Franklin County Children's Report: How Toxic Stress Threatens Success, <http://liveunitedcentralohio.org/our-work/education/champion-of-children/franklin-county-childrens-report/>

¹³ Alio, A.P., Richman, R.R., Clayton, H.B., Jeffers, D.F., Wathington, D.J., & Salihu, H.M., 2010, *An Ecological approach to understanding black-white disparities in perinatal mortality*, Maternal and Child Health Journal, 14(4) 557-66

Prior to the great recession, housing production in Dane County reached a high of 5,458 new housing units in 2002

Figure 31 – New Housing Units, 2000—2012



Source: CARPC Building Permit data

Housing demand – shifting demand

Demographic shifts towards greater number of elderly and the millennial generation are projected to influence changes in housing demand.¹⁴ Demand is expected to shift demand away from large-lot, single-family detached homes to other housing types, ranging from small-lot homes to town homes to large and small multi-family homes.

Housing Affordability

Housing is considered affordable, according the U.S. Department of Housing and Urban Development, if it costs 30% or less of household income.¹⁵ Of particular concern are low and moderate income (LMI) households that bear this cost burden because they have less money available for other essential needs. In Dane County, for the period 2008 to 2010, 51,195 LMI households pay more than 30% of income for housing.¹⁶ These **cost-burdened households represent 26% of all households in the county.**

As shown in Figure 32, the vast majority of the very low-income households – those making at or below 30% of the county’s median income¹⁷ – are renters. Conversely, most of the moderate-income households (between 50% and 80% of median) are owners.

¹⁴ Center for Neighborhood Technologies with Peloton Research Partners and Seth Harry & Associates, 2014, http://www.capitalregionscrpg.org/2013_postings/Market_Study/Final_Madison_WTS_Study-1-9-14.pdf

¹⁵ “Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.”

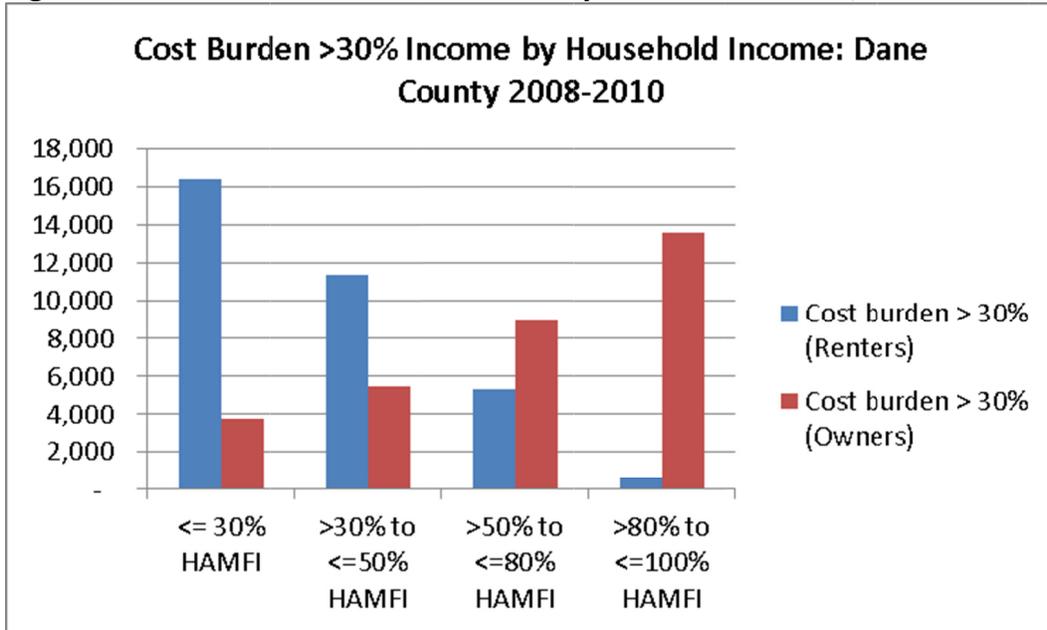
http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/

¹⁶ US Census, Special CHAS tabulation, by US HUD, of 3-Year American Community Survey Data, 2008-2010.

¹⁷ HAMFI, or Housing Urban Development Median Family Income, which is reported for Dane County here.

The vast majority of the very low-income households are renters.

Figure 32 – Cost Burdens > 30% of Income by Household Income, 2008–2010



Source: US Census, Special CHAS tabulation, by US HUD, of 3-Year American Community Survey Data

As shown in Figure 34, most of the cost burdened renters live in the City of Madison, while most of the cost burdened owners in Dane County live outside Madison. This reflects, in part, a higher rate of home ownership outside Madison. Maps showing a more detailed distribution of housing affordability are presented in “Access to Opportunity/Housing.”

About a quarter of county households are “cost burdened:” pay more than 30 percent of their income for housing. About one in seven households pay more than half of income for housing. Most of these “extremely cost burdened” households are very low-income renters.

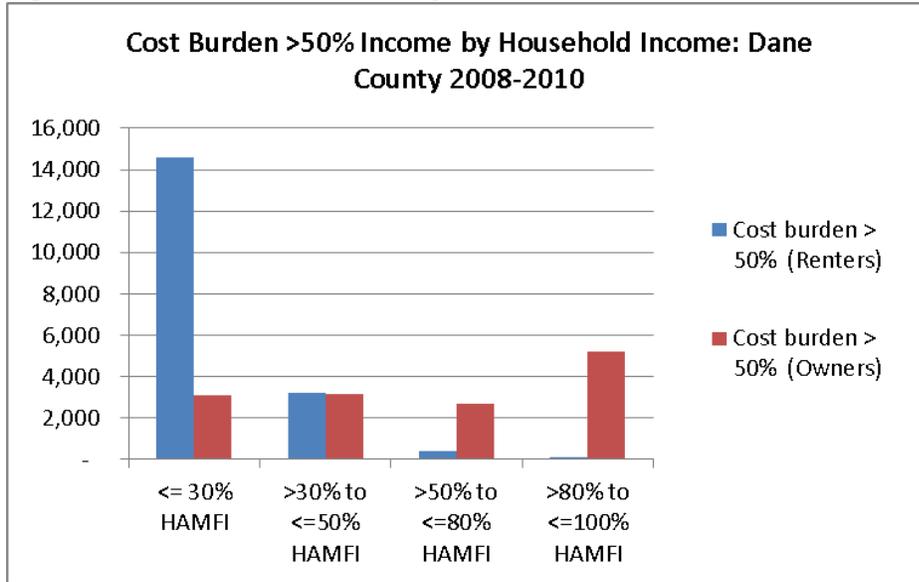
It is important to note that another aspect of housing affordability is the cost of transportation. Transportation costs vary with location. A measure of affordability that combines housing and transportation costs is discussed in Section F, Barriers to Accessing Opportunity.

Another way to understand housing affordability is to consider the income required to afford housing. In 2014 in Dane County, an hourly wage of \$17.27 (annual income of \$35,920) is needed to afford a two-bedroom apartment at “fair market rent” of \$898. Yet the hourly mean wage of the 81,320 rental households in the county is \$12.23. With this wage a renter could afford rent (at 30% of income) of \$636 per month. At that wage it would take 1.4 full-time jobs to afford the 2-bedroom fair market rent unit.¹⁸

¹⁸ *Out of Reach*, National Low Income Housing Coalition, www.nilhc.org/oor/2014. Fair Market Rents are established by the U.S. Department of Housing and Urban Development.

A high number of renters making less than 30% of the Median Family Income have a cost burden greater than 50%.

Figure 33 – Cost Burden > 50% by Household Income, 2008—2010



Source: US Census, Special CHAS tabulation, by US HUD, of 3-Year American Community Survey Data

Most of the cost burdened renters live in the City of Madison, while most of the cost burdened owners in Dane County live outside Madison.

Figure 34 – Cost Burdens by Household Income, Madison and Dane County (non-Madison), 2008—2010



Source: US Census, Special CHAS tabulation, by US HUD, of 3-Year American Community Survey Data

[this page left intentionally blank]

C. Geography of Opportunity

The previous section described the growing diversity and shifting demographics of people in Dane County with respect to age, race, ethnicity, disability, household composition and occupation. The region maintains a strong economy rooted in core sectors such as health care and professional services, but with unequal participation in prosperity, particularly along racial and ethnic lines. The housing market is rebounding following a sharp drop in production during the great recession. Multi-family housing dominates recent construction, and is likely to continue due to anticipated shifts in housing demand. Affordability continues to elude about a third of county households.

The report in this section turns from the background and trend information to a portrayal of the geographic distribution of opportunities and barriers to opportunities. Communities strive to create opportunities for residents to fulfill their potential to be healthy, happy and productive members. They invest in schools, cultural and recreational facilities. They promote economic development and workforce training. And they provide infrastructure for transportation and other vital services.

Ideally, these opportunities are accessible to all community members. A core tenet of the American Dream is that everyone should be able to get ahead through hard work and perseverance regardless of the zip code where they were born and raised. Broad access to opportunity also promotes strong regional economies.,¹⁹

Recent reports, highlighting racial disparities in Dane County and Wisconsin, show that people experience different opportunities based on race. An examination of the geographic distribution of opportunities can deepen understanding of how opportunities, and barriers to accessing them, are distributed. Such increased understanding can hopefully identify highlights ways to increase access to opportunity for all community residents.

Access to Opportunities

A summary measure of opportunity is the Childhood Opportunity Index created by the Kirwan Institute at Ohio State University. The index combines measures of education opportunity²⁰, health and environmental opportunity²¹, and social and economic opportunities²².

Figure 35 and Figure 36 below show the distribution, at the census tract level, of the Childhood Opportunity Index measures ranked from very low to very high in Dane County and the Madison area. The maps show areas of very high opportunity in west Madison extending westward, and in the area north of Lake Mendota. Very low opportunity areas are along the perimeter of Madison to the south, southwest, north, northeast and southeast. Some areas extend into Fitchburg to the south.

¹⁹ Benner, Chris and Pastor, Manual; *Just Growth: Inclusion and Prosperity in America's Metropolitan Regions*; Routledge, 2012

²⁰ Educational Opportunity Indicators include measures of adult educational attainment, student poverty, reading and math proficiency, preschool attendance, high school graduation, and proximity to early childhood centers.

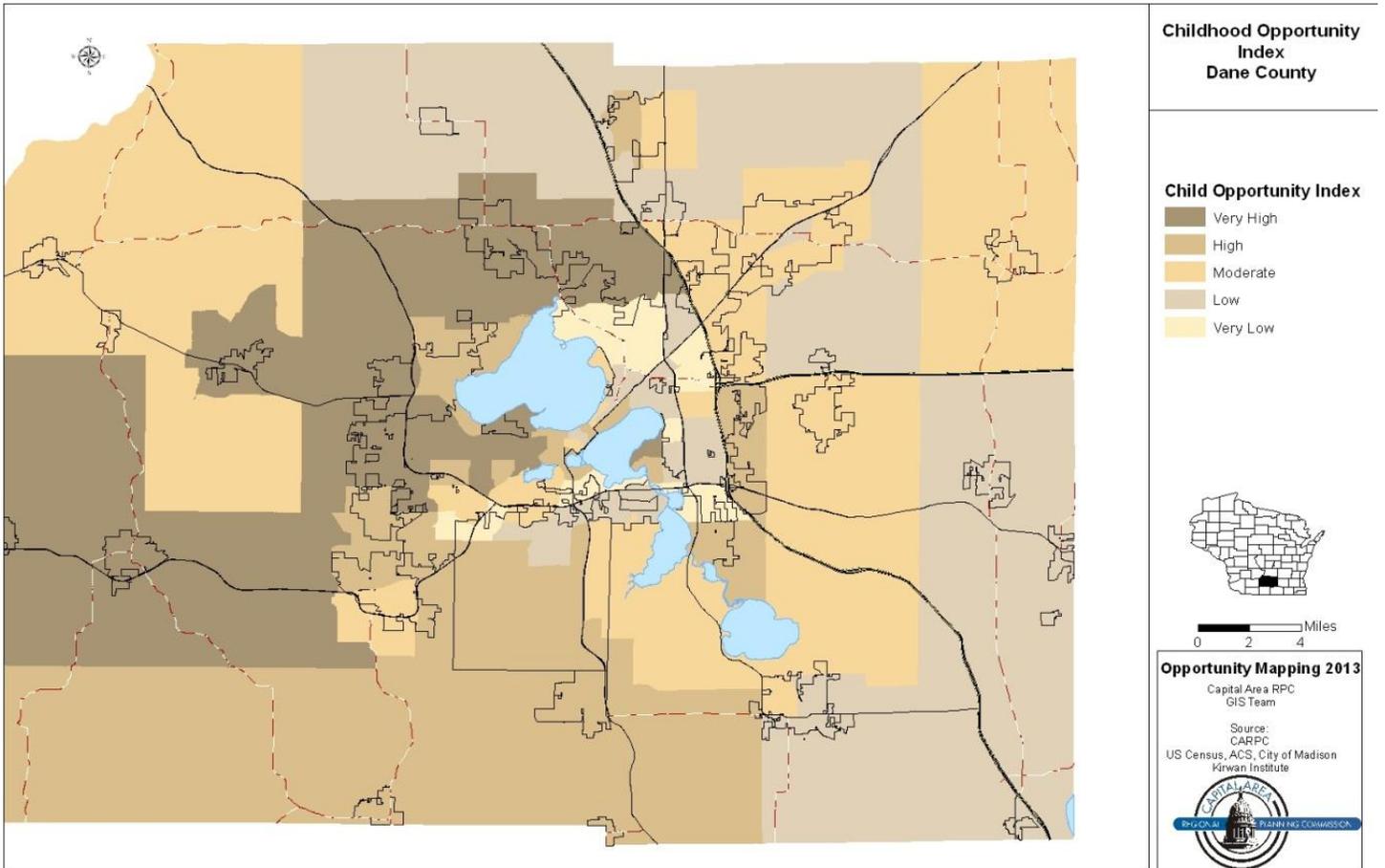
²¹ Health and Environmental Opportunity Indicators include measures of healthy food retailers, proximity to toxic waste release sites, volume of nearby toxic waste, proximity to parks and open space, housing vacancy, and proximity to health care facilities.

²² Social and Economic Opportunity Indicators include neighborhood foreclosures, poverty, unemployment, public assistance, and proximity to employment.

C. Geography of Opportunity

High opportunity areas are found on the west and north of the central portion of the county. Lowest opportunity areas are found in along the periphery of Madison, including Fitchburg. Some rural areas exhibit low opportunities.

Figure 35 – Childhood Opportunity Index, Dane County

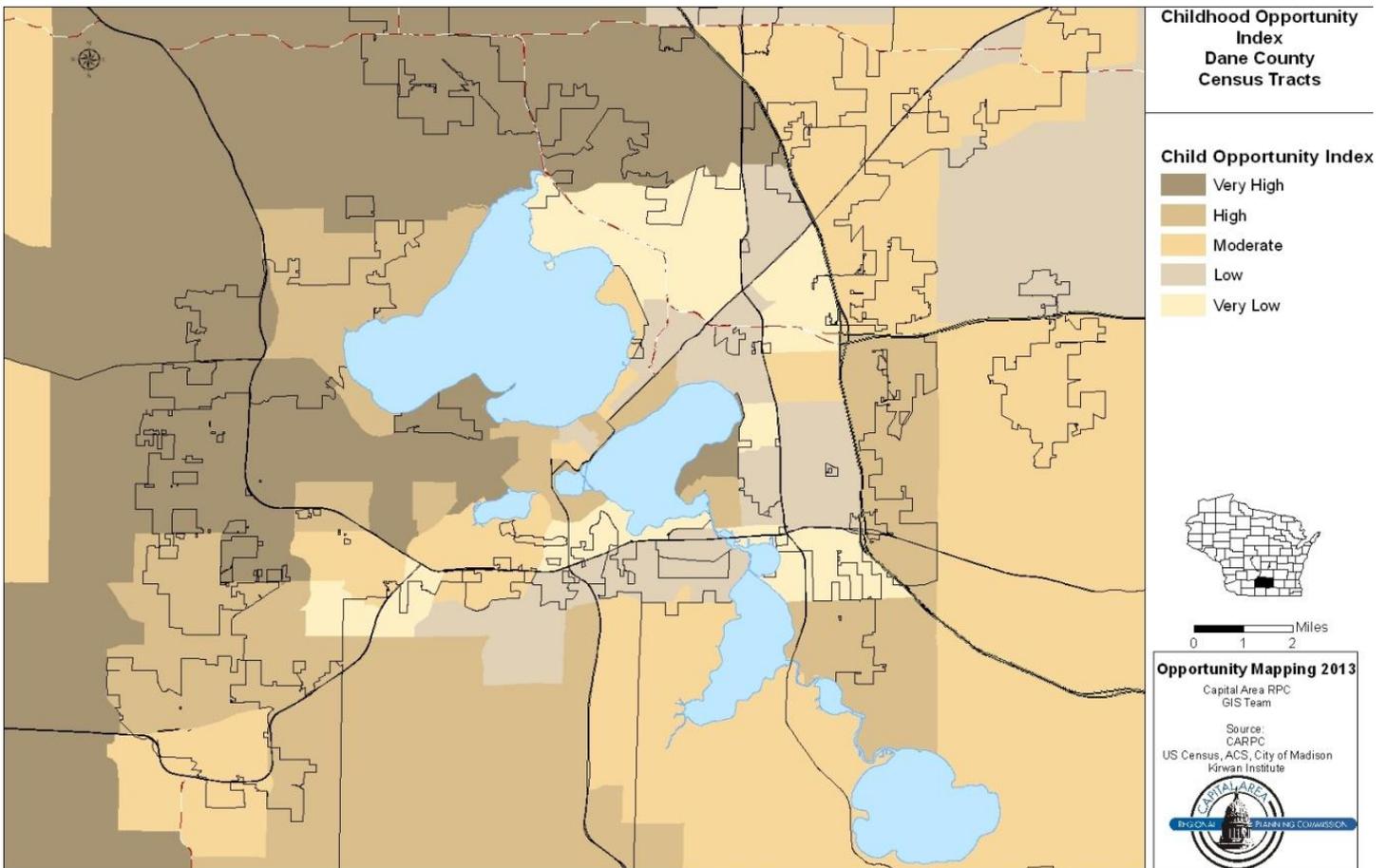


Source: Kirwan Institute, Ohio State University

C. Geography of Opportunity

High opportunity areas are found on the west and north of the central portion of the county. Lowest opportunity areas are found in along the periphery of Madison, including Fitchburg. Some rural areas exhibit low opportunities.

Figure 36 – Childhood Opportunity Index – Madison, WI Area



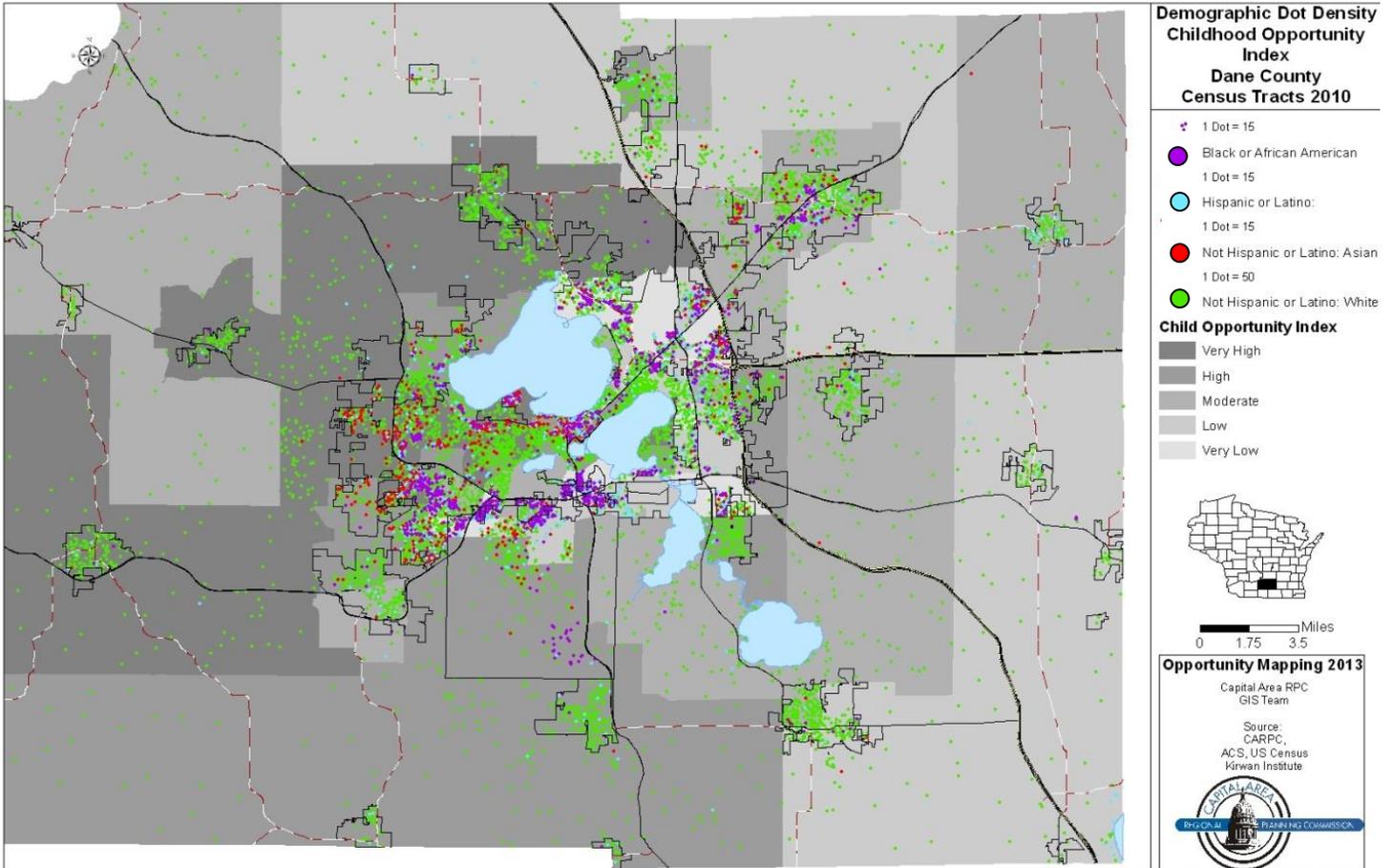
Source: Kirwan Institute, Ohio State University

Figure 37 shows the Childhood Opportunity Index for the Madison area, overlaid with a dot map of the population of persons of color.

C. Geography of Opportunity

African-American and Latino persons are more heavily concentrated in very low and low opportunity areas in the Childhood Opportunity Index.

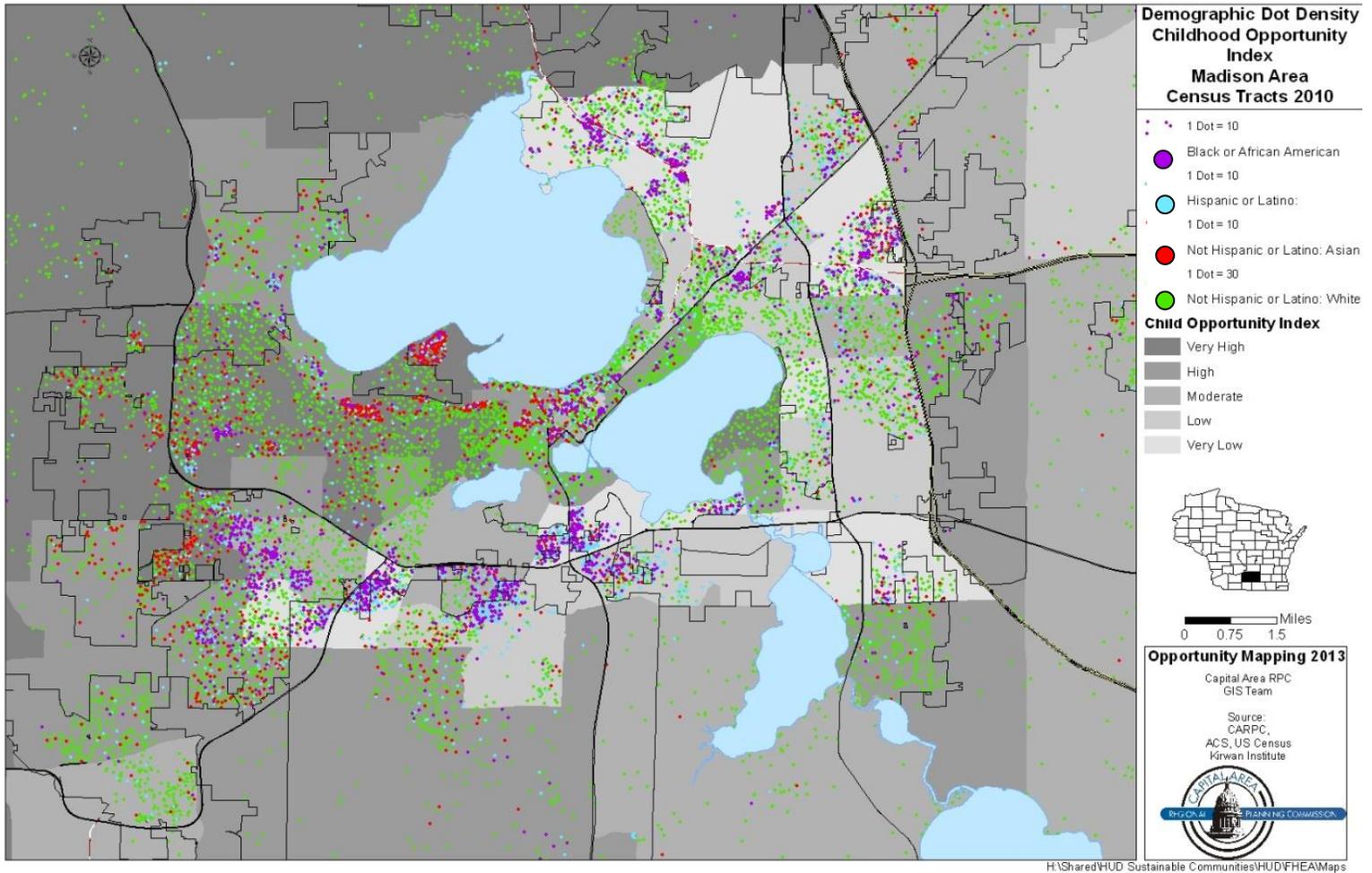
Figure 37 – Childhood Opportunity Index and Race/Ethnicity, Dane County 2010



Source: Kirwan Institute, Ohio State University, U.S. Census

H:\Shared\HUD Sustainable Communities\HUD\FHEA\Maps

Figure 38 – Childhood Opportunity Index, Race/Ethnicity, Madison Area 2010



Source: Kirwan Institute, Ohio State University, U.S. Census

H:\Shared\HUD Sustainable Communities\HUD\FHEA\Maps

Additional maps for educational, health and environment, and social and economic opportunity are shown in Appendix B: Opportunity Mapping Atlas. Other, more detailed opportunity maps²³ are also included in Appendix B.

Barriers to Accessing Opportunities: Social and Economic

Access to Opportunity, above, presents a picture of the distribution of opportunities in the region. As the maps above, and in Appendix B show, different opportunities have different geographic distributions. Jobs, school quality, social and economic opportunity and health and environmental features are concentrated in the suburbs and on Madison’s west side. Jobs, transportation choices and cultural sites are concentrated in downtown Madison. Transportation choices and affordability (car, transit and bicycle), and community centers are available in portions of Madison outside of downtown. Healthy food access is found along major roads but with significant gaps.

²³ Including jobs, schools, retail healthy foods, income, housing, mobility, parks and open spaces, and community centers

C. Geography of Opportunity

Regions can work to live up to the principle of access to opportunity for all, but often fall short of the ideal. Historical patterns and current realities result in disparities in access to opportunity.

Characteristics including race, ethnicity, income, and geographic location become determining factors of access to opportunity. This section identifies the geography of opportunities and characteristics that limit access.

A range of barriers can prevent people from good access to opportunities. Many of these barriers disproportionately confront people of color.

This section examines 10 socio-economic characteristics that can reduce people’s chances of accessing opportunities. Data for all Dane County census block groups were downloaded for each characteristic. The table in Figure 39 lists the characteristics, variables used to measure barriers, average values for all 310 block groups in Dane County and the calculated number identified as a “barrier threshold.”²⁴ A block group exceeding the threshold for a variable was considered to be a concern for that characteristic.

Figure 39 – Barrier Thresholds, Dane County

Characteristic	Variable	Block Group Avg.	Barrier Threshold
Segregation	% Non-White Persons	18%	33%
Poverty	% Persons below Poverty	13%	30%
Language	% Limited English Proficiency	2%	5%
Mobility	% Household with no Vehicle	8%	20%
Family	% Single-Parent Households	13%	25%
Housing	% Households Paying More than 50% of Income for Rent	21%	40%
Education	% Adults with less than High School Degree	6%	12%
Youth	% Children under 18 Years	21%	29%
Employment	% Unemployed	6%	10%
Food Stamps	% Households Receiving Food Stamps	8%	16%

Source: US Census 2010 (race, age) and American Community Survey (ACS) 5-year 2007-2011 (all other variables).²⁵

For each block group, the total number of thresholds exceeded was totaled. Figure 40 shows the block groups by number of barrier thresholds exceeded.

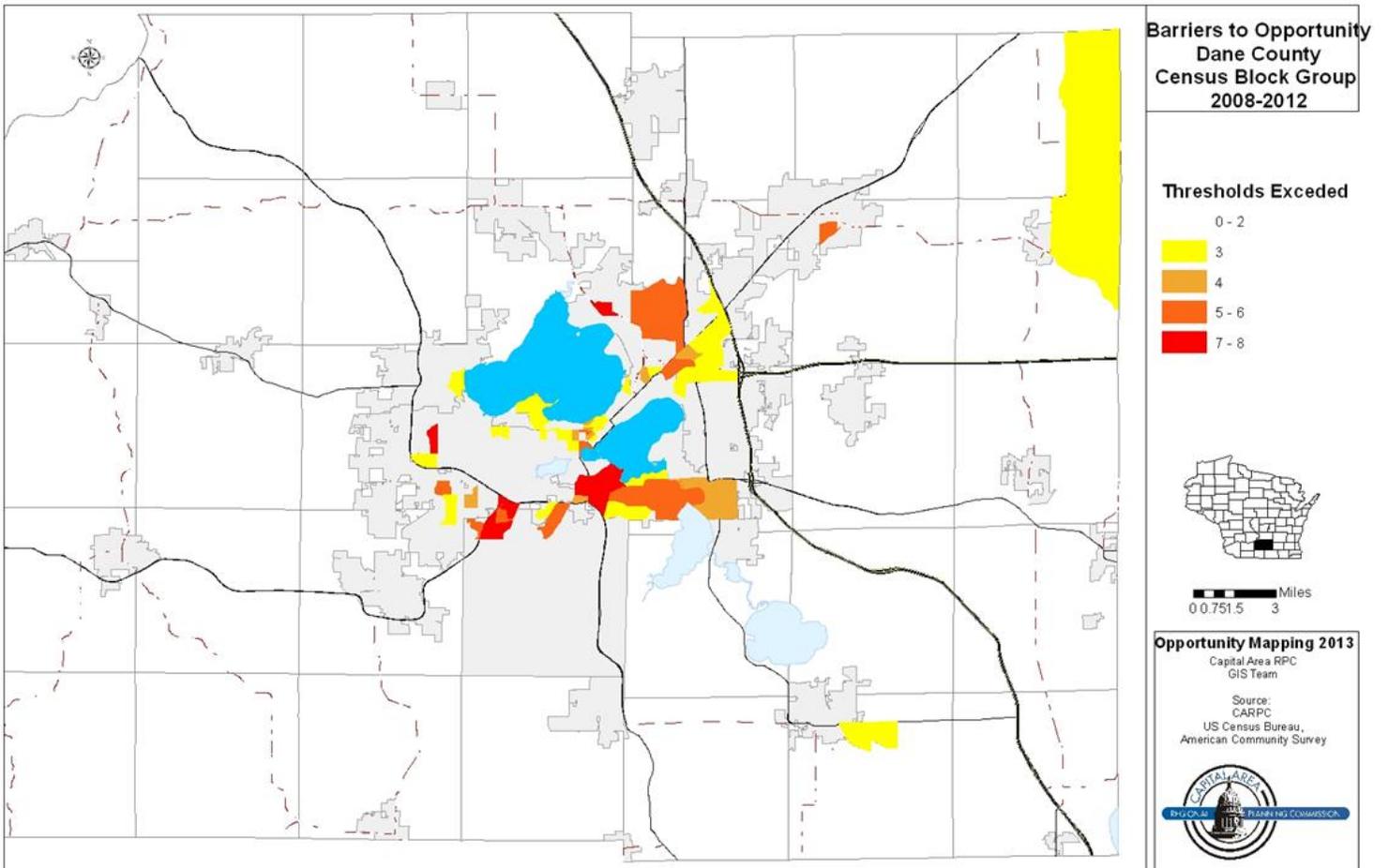
²⁴ Barrier thresholds were calculated by adding the standard deviation all block groups to the mean average for all block groups.

²⁵ ACS data at the block group level comes with a wide range of margins of error (MOE). Where counts are small the MOE can be as high as 100%. It was determined that, for the purposes of this analysis, that ACS data at the block group level was appropriate for the following reasons: 1) the analysis identifies block groups with higher than average counts which have lower margins of error; 2) the analysis combines 10 variables for each block group to get an overall picture of risk, which minimizes the impact of higher MOE for any one variable; and 3) block group level data is more useful for guiding policy because it provides more precise picture of geographic distribution.

C. Geography of Opportunity

Areas with multiple barriers to opportunity are found along the beltline (U.S. 12 and 151) highway and north/east Madison. Highest concentrations of barriers (7-8) are in south, southwest, west and north Madison.

Figure 40 – Barriers to Opportunity in Dane County

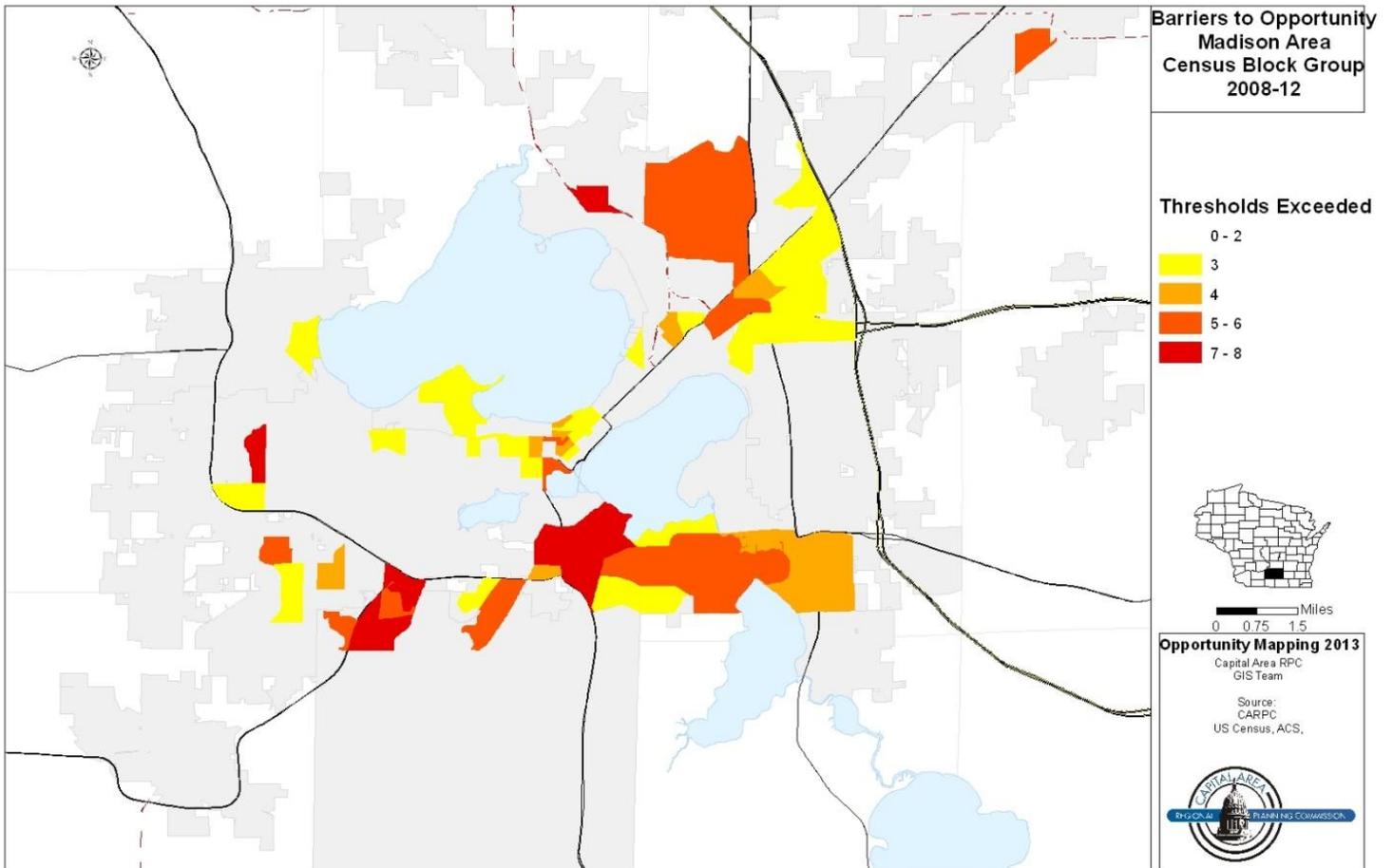


Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2007-11

C. Geography of Opportunity

Areas with multiple barriers to opportunity are found along the beltline (U.S. 12 and 151) highway and north/east Madison. Highest concentrations of barriers (7-8) are in south, southwest, west and north Madison.

Figure 41 – Madison Area Barriers to Opportunity



Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2007-11

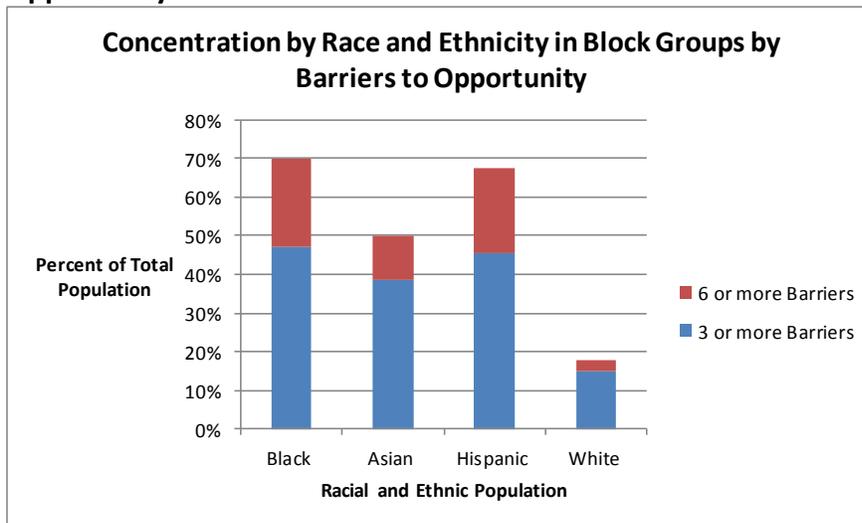
Block groups with highest concentrations of barriers to opportunity in the Madison region are found along the south Beltline highway at Highway 51, Park Street and Verona Road/Highway 151; and north Madison and west Madison. Block Groups 1 and 3 of Census Tract 14.01 along the south beltline highway adjacent to Park Street have the highest concentration to barriers of opportunity at 8 each.

In Dane County as a whole, a larger percentage of persons of color live in block groups with 3 or more barriers to opportunity. Figure 42 shows that approximately 70% of all Black and Hispanic individuals reside in a block group with three or more barriers to opportunity, while only 18% of White individuals in Dane County reside in this type of block group. In addition, 23% and 22% of Black and Hispanic individuals reside in a block group with 6 or more barriers to opportunity, compared to only 2% of all White individuals.

C. Geography of Opportunity

Figure 43 shows areas with barriers to opportunity overlaying the Childhood Opportunity Index. On the whole, areas with low and very low childhood opportunity correspond with areas that have many barriers to opportunity. One exception is the area on the far west side of the City of Madison – the Wexford Ridge neighborhood – that has concentrated barriers to opportunity, while also residing in an overall high childhood opportunity area. One explanation for this discrepancy is that the Childhood Opportunity Index is shown at the census tract (larger) level, while the barriers to opportunity are shown at the block group (smaller) level. For the Childhood Opportunity Index, the Wexford Ridge neighborhood is combined with surrounding, more opportunity rich areas.

Figure 42 – Concentration of Dane County Population in Block Groups with Barriers to Opportunity



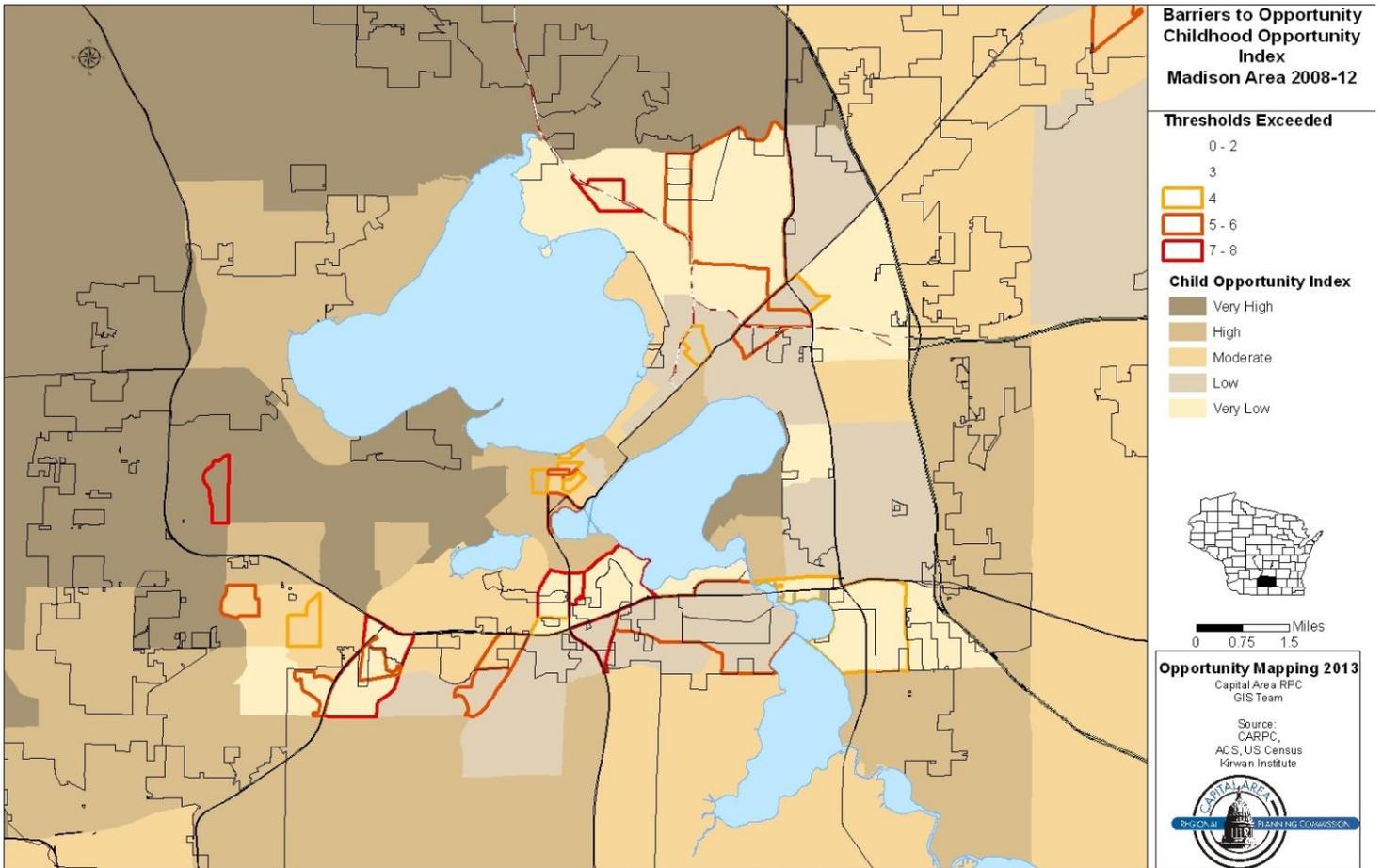
Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2008-12

“It appears that about half of the area’s low-income Black households live in approximately 15 small, compact residential concentrations scattered within the city and around its perimeter. These largely rental developments are each home to anywhere from 100 to 400 families of color, and they are typically surrounded by larger, predominantly White homeownership neighborhoods. Along with this dispersion of the African American population into numerous small enclaves, the city and county actually have few, if any, large-scale and prominent Black neighborhoods, such as those that culturally and politically anchor the African American community in most major American cities. In fact, despite a total Black population of almost 32,000 county-wide, there is not a single aldermanic district, supervisory district, planning unit, or even a census tract where African Americans constitute the a majority of residents.

“Not surprisingly, most of the small African American residential communities trace their history back to rental or affordable housing developments dating from the 1960s, 70s or 80s. Even to this day, a majority of families in these small neighborhoods qualify for housing assistance, and live near or below the poverty line. Typically, these enclaves do not include a church, a full service grocery, a public school, social or civic clubs, developed open spaces, a bar, restaurant, or a significant employer.”

Race to Equity: A Baseline Report on the State of Racial Disparities in Dane County, Wisconsin Council on Children and Families, 2013

Figure 43 – Childhood Opportunity Index and Barriers to Opportunity, Madison Area 2012



Source: Kirwan Institute, U.S. Census, American Community Survey 5-year estimates, 2008-12

Racial and Ethnic Concentrations of Poverty

Another way to look at barriers to opportunity is by identifying areas where poverty and segregation coincide. When people of color are disproportionately poor, and geographically concentrated and isolated, they can face many barriers to opportunity. The U.S. Department of Housing and Urban Development (HUD) identifies such “racially and ethnically concentrated areas of poverty” as important focal points for identifying barriers to opportunity.

Racially and ethnically concentrated areas of poverty (RECAPs) can reinforce patterns of segregation and perpetuate the isolation of low-income residents and people of color from life opportunities available to other residents. Nationally, these areas tend to be located in urban cores and other large concentrations of affordable housing.

HUD defines RECAPs as census tracts with the family poverty rate above 40% or three times the metro average and a non-White population greater than 50%.

C. Geography of Opportunity

Within the Madison region there are two census tracts that meet the HUD criteria for racially or ethnically concentrated areas of poverty: census tracts 6 and 14.01 (see Figure 44 and Figure 45). They are located along the beltline (US Highways 12 and 151) in south and southwest Madison. These tracts are home to approximately 1% of the county's total population, but nearly 5% of the county's persons of color.

The RECAP areas correspond with the areas with concentrated barriers to opportunity presented above (see Figure 41). South and southwest Madison in particular meet RECAP criteria, and had seven or more barriers to opportunity. An area on the far west side of Madison (Wexford Ridge neighborhood) showed up in the barriers analysis above, but not the RECAP below. As discussed above, the difference is explained by the different unit of analysis: the barrier analysis examines the smaller geography of block groups, while the RECAP uses the larger unit of tracts (Wexford Ridge area is smaller and adjacent to areas with fewer barriers).

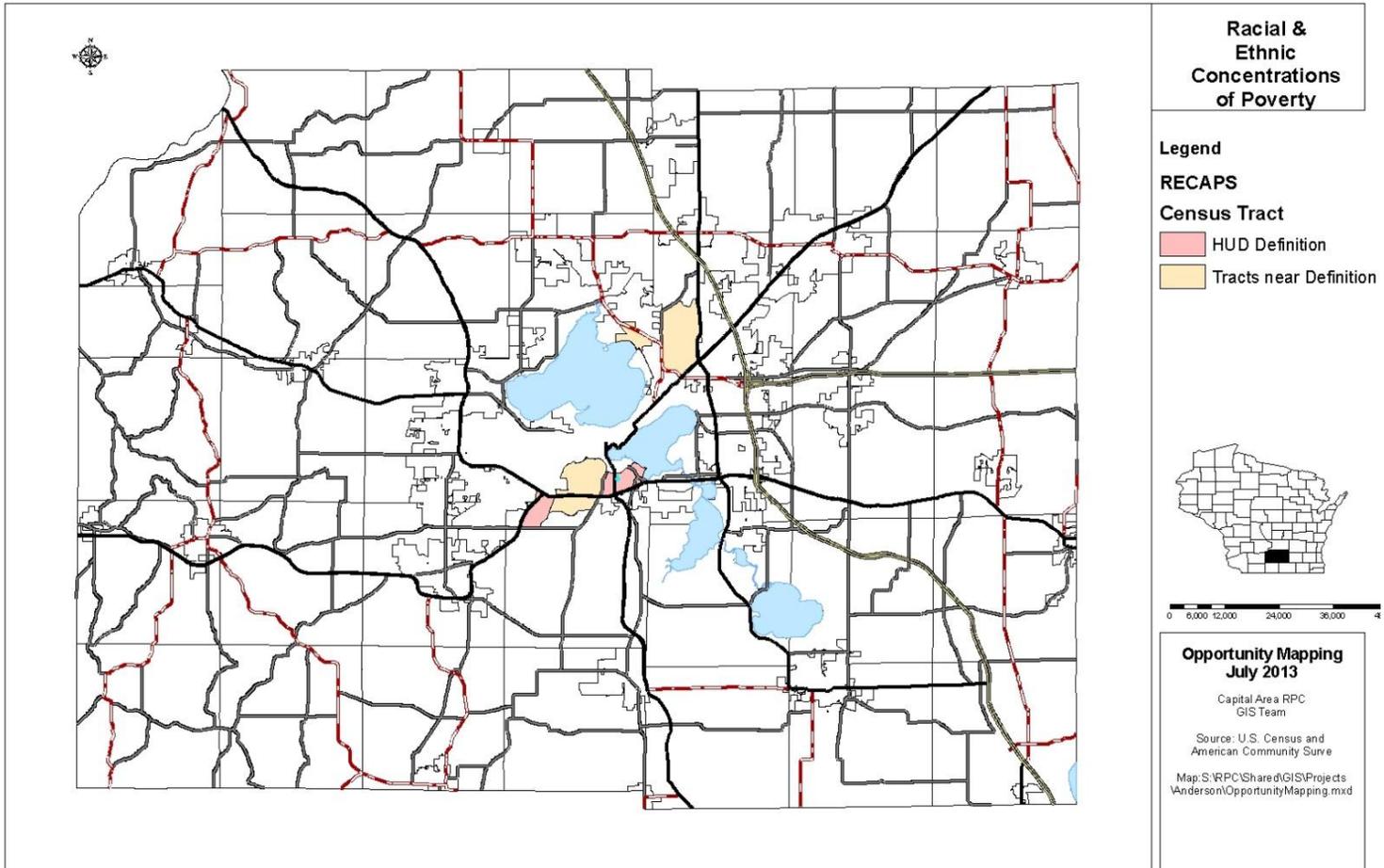
Other tracts, 14.02, 23.01, and 25 had similar levels of poverty and racial composition but fell just short of the above criteria; so are also included in portions of the RECAP analysis below (see Figure 47 and Figure 46). They are located in south Madison (along the beltline highway), and north and northeast Madison.

Census tract 32 in central Madison also met the criteria for being RECAP; however it was excluded from the analysis because its population is comprised primarily of students from the University of Wisconsin and includes foreign exchange student housing.

C. Geography of Opportunity

Areas with high levels of poverty, that also house mostly person of color, are found along the beltline highway (U.S. 12 and 151) and, to a lesser degree north/northeast Madison.

Figure 44 – Racial & Ethnic Concentrations of Poverty, Dane County



Source: U.S Census and Department of Housing and Urban Development

C. Geography of Opportunity

The racial and ethnic concentrations of poverty correspond closely with those areas that have concentrated barriers to opportunity.

Figure 45 – Racially/Ethnically Concentrated Areas of Poverty, Dane County, 2005-2009

	Count	Percent
Tracts	230	100%
RCAP/ECAP Tracts	2	1%
Non-RCAP Tracts	228	99%
Total Population in RCAP/ECAP	5,345	1.12%
Non-White	3,509	4.73%
Black	1,080	5.32%
Hispanic	1,296	5.67%
Asian	828	4.09%
Pacific Islander	0	0.00%
Native American	27	3.01%

Source: U.S Census and Department of Housing and Urban Development

Both RECAP tracts exist in areas previously identified as having the greatest concentrations of minority populations, by the beltline south of central Madison. The two tracks are distinct from each other in terms of growth and other patterns (see Figure 46).

Figure 46 – Poverty Rate of Racially and Ethnically Concentrated Areas of Poverty, 1970—2010

Poverty Rate	2010*	2000	1990	1980	1970
6 (Family)	31.3	16.2	15.5	2.7	3.9
White	16.2	8.9	11.7	9.4	6.4
Black	57.6	26.9	43.5		
Asian	51.8				
Hispanic	20.7	21.9	23.7		
14.01 (Family)	31.2	23.0	28.8	5.6	16.6
White	25.2	15.1	21.8	20.2	14.1
Black	33.3	31.9	48.0	22.5	23.9
Asian	39.3				
Hispanic	35.3	42.9	12.9		

Source: U.S. Census, Decennial Census (1970—2000); American Community Survey 5-year estimates, 2007-11

C. Geography of Opportunity

Other tracts, 14.02, 23.01, and 25 had similar levels of poverty and racial composition but fell just short of the HUD criteria.

Figure 47 – Census Tracts Close to Meeting HUD Definition of Racial and Ethnic Concentrations of Poverty (RECAP)

Tract	Families	Percent Persons below poverty	Percent People of Color	Area
14.02	1,306	24	46	South Madison
23.01	896	33	44	N. Madison/ Troy Drive
25.01	381	40	39	Near airport
HUD Definition		39.3	50	
County		13.1	18	

Source: U.S Census and Department of Housing and Urban Development

Segregation

On a national level, “exposure to extensive poverty is the norm for most blacks and Latinos, while the opposite is true for most whites and Asians. Less than one-third of black and Latino children live in middle-class neighborhoods where middle-class norms predominate. Meanwhile more than 60% of white and Asian households live in neighborhoods where the majority of people are not poor.”²⁶

Data presented above shows that Blacks and Latinos in Dane County are similarly more likely to live in concentrated poverty. This section presents three numerical measures of such segregation and disparate access to opportunities. The measures were developed to better understand the magnitude of segregation, and to compare levels of segregation across regions and time. For more detail about these segregation measures, see Appendix C.

1. Dissimilarity Index

The dissimilarity index²⁷ is a commonly used measure of segregation between two groups, such as White and Black populations, reflecting their relative distributions across neighborhoods within a city or metropolitan area. Dissimilarity Index values range from zero (complete integration) to one, (complete segregation).

The City of Madison shows low levels of segregation as measured by the dissimilarity index (see Figure 48). White-Black segregation is moderately higher than for Hispanic and Asian. Madison’s dissimilarity measures are much lower than many large urban areas (Milwaukee, for example, has a Black-White score of 0.70 and a Hispanic-White score of 0.61), but are comparable to other Wisconsin cities and peer regions nationally. Like many small to mid-size metro regions, dissimilarity indices generally are low.²⁸

²⁶ Cashin, Sheryll, “Place, not Race: Affirmative Action and the Geography of Opportunity,” Poverty & Race, May/June 2014, Vol. 23: No. 3, Poverty & Race Research Action Council

²⁷ “Measurement of Segregation by the US Bureau of Census in Racial and Ethnic Residential Segregation in the United States: 1980-2000,” Weinberg, Iceland and Steinmetz

²⁸ Dissimilarity index measures segregation well for large metro regions, it is less effective at measuring segregation in smaller metros like Madison. The reason it is less accurate for smaller metros is that it uses the census tract as the unit of geography. Regions with large

Figure 48 – Indices of Dissimilarity, City of Madison, 2010

White-Non-White	
White-Black	0.37
White-Hispanic	0.31
White-Asian	0.29
White-Pacific Islander	N/A
White-Native American	N/A

Source: U.S. HUD

On a county level, Black-White segregation is near the “high” level on a national scale, while Hispanic and Asian segregation levels are low/moderate (see Figure 49). Higher segregation at the county level reflects more predominantly White areas outside the City of Madison.

Figure 49 – Indices of Dissimilarity, Dane County, 2010

White-Non-White	0.36
White-Black	0.52
White-Hispanic	0.42
White-Asian	0.45
White-Pacific Islander	N/A
White-Native American	N/A

Source: U.S. HUD

2. Predicted Racial and Ethnic Composition

The second metric used to measure segregation is a comparison between the actual racial/ethnic composition of a place and one that is predicted based on metro population and household income characteristics. Scores greater than 100 indicate that a racial group is more concentrated in a place than would be expected, given that group’s share of the total metro region population at different income levels.

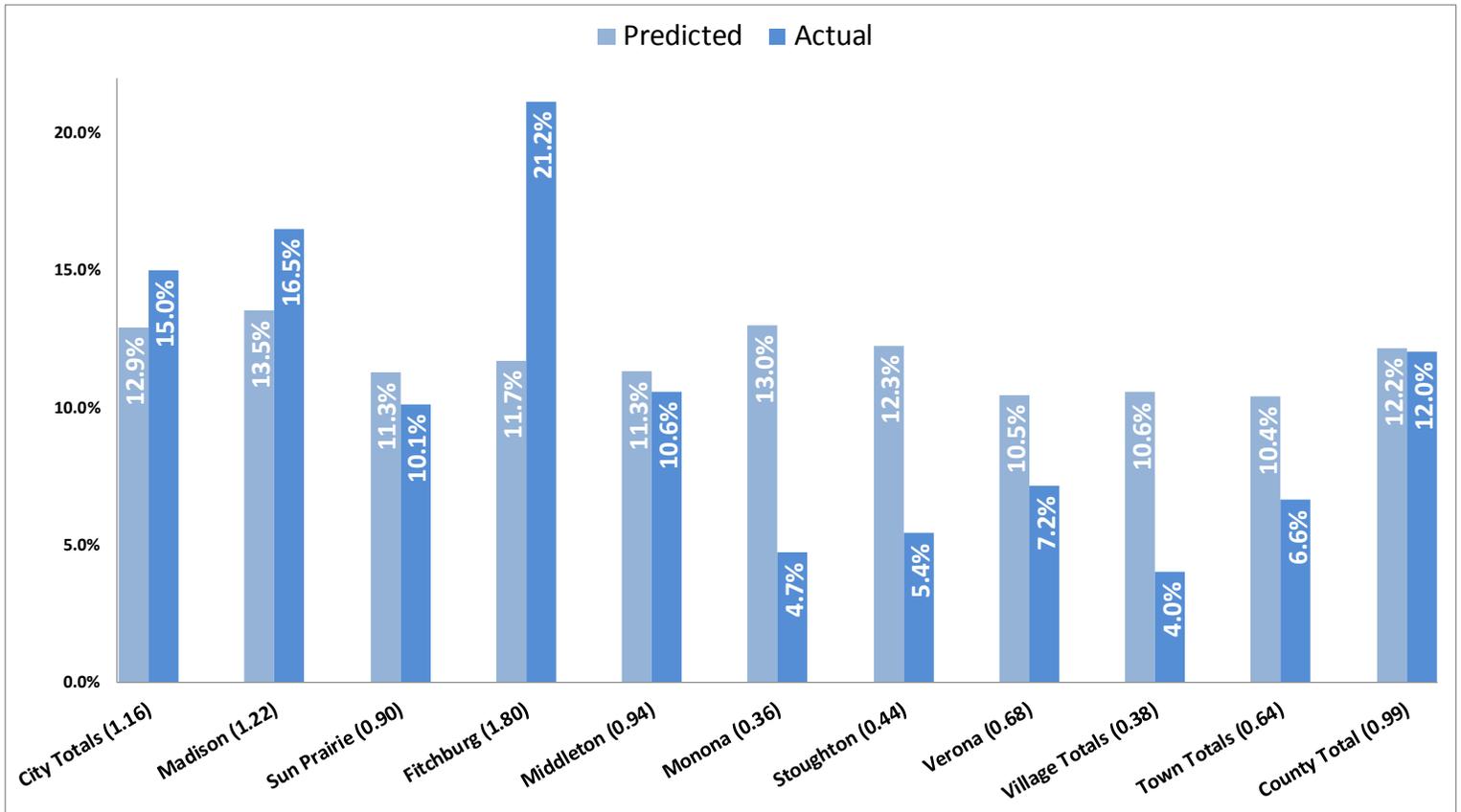
As shown in Figure 50, cities in Dane County contain the highest percentages of persons of color, including 5% Black, 4% Hispanic and 5% Asian, for a total of 15% people of color. In each of population groups, **cities as a whole had larger populations of people of color than projected**. Both Madison and Fitchburg exceed predicted populations individually, with Fitchburg having significantly greater Black and Hispanic populations than projected (170% and 289% respectively vs. projections). Sun Prairie and Middleton did not have the overall predicted population of people of color, but had approximately 90% of these numbers. The remaining cities fell below their predicted rates by about half, with people of color comprising roughly 5% of their populations.

populations exhibit segregation at the tract level. In less populated regions like Madison, smaller pockets of predominantly persons of color can exist within census tracts that also include significant numbers of White persons.

C. Geography of Opportunity

Cities as a whole had larger populations of people of color than projected.

Figure 50 – Percent Persons of Color and Dissimilarity Indices by Municipality and Municipality Type



Source: U.S. HUD

3. HUD Analysis of Disparities in Access to Opportunities

The U.S. Department of Housing and Urban Development prepared an analysis of disparities in access to opportunity for Dane County. HUD measures disparities in five indices: school, poverty, labor engagement, housing and neighborhood stability, and job accessibility. A more detailed presentation of the HUD measures can be found in Appendix D: Measures of Disparities in Access to Opportunities.

Each index combines two or more measures as shown to the right.²⁹ Scores are 0 to 10, with 10 being assigned to census tracts with highest access scores. Total census tract scores for the groups are combined for an overall average. An overall high access score for a group means that they mostly live in census tracts with high levels of opportunity.

The gap between the opportunity access scores for poor Whites and poor Blacks shows that race is a factor in access to opportunity. Another way to present this information is to say that poor Whites are 26% more likely to live in higher opportunity areas than poor Blacks.

²⁹ Each opportunity dimension ranges from 1 to 10, with 10 representing the most opportunity-rich census tracts, and 1 representing the most opportunity-scarce census tracts. Data represent the average neighborhood characteristics for each group. Highlighted disparity cells represent statistically significant differences across groups at the 0.1 significance level. For more information on the variables in each dimension, please read the PDR Fair Housing Data Documentation Guide.

C. Geography of Opportunity

To measure disparity between racial and ethnic groups, HUD compared access scores for poor persons in each group. This method effectively holds income constant and isolates race and ethnicity as a key variable accounting for different levels of access.

Figure 51 shows the opportunity access scores for poor Whites, Blacks, Hispanics, Asians and all poor families in Dane County. The gap between the scores for poor Whites and poor Blacks is 1.1, which is the Black-White disparity measure as shown in the table. Another way to present this information is to say that poor Whites are 26% more likely to live in higher opportunity areas than poor Blacks.

Other high disparity scores are Black-White and Hispanic White Labor Engagement (1.2) and Black-White School (1.2). Opportunity access scores for poor Asians are slightly higher than for poor Whites.

Poor White families are more likely to have access to quality schools, and be engaged in the labor market, than poor Black families.

Figure 51 – Summary Table Disparities in Access to Opportunity, Dane County, WI

Indices	Poor Families	Poor White	Poor Black	Poor Hispanic	Poor Asian	Disparity Black-White	Disparity Hispanic-White	Disparity Asian-White
School	4.5	4.2	3.0	3.9	4.5	1.2	0.3	-0.4
Poverty	2.3	2.5	2.0	2.1	2.0	0.5	0.4	0.5
Labor Engagement	6.0	6.8	5.6	5.6	7.2	1.2	1.2	-0.4
Housing Neighborhood Stability	5.7	4.9	4.9	4.3	5.6	-0.1	0.5	-0.7
Job Accessibility	7.0	7.9	7.4	7.9	8.5	0.5	0.0	-0.6
Opportunity	5.2	5.4	4.3	4.5	6.0	1.1	0.9	-0.6

Source: U.S. HUD

Profiles of Areas with Concentrated Barriers to Opportunity

The sections below profile the RECAPs and areas with high numbers of barriers to opportunity.

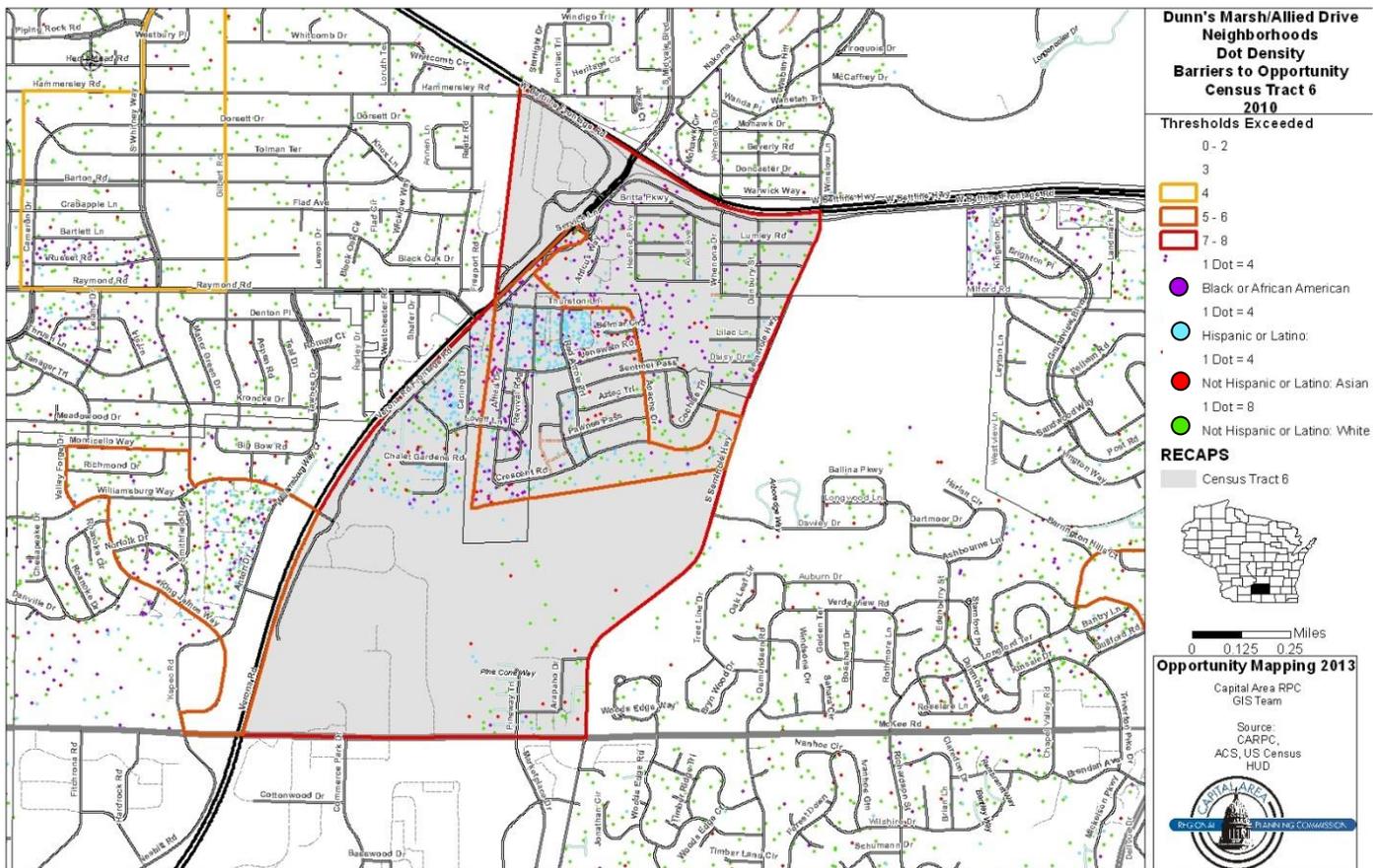
Dunn's Marsh/Allied Drive—Census Tract 6

Tract 6 is generally bound by the beltline, Verona Road, Seminole Highway and McKee Road, in the cities of Madison and Fitchburg, including the Allied Community and Dunns Marsh neighborhoods (see Figure 52).

The Dunn's Marsh/Allied Drive area has grown about 70% from its 1970 population, with the highest period of growth occurring between 1980 and 1990. During this time, the tract had a significant change in racial and ethnic composition, changing from nearly exclusively White, to a majority minority starting in 2000. In the past 20 years, the White population was cut in half in absolute numbers, and Black and Hispanic populations grew significantly.

With growth in Tract 6, poverty began to increase starting in 1980. Due to small sample sizes in years prior, 1990 is the first year census is able to reveal uneven poverty rates between racial and ethnic groups, which are more than twice the White rate. It should be noted racial/ethnic groups are shown as individual poverty rates, not family poverty rates which were used to identify the RECAPs (see Figure 46).

Figure 52 – Dunn's Marsh/Allied Drive—Census Tract 6



Source: U.S. Census, CARPC

C. Geography of Opportunity

What Life is Like in Dunn's Marsh/Allied Drive

Section below describes physical barriers to opportunity and their impacts in greater detail. This section highlights some of those barriers and impacts for the Dunn's Marsh/Allied Drive neighborhood.

The Dunn's Marsh/Allied Drive neighborhood experiences many challenges, yet has many community assets. The neighborhood association is actively involved in community issues. A community center serves the area (see Figure 81), as well as the Boys and Girls Club. CRSC awarded a Community Building Grant to the Dane County Time Bank and Allied Community Cooperative. Key outcomes of the grant included: community outreach and engagement; trainings for local residents on how to conduct initial home energy conservation screenings; information sessions on the potential for local solar projects; a neighborhood video about the project; and re-launch of Allied Community Cooperative as a vehicle for community energy and food initiatives.

Much of the housing in the Allied Drive portion of the neighborhood consists of apartment complexes (Figure 96). The housing includes clusters of publically assisted housing (Figure 76). The City of Madison recently completed a neighborhood revitalization project for the neighborhood that included housing renovation and construction with the intent of achieving a broader mix of income types, as well as park improvements. The Boys and Girls Club recently built a new community facility in the neighborhood that offers a wide range of activities and services.

One of the barriers to opportunity for this neighborhood is location and access to opportunities. The neighborhood is bordered by major highways to the north (US 12/151) and west (US 151) that serve as substantial barriers to surrounding areas. Access to surrounding areas is needed, however, because the neighborhood lacks a number of amenities such as a full-service grocery store (see Figure 78 and Figure 79) and employment (Figure 63). Greater reliance on cars increases household transportation costs (Figure 71 and Figure 75).

At the same time, a higher portion of the residents do not have cars (Figure 78), creating greater reliance on walking, transit (Figure 59 and Figure 66) and carpool (Figure 60). Within the neighborhood walkability is limited (Figure 68). Transit service from Dunn's Marsh/Allied can require long trips to employment centers. The Madison Area Transportation Planning Board estimated in 2011 that weekday A.M. peak period transit travel times from Allied Drive to employment centers ranged from 23 minutes (to University Research Park) to 75 minutes (to World Dairy Center). The average transit commute was 48 minutes.

The area is currently experiencing the expansion of Verona Road/US Highway 151. The project includes reconstruction of the Verona Road interchange (151 and 12/Beltline) and Verona Road, with significant impacts on surrounding neighborhoods, including Allied Drive/Dunn's Marsh. A study of the public process conducted by Wisconsin Department of Transportation for this project found that significant amounts of neighborhood engagement had limited effects on final project design, which was primarily influenced by regional transportation objectives – to meet forecasted regional demand. Many community proposals, to mitigate impacts of highway expansion on residents, were not acted on because they were deemed impractical from a regional transportation perspective.³⁰

³⁰ Carolyn McAndrews and Justine Marcus, *Community-Based Advocacy at the Intersection of Public Health and Transportation: The Challenges of Addressing Local Health Impacts within a Regional Policy Process*, Journal of Planning Education and Research, <http://jpe.sagepub.com>, May 9, 2014.

C. Geography of Opportunity

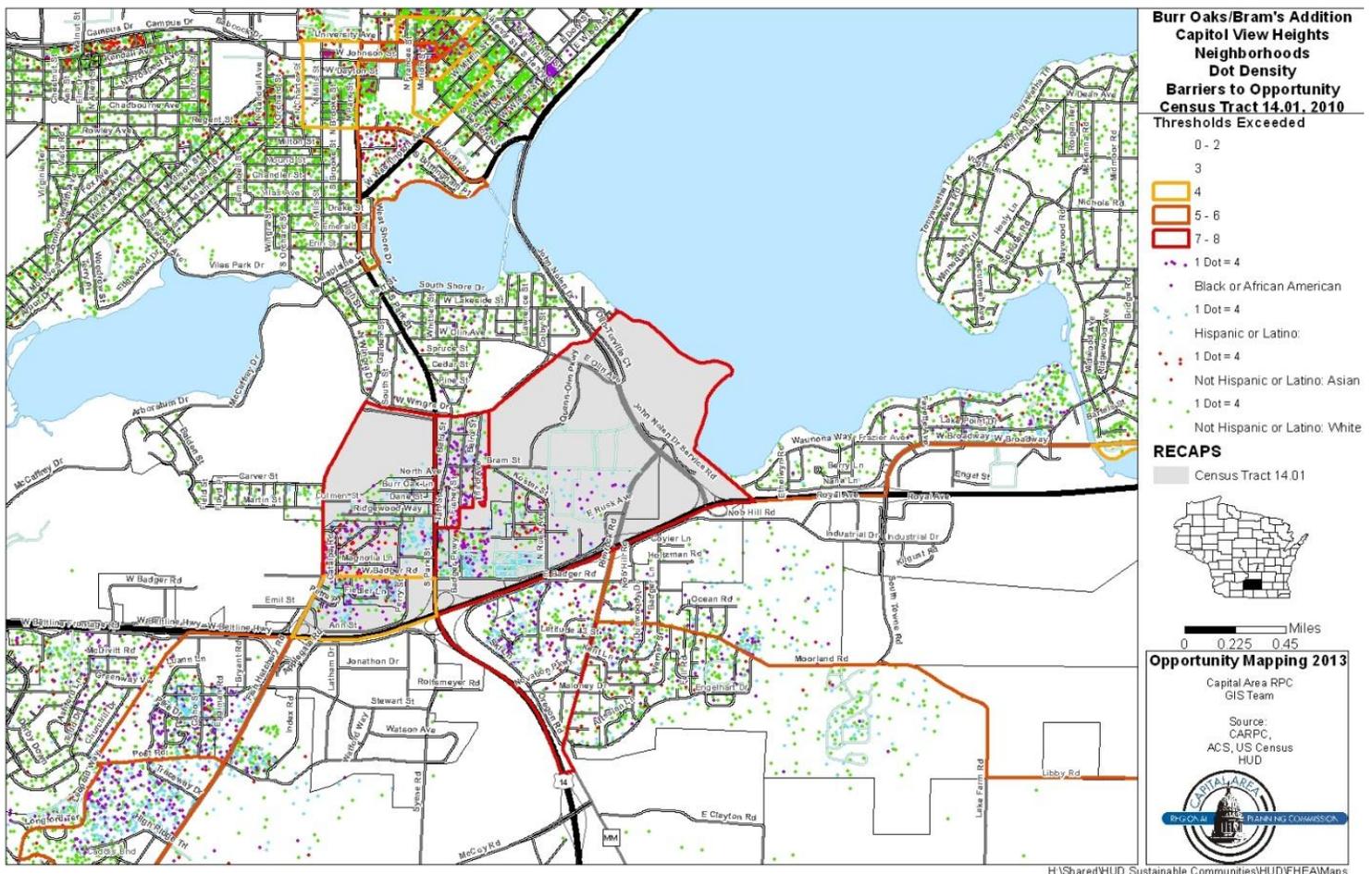
Another barrier to opportunity is the fact that children in the neighborhood are bused to schools in two different school districts: Madison and Verona. This arrangement makes it difficult to make a neighborhood and family connection to local schools. Some of the Madison schools that neighborhood kids attend are rated as “meet few expectations” by the Wisconsin Department of Public Instruction (Figure 80).

In addition to the physical barriers the neighborhood faces, residents experience a number of social and economic barriers (Figure 41). The combination of these barriers contributes to adverse health impacts. Neighborhood residents experience higher than average rates of childhood obesity (Figure 84), asthma (Figure 85) and diabetes (Figure 86).

Burr Oaks/Bram’s Addition/Capitol View Heights Neighborhoods—Census Tract 14.01

Tract 14.01 is located between the beltline, Fish Hatchery Road, Wingra Creek and Lake Monona, though the largest concentration of residential is located on Park Street. This includes the Burr Oaks, Bram’s Addition and Capitol View Heights neighborhoods, as well as the convention center area. (See Figure 53)

Figure 53 – Burr Oaks/Bram’s Addition/Capitol View Heights—Census Tract 14.01



Source: U.S. Census, CARPC

C. Geography of Opportunity

The Burr Oaks, Bram's Addition, and Capitol View Heights Neighborhoods have grown very little since 1970, peaking at a 2000 population then decreasing nearly to 1970 levels in 2010. Unlike Tract 6, these neighborhoods had some degree of diversity back to the 1970's and today have the greatest rate of minority populations in Dane County.

South Madison is an historic area of settlement for African-Americans. A report produced by the NAACP in 1966 noted that, of the 200 African-American households in the city at that time, all but 30 were located in the "traditional neighborhoods" of South Madison and in the Greenbush area.³¹ Between 1970 and 1990, the Black population grew from 12% to 31% of the population. The major period of Asian growth began 10 years after the Black population, growing by 15% between 1980 and 2000. Rapid Hispanic growth began in 1990, coinciding with a period of modest Black population decreases. The White population has decreased every decade, with the 2010 population nearly one third of what it was in 1980.

Overall poverty rates have doubled for tract 14.01, with White poverty increasing during the 70's and 80's before dropping by 2000. Black poverty rates spiked to nearly 50% in 1990 before dropping to a still-high 32% in 2000. Hispanic poverty also had a high rate in 2000, with nearly 43% of the community in poverty. Currently this tract has one of the highest poverty rates in the county, when student-dominated areas surrounding the university are removed.

What Life is Like in Burr Oaks/Bram's Addition/Capitol View Heights

Section below describes physical barriers to opportunity and their impacts in greater detail. This section highlights some of those barriers and impacts for the Burr Oaks/Bram's Addition/Capitol View Heights.

As noted above, these south Madison neighborhoods were among the "traditional neighborhoods" to which persons of color located. One reason for this settlement pattern was historic barriers to other neighborhoods. A survey of Black residents, by the NAACP in 1966, noted that 76% of Blacks lived in Greenbush and South Madison. The study examined barriers to housing choice and concluded that "Negroes are restricted from moving freely within the city. The families who have moved away from traditional areas have done so through almost exclusively personal contacts."³²

Today the neighborhoods are one of the most diverse areas of the region, particularly with the recent settlement in the area by Hmong families. As a place of historic settlement, the area has a history of civic leaders, organizations and churches serving the community. The area has a number of physical assets as well, including parks (Figure 82), schools (Figure 80), a grocery store (Figure 78) and other shopping. The area offers some of the more affordable housing within a short commute of downtown Madison. Housing affordability is bolstered by clusters of publically assisted housing (Figure 76). Closer to downtown neighborhoods are organized along a more traditional and walkable block pattern. Closer to the Beltline/US 12 highway, larger blocks of multi-family exist (Figure 97).



Eat-Play-Bike event, Villager Mall, Madison

³¹ Negro Housing in Madison. National Association for the Advancement of Colored People, Madison Branch. 1957.

³² Ibid.

C. Geography of Opportunity

Recently, the City of Madison worked with community organizations and other service providers (Dane County and Madison College) to revitalize an aging strip center, the Villager Mall, to serve as a community resource center housing the Urban League of Greater Madison, a new library branch, health clinic, social services and shopping.

CRSC provided a Community-Building Grant to the Urban League and Sustain Dane in 2013 to organize place-making events in the parking lot of Villager Mall. For four evenings, the Eat-Play-Bike events drew 200 to more than 300 people each. Residents participated in organizing and designing events. Initial skepticism transformed to active participation in activities, dancing, singing and celebrating in a shared public space. A how-to guide with lessons learned was created for other communities.

In addition to physical assets, these south Madison neighborhoods are also located close to and along major transportation corridors. The Park Street/US highway 14 interchange with the Beltline/US 12 serves as a major gateway into the City of Madison. Such traffic volumes offer opportunities for economic development. The area has good transportation access to central Madison and the employment centers (see Figure 63, Figure 64 and Figure 67).

A recent study commissioned by CARPC recommended Park Street, the main arterial for these neighborhoods, as one of four routes for bus rapid transit (BRT) service (Figure 100). BRT service would further enhance transportation connections for these neighborhoods. The neighborhoods are also next to the Alliant Energy Center (AEC), a 160-acre convention center campus in the Town of Madison and operated by Dane County. The County recently invested, with State assistance, in new facilities at AEC to accommodate World Dairy Expo. The County is also currently engaged in planning for long-term future of AEC, which will impact surrounding neighborhoods.

The high level of transportation choices discussed above translates into lower household costs to get around (Figure 71). The neighborhoods are one of the few places in the region where a moderate-income household could expect to pay less than 45% of their income for housing plus transportation (Figure 75). At the same time, transit-dependent households still face long commutes to the major growing employment centers around the periphery of the central urban area.

Development projects, including medical and mixed-use housing and commercial, are occurring along Park Street to the north of these neighborhoods. Such developments are emerging in response to growing demand for urban living, and to City of Madison plans and new zoning codes that promote such infill development along major corridors. These projects have the effect of increasing land values in nearby properties along the corridor that are also suitable for infill, including in the Burr Oaks/Bram's Addition/Capitol View Heights neighborhoods. Such development brings benefits of new jobs, housing, shopping and taxes, but also raises housing costs and reduces housing affordability.

Despite the many physical and locational assets these neighborhoods offer, residents continue to face social and economic barriers to opportunity (Figure 41). Given the combination of physical, location, assets, lower land and housing costs, encroaching development pressures, public planning and investments (recent and potential), and low-income communities of color, the potential for displacement of current residents over the next decade or so is significant.

The potential for displacement of current South Madison residents over the next decade or so is significant. To minimize such displacement, and to ensure that investments benefit current residents, plans and strategies need to be developed soon.

C. Geography of Opportunity

To minimize such displacement, and to ensure that investments benefit current residents, plans and strategies need to be developed soon.

The prevalence of barriers to opportunity in these neighborhoods contributes to worse health outcomes by some measures. Residents experience high rates of childhood obesity, asthma, and moderate rates of diabetes (Figure 84, Figure 85 and Figure 86).

Just across and south of the Beltline/US 12 highway from the Burr Oaks/Bram's Addition/Capitol View Heights neighborhoods is a triangular shaped housing development called Southdale Neighborhood. It is not in the census tract 14.01 RECAP, but is identified as a census block group with high number of barriers to opportunity.

Physically, the area is much more isolated as a result of being surrounded by major highways on two sides, and a business park on the third side. Housing consists of large apartment blocks (Figure 97). Such isolation renders the area a food desert (Figure 79). Although the area is adjacent to a growing business park, the Novation Technology Campus, Southdale residents remain mostly physically and economically (cultural and skills mismatch) separated from the employment opportunities in the park. These residents also experience high rates of asthma, childhood obesity and diabetes.

This area is located within the Town of Madison, an unincorporated area with more limited capacity to address the multiple barriers to opportunity. The area will become part of the City of Fitchburg in 2022, when the Town of Madison dissolves.

Dane County identified this area as a Neighborhood Revitalizations Strategy Area (NRSA) in the early 2000s. NRSA is designation under the federal Community Development Block Grant (CDBG) program. HUD approved this NRSA designation, allowing greater CDBG expenditures from the County within this high priority area. NRSA funding led to various housing, economic development and public service expenditures in the area.

A portion of the Sustainable Communities Regional Planning Grant was allocated to Dane County to address the food desert. Dane County partnered with the South Madison Farmers Market and the developer of Novation Campus (Alexander Company) to conduct a feasibility study and business plan for a food enterprise that would serve both Southdale residents and Novation Campus employees (who are also isolated from opportunities for lunch).

Mendota Hills—Census Tract 23.01

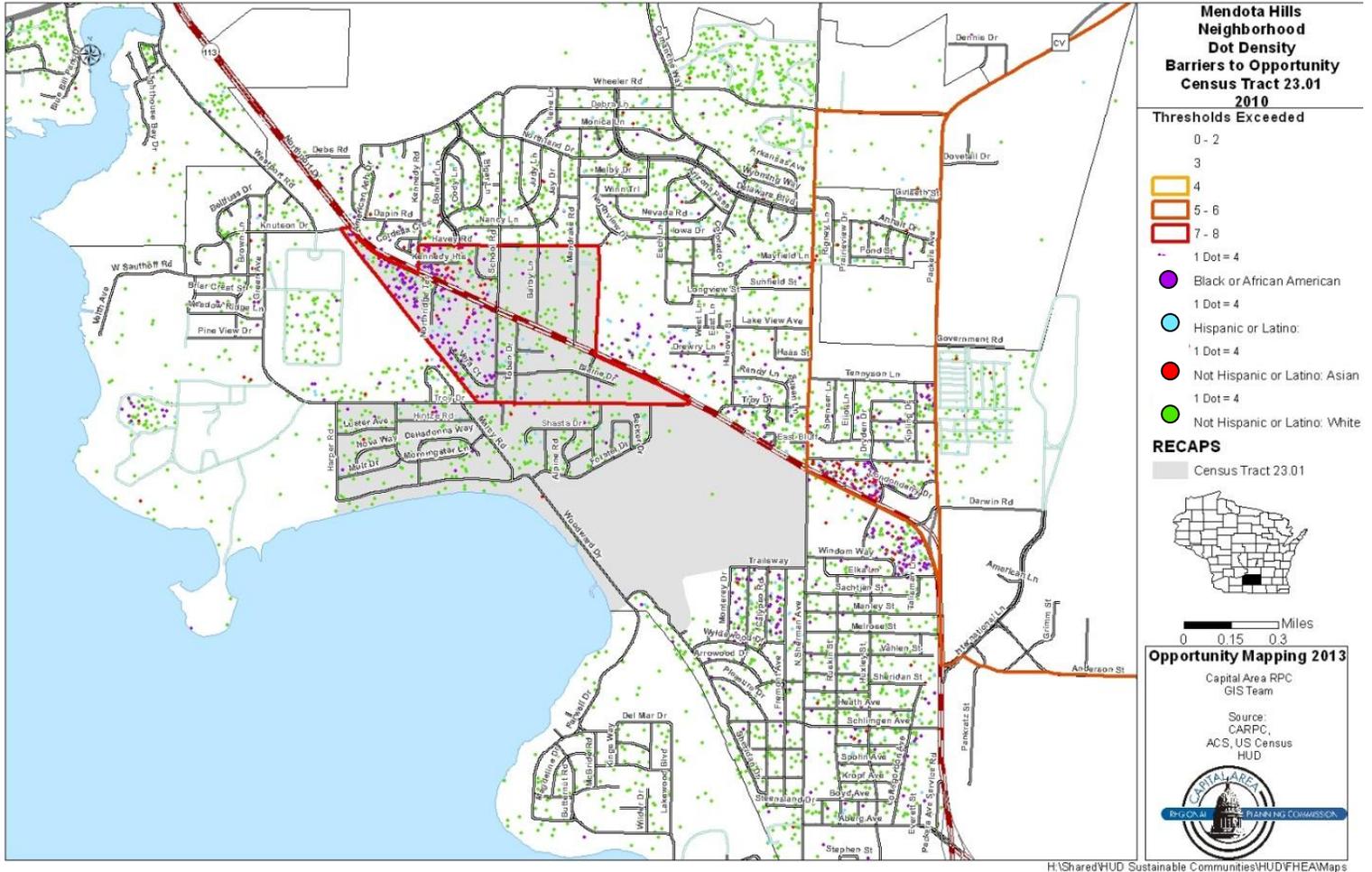
The Mendota Hills area is situated northwest of Maple Bluff along Northport Drive. Though the Census Tract includes the land area of Warner Park, Forster Drive/Woodward Drive is the effective southern boundary of the area. The Mendota Hills area is bounded to the north by a portion of Troy Drive and Havey Road. (See Figure 54)

The proportion people of color in the Mendota Hills area has increased steadily in the period between 1970 and 2010. With each taking of the Decennial Census, Blacks, Asians, and Hispanics families have all increased steadily in terms of percentage of the total population of the area. Presently these groups make up 25%, 8%, and 9% of the families in tract 23.01. Poverty rates are estimated highest among Black families at nearly 71% of the population. Asian and Hispanic families also experience high poverty rates—62% and 43% respectively—though they account for a much smaller proportion of families in the Mendota Hills area.

C. Geography of Opportunity

Mendota Hills includes the Vera Court neighborhood, shown with high numbers of barriers to opportunity (Figure 54 above and Figure 41). Most of the concentration of person of color are in the Vera Court neighborhood.

Figure 54 – Mendota Hills—Census Tract 23.01



Source: U.S. Census, CARPC

What Life is Like in Mendota Hills

Section below describes physical barriers to opportunity and their impacts in greater detail. This section highlights some of those barriers and impacts for the Mendota Hills Neighborhoods.

The Vera Court neighborhood includes multi-family housing (Figure 96) and affordable housing tax credit projects (Figure 76). The area is fairly isolated from employment centers and with limited transit service (Figure 63, Figure 66 and Figure 67), and low levels of livable wage jobs (Figure 64 and Figure 65). The area is a food desert where higher percentages of households do not own cars but are beyond walking distance to full-service grocery stores (Figure 79). Many households do rely on cars, resulting in somewhat more burdensome transportation costs (Figure 71) and combined housing plus transportation costs (Figure 74).

C. Geography of Opportunity

Street patterns making walking more difficult (Figure 68), and there are few walkable destinations. Bicycling opportunities are limited by lack of bike paths and the need to use busy streets (Figure 69).

Children in the area attend primarily schools that either meet expectations or meet few expectations (Figure 80).

Mendota Hills census tract borders a large park, Warner Park (Figure 82), although residents of Vera Court face a circuitous route to access the park. A community center is located within Vera Court, and the Warner Park Community Center serves the larger north Madison area (Figure 81).

Residents in Mendota Hills neighborhoods experience moderately high to high rates of asthma, childhood obesity, and diabetes (Figure 84, Figure 85 and Figure 86). Rates are generally higher in the Vera Court area.

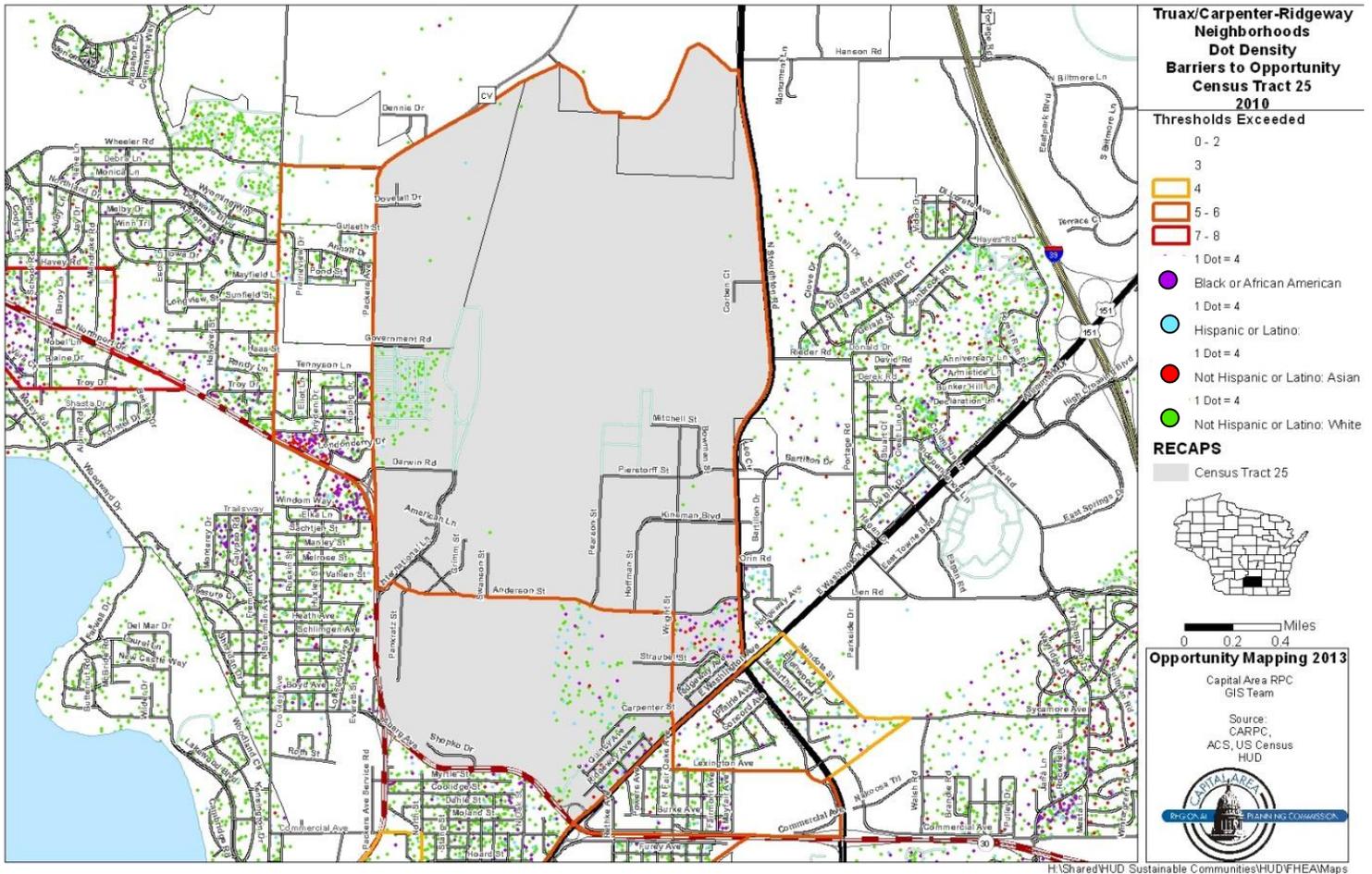
Truax/Carpenter-Ridgeway Neighborhoods—Census Tract 25

Residential portions of Census tract 25 are located between the Dane County Regional Airport and the Madison College Truax campus to the north and East Washington Avenue to the south. Included in this tract are the Truax neighborhood and portions of the Carpenter-Ridgeway neighborhood. The tract also includes a mobile home park located adjacent to the Berkeley Oaks neighborhood on the east side of Packers Avenue.

The Truax/Carpenter-Ridgeway Neighborhoods are approximately 37% people of color and have experienced some of the same trends mentioned above. Over the past 50 years, people of color have increased from being seven percent of the populations of Tract 25 to 37%. While this is the lowest concentration of people of color among these five tracts, families of all types experience high estimated levels of poverty: White at 25%, Black at 69%, Asian at 100%, and Hispanic at 55%.

Within Census Tract 45, the block group with the highest level of poverty (49% in Block Group 1) includes the Truax and mobile home areas, but not the Carpenter-Ridgeway area. This block group included 5-6 barriers to opportunity (Figure 41).

Figure 55 – Truax/Carpenter-Ridgeway Neighborhoods—Census Tract 25



What Life is Like in Truax/Carpenter-Ridgeway Neighborhoods

Section below describes physical barriers to opportunity and their impacts in greater detail. This section highlights some of those barriers and impacts for the Truax/Carpenter-Ridgeway Neighborhoods.

Housing in Truax consists of publically subsidized, multi-family, low-rise buildings (Figure 76 and Figure 96) organized within a fairly walkable street pattern and served by nearby bicycle paths (Figure 68 and Figure 69). Housing in Carpenter-Ridgeway is also walkable and bikable, but with more single-family homes. The mobile home park shows as a walkable street pattern, but fairly isolated.

From a location standpoint, these areas are close to the Dane County Regional Airport and adjacent light industrial businesses, which are major employment centers (Figure 63, Figure 64 and Figure 65).

Accessing these jobs requires access to a car, however. The area shows as somewhat limited transit connectivity (Figure 66), and limited to moderate transit access to jobs (Figure 67), resulting in mid-range transportation costs per household (Figure 71) and high housing plus transportation plus costs for moderate-income households (Figure 75). Truax and Carpenter-Ridgeway are within walking distance of a grocery store, while mobile home park residents must drive about a mile.

C. Geography of Opportunity

Residents mostly attend schools that meet or meet few expectations (Figure 80). A community center is located in Truax (Figure 81). Truax and Carpenter-Ridgway have access to parks and green space (Figure 82).

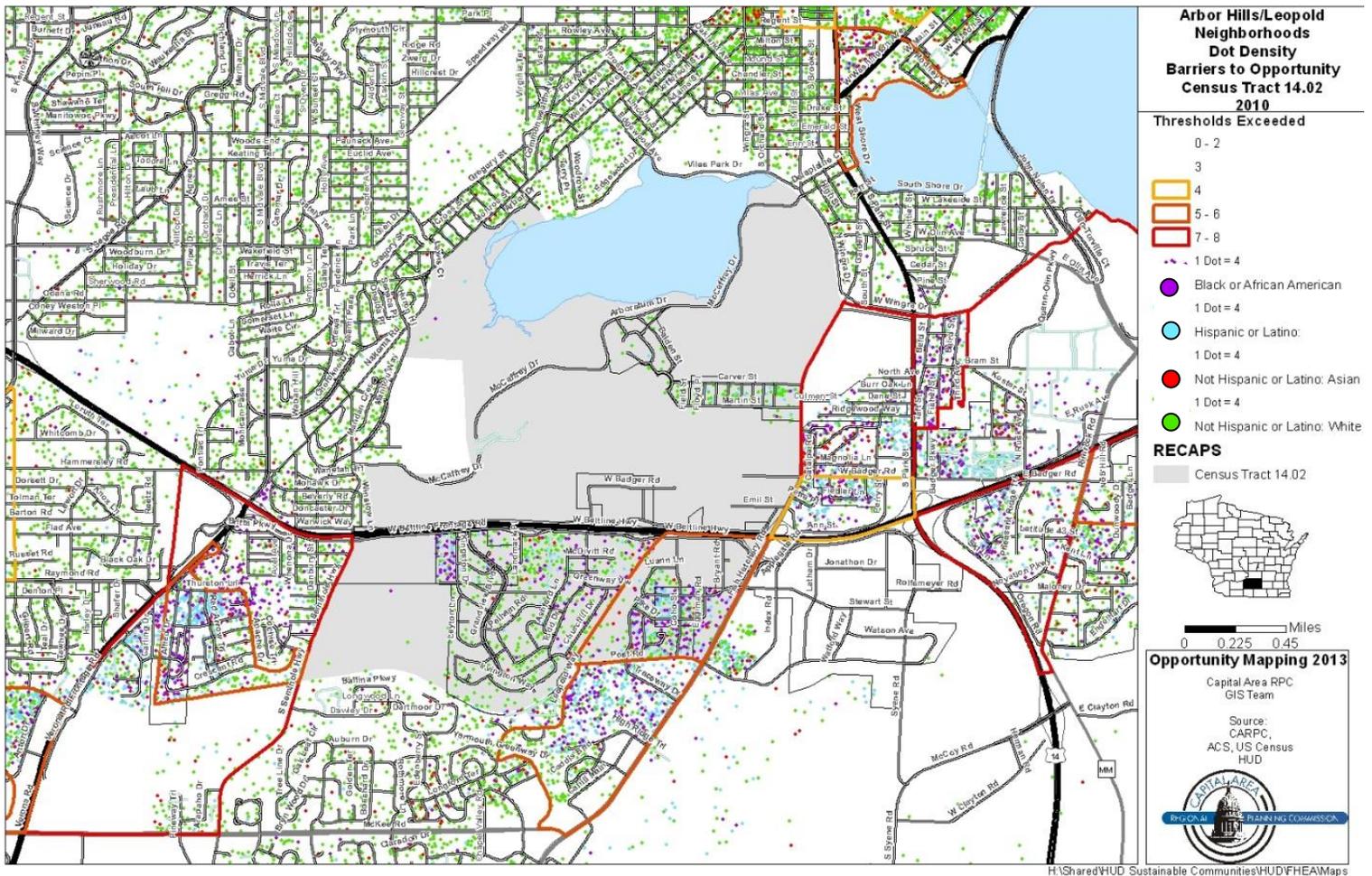
The neighborhoods experience moderate to high rates of childhood obesity (Figure 84), asthma (Figure 85) and diabetes (Figure 86).

Arbor Hills/Leopold Neighborhoods—Census Tract 14.02

The neighborhoods included in Tract 14.02 include both the north and south sides of the Beltline in the vicinity of the UW-Madison Arboretum: Arbor Hills and the Leopold neighborhood to the south of the Beltline and those homes on the western side of the Town of Madison, in the Arboretum. The area is bounded by Lake Wingra to the north, Whispering Pines Way/Post Road to the south, Seminole Highway to the west, and Fish Hatchery Road to the east. (See Figure 56).

Immediately to the south of tract 14.02, along Fish Hatchery Road, is tract 14.03, block group 2. Residents in this block group experienced six barriers to opportunity (Figure 41). It is bordered by Post Road, Fish Hatchery Road, Yarmouth Greenway Drive, and Leopold Way.

Figure 56 – Arbor Hills/Leopold Neighborhoods—Census Tract 14.02



Source: U.S. Census, CARPC

C. Geography of Opportunity

The proportion people of color in the Arbor Hills/Leopold area has increased steadily in the period between 1970 and 2010. With each taking of the Decennial Census, Blacks, Asians, and Hispanics families have all increased steadily in terms of percentage of the total population of the area. Presently these groups make up 21%, 4%, and 19% of the families in tract 14.02.

Within tract 14.02, poverty is concentrated in the block group north of Post Road and west of Fish Hatchery Road (Block Group 3). The population of this block group was 64% persons of color in 2010, and had a poverty rate of 21% (2008-2012 American Community Survey). Within the block group south of Post Road (in tract 14.03), 62% of residents were persons of color in 2010 and the poverty rate was 24%. In short, the highest concentrations of persons of color and poverty are within these two block groups; other block groups within tract 14.02/Arbor Hills include persons of color and poverty, although a lower rates.

What Life is Like in Arbor Hills/Leopold Neighborhoods

Section below describes physical barriers to opportunity and their impacts in greater detail. This section highlights some of those barriers and impacts for the Arbor Hills/Leopold Neighborhoods.

In the two block groups with the highest rates of poverty and concentrations of persons of color, people primarily live in multi-family housing complexes (Figure 97). These block groups are divided between the Cities of Fitchburg and Madison. South of Post Road is in Fitchburg, as is a strip along Fish Hatchery north of Post Road. The west and north parts of the block group north of Post Road are in the City of Madison. This part of the City of Madison includes clusters of publically assisted housing (Figure 76).

The streets that were laid out to serve the garden apartment complexes in these two block groups are not particularly walkable (Figure 68). A grocery store is located along Fish Hatchery south of Post Road. Car ownership rates are high overall in the Arbor Hills neighborhoods making access to grocery stores feasible. Children in the area attend schools that meet expectations, meet few and exceed expectations (Figure 80).

Residents north of the Beltline/US 12 enjoy immediate proximity to the UW Arboretum, a significant natural resource (Figure 82). Residents in the high poverty area south of the Beltline are close to green space in the form of a golf course, but are mostly restricted from access to the course unless golfing, which few partake. Other areas south of the Beltline have good access to local parks.

The Arbor Hills neighborhoods as a whole have low transit accessibility (Figure 66) overall, and low transit access to jobs (Figure 67). Car ownership in the Arbor Hills neighborhoods is high, as might be expected in areas with low transit connectivity (Figure 79). Consequently, transportation and housing plus transportation costs are on the high end for the areas (Figure 71 and Figure 75).

The Capital City bike path runs along the south of block group 2, tract 14.03 (south of Post Road). This path is part of a regional bicycle path network connected to downtown Madison. Access to the path, however, is indirect along the circuitous street pattern. North of the Beltline, bicycling through the Arboretum and on paths along Wingra Creek provide access.

A number of employers are located nearby along frontage roads of the Beltline/US 12 (Figure 63). Access to these jobs, however, is difficult without a car despite proximity due to low walkability. Employment in the area offers lower levels of living wage jobs (Figure 64 and Figure 65).

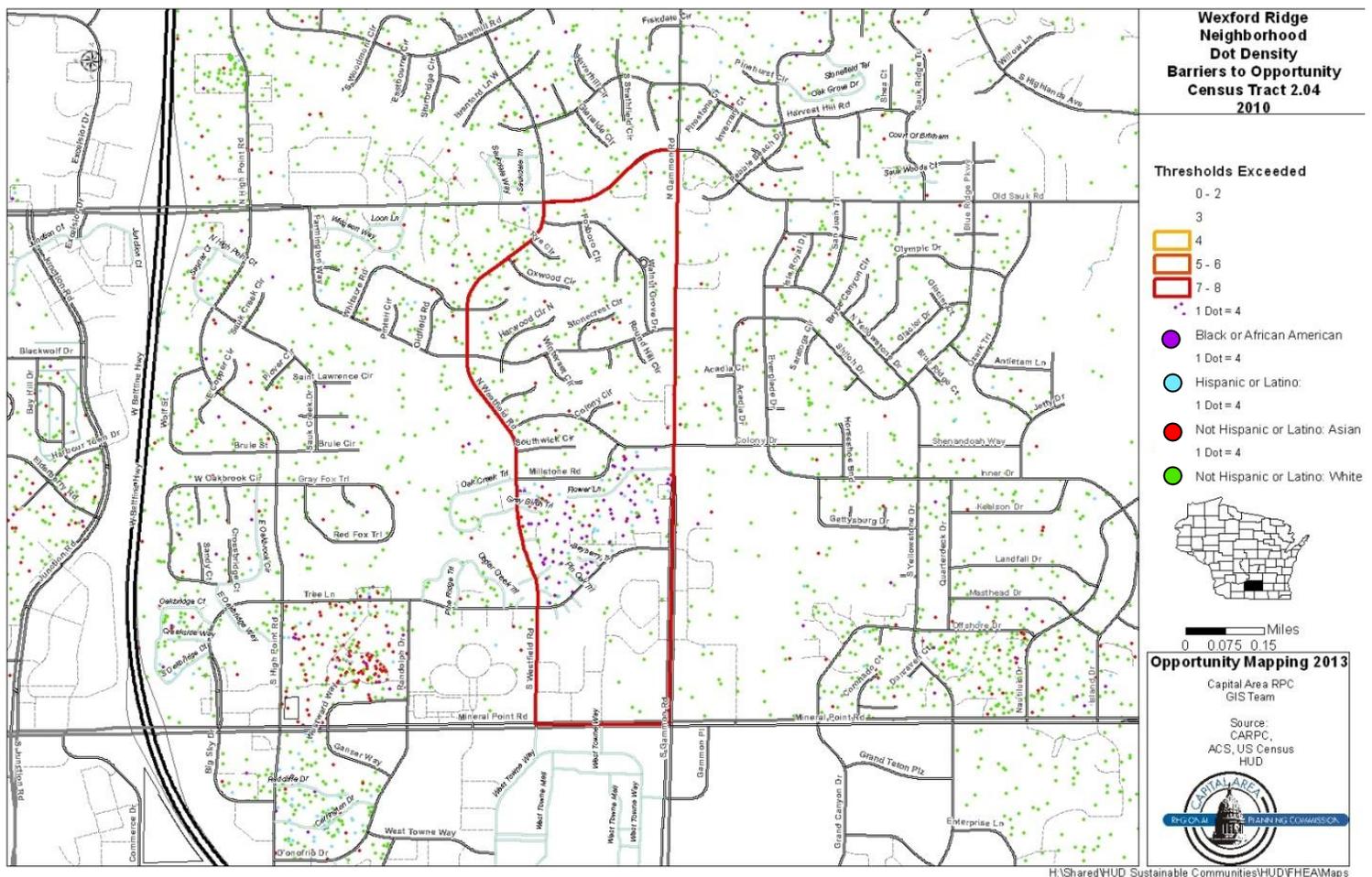
C. Geography of Opportunity

Health outcomes in the neighborhoods are influenced by the physical and social-economic barriers to opportunity. Residents have higher than average rates of childhood obesity and asthma, and moderate rates of diabetes (Figure 84, Figure 85 and Figure 86).

Wexford Ridge Neighborhood

The Wexford Ridge neighborhood shown in Figure 57 is not a Racial and Ethnic Concentration of Poverty (RECAP). It is, however, one of the census block groups with high numbers of barriers to opportunity. The block group is a relatively narrow strip along the west side of Gammon Road on the far west side of Madison. The Wexford Ridge apartment complex, which is privately managed, is about in the middle of this area, seen on Figure 57 as the portion with significant population of African-Americans. Memorial High School is located on the other side of Gammon Road. The West Towne shopping mall and surrounding big box center is located immediately to the south of this block group.

Figure 57 – Wexford Ridge Neighborhood



Source: U.S. Census, CARPC

C. Geography of Opportunity

Commercial and institutional uses border the apartments to the south, and single-family to the north. The apartment complex accounts for most of the population of the block group, and consequently, the many barriers to opportunity. block group was 43% persons of color (2010) with a poverty rate of 41% (2008-2012). Other social-economic barriers found here were high levels of single-parent household, high rent burdens, higher percent without high school diploma, and high percentage receiving food stamps. There were also significantly more children.

What Life is Like in Wexford Ridge

Section below describes physical barriers to opportunity and their impacts in greater detail. This section highlights some of those barriers and impacts for the Wexford Ridge Neighborhood.

Capital Region Sustainable Communities awarded a Community Building Grant to the Lussier Community Education Center in Wexford Ridge. The small grant was used to train Grassroots Engagement Mentors (GEMs) who conducted asset mapping and community engagement. Seven GEMs were trained on the cycle of organizing. They conducted 22 relational meetings with neighbors to learn about their gifts, assets and things they value and wish to see improved. Planning meetings identified tenant issues and led to constructive dialogue with property management and property improvements.

Because Wexford Ridge is located in otherwise high opportunity portion of the region (Figure 36), children in the neighborhood attend schools that “exceed expectations” (Figure 80).

Wexford Ridge has low walkability (Figure 68) due to curvilinear street pattern. The two streets serving the apartment complex only connect to arterial and connector streets; they do not connect to other single-family residential streets within the block group.

The apartment complex has green space within it but with minimal outdoor facilities. A park is less than half a mile away from apartments, but due to poor street connectivity, residents must travel much further along busier streets.

A grocery store is located nearby, within the West Towne complex, approximately half a mile as the crow flies (Figure 78). Despite proximity, walking to the store is made difficult by very busy arterial streets and large parking lots.

Jobs within walking distance are available in the West Towne complex (Figure 63), an area of job growth (Figure 61) and living wage jobs (Figure 64 and Figure 65). Significant employment occurs nearby along the Beltline/US 12 to the west and north, and in the University Research Park south and east. Access to these jobs requires a car.

Transportation options are further limited by low levels of transit service (Figure 66 and Figure 67) and bikability (Figure 69). Consequently, car ownership rates are fairly high, resulting in higher household transportation costs (Figure 71). High transportation costs offset more affordable housing, resulting in overall housing plus transportation cost burdens greater than 45% of income (Figure 75).

Wexford Ridge residents experience high rates of asthma (Figure 85), and moderate rates of childhood obesity (Figure 84) and diabetes (Figure 86).

Barriers to Opportunity: Physical

Transportation Barriers

Transportation, or lack thereof can impact the ability of low and moderate income residents to choose their place of residence. Lack of transit access eliminates many potential residential areas and employment opportunities from consideration if no other mode of transportation is regularly available.

A census evaluation of means of transportation to work shows **communities of color have a greater reliance on transit, up to three times the Dane County average, and carpooling is also more common.** A 10-15% decrease in driving alone is also observed with these communities.

When income is considered, the differences are more dramatic. Only 44% of workers in households below the poverty line drive alone, while 13% take transit and 22% walk. This underscores the importance of having employment centers within walking distance of, or accessible by transit from, affordable housing opportunities.

Communities of color have a greater reliance on transit, up to three times the Dane County average, and carpooling is also more common.

Figure 58 – Means of Transportation to Work, 2010

Means of Transportation to Work - ACS 2010 5 Year Estimates - Dane County										
	By Race				By Poverty Level (100%)			By Tenure		All Dane County
	Black	Asian	Hispanic	White	<100%	100-149%	>150%	Rent	Own	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Drove alone	65%	59%	65%	74%	44%	57%	77%	64%	79%	73%
Carpooled	14%	15%	17%	9%	10%	15%	9%	10%	9%	10%
Public transportation	12%	15%	6%	4%	13%	10%	4%	9%	2%	5%
Walked	6%	6%	6%	5%	22%	10%	3%	10%	2%	5%
Other	1%	5%	4%	3%	9%	5%	3%	5%	3%	3%
Worked at home	1%	2%	2%	4%	2%	2%	4%	2%	5%	4%

Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2007—2011

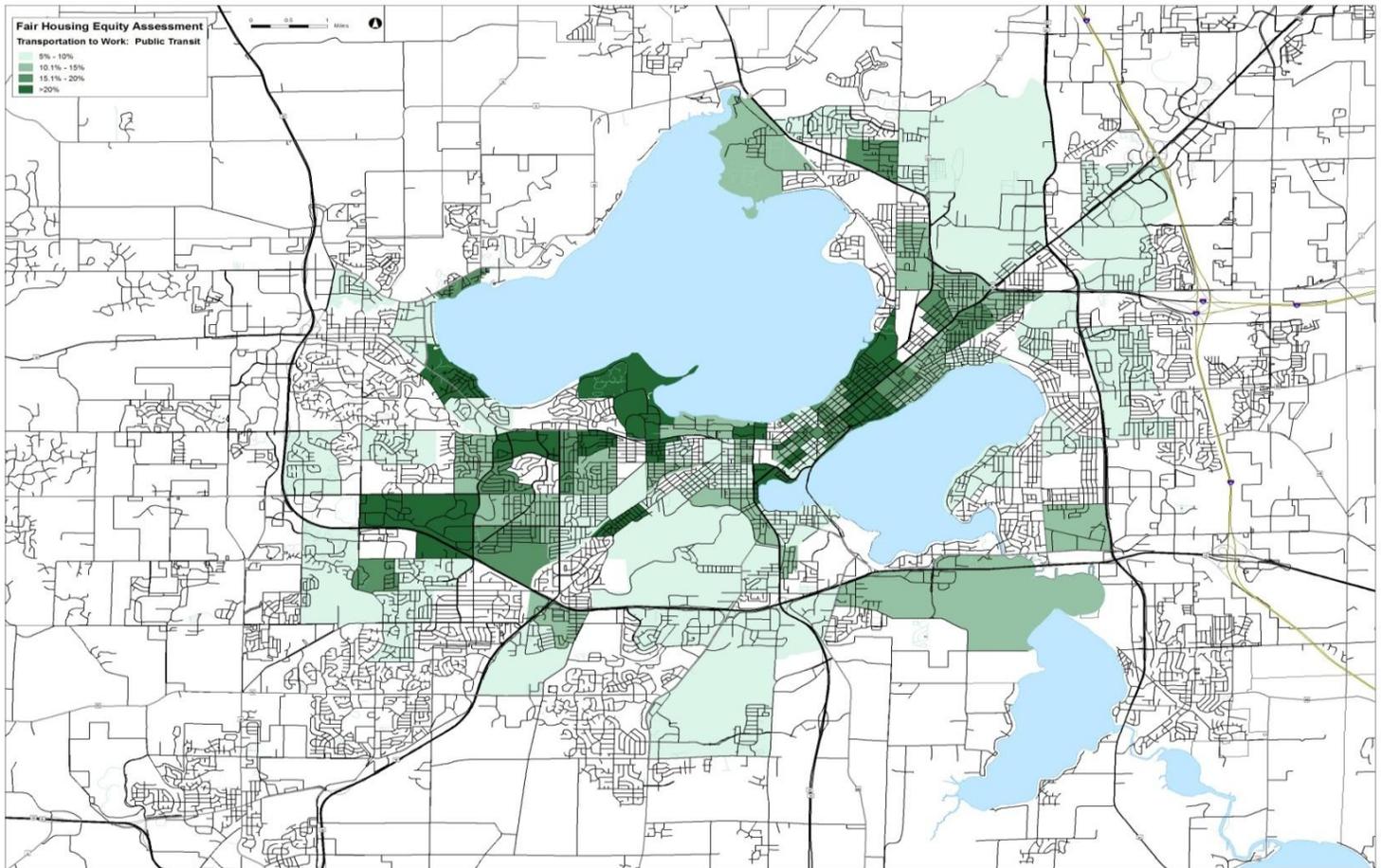
Communities of color have a greater reliance on transit, up to three times the Dane County average, and carpooling is also more common.

Figure 59 and Figure 59 shows transit use to work by block group. The areas with the highest use are located in areas with high frequency of bus service nearby. Some areas without lower frequency of bus service also have high ridership. These areas – in southwest and north Madison – are also areas with multiple barriers to opportunity, including higher portions of households without access to vehicles. Higher transit ridership in these areas indicates transit dependencies combined with lower levels of bus service.

C. Geography of Opportunity

Communities of color have a greater reliance on transit, up to three times the Dane County average, and carpooling is also more common.

Figure 59 – Transportation to Work by Public Transit



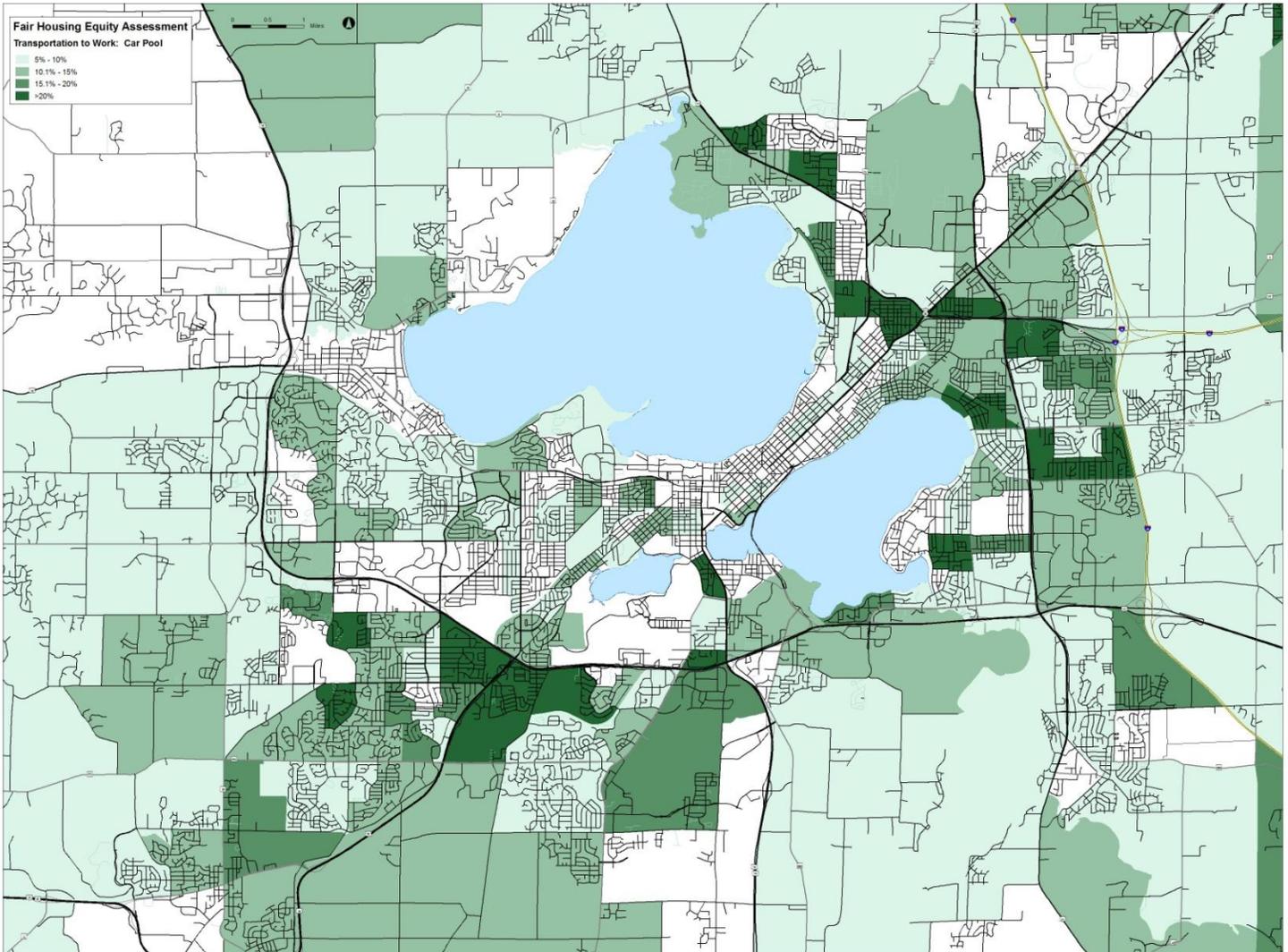
Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2007–2011

The map in Figure 60 shows rates of carpooling by census block group. Note that rates of carpooling seem to better resemble concentrations of communities of color. Interestingly, some high-carpool areas are also well served by transit. Inter-household carpooling could also limit household ability to move: ride-dependent individuals may be reluctant to move if future transportation options are limited or unavailable.

C. Geography of Opportunity

Rates of carpooling seem to better resemble concentrations of communities of color.

Figure 60 – Transportation to Work by Carpool



Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2007—2011

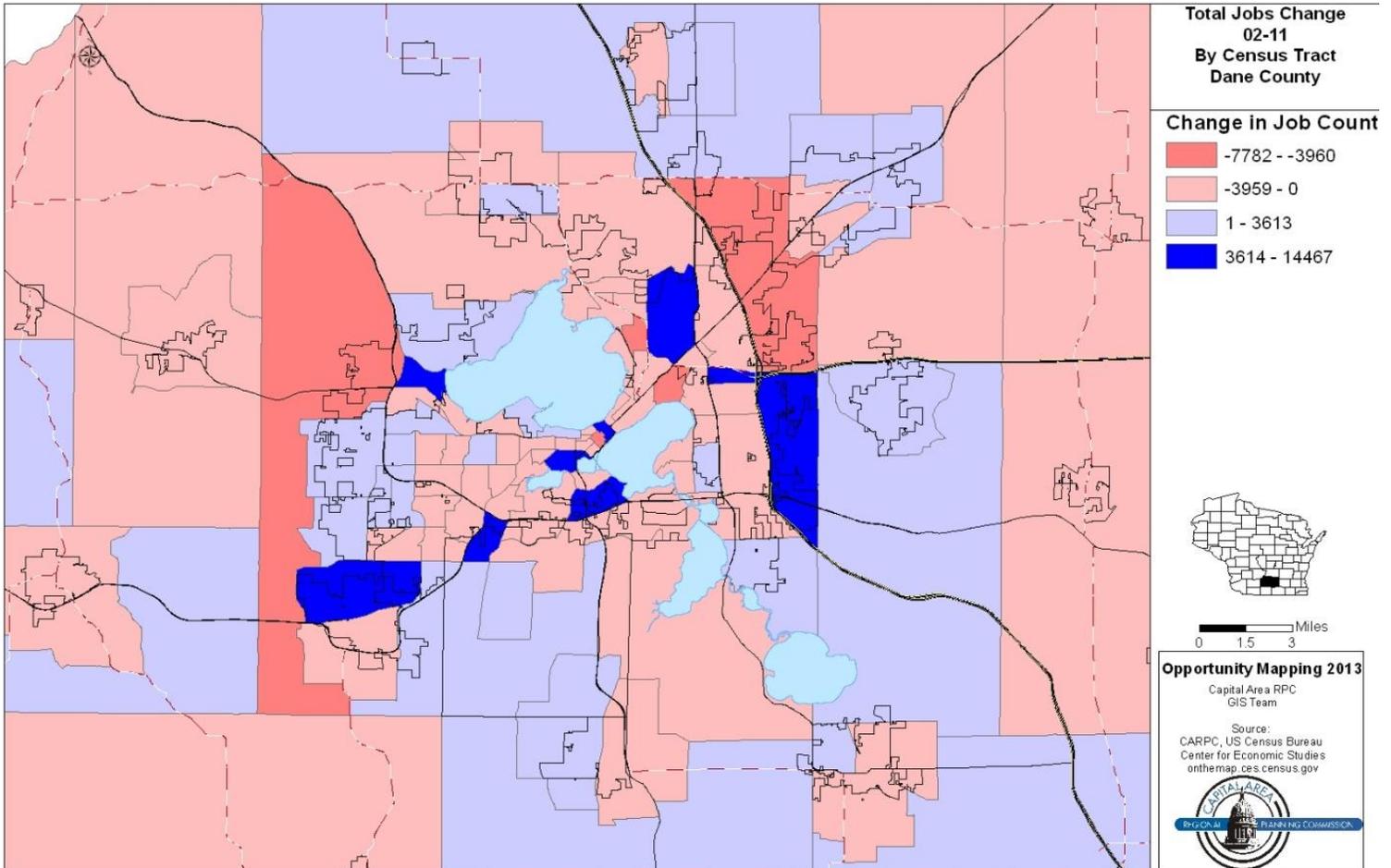
Transportation Access to Jobs

Location of jobs is a factor in access to opportunities. People without ready access to good jobs experience barriers to upward mobility, even in regions with healthy job markets. Although employment concentrations continue in central Madison, jobs are decentralizing, with higher growth on the edges of the Central Urban Service Area. Figure 61 shows change in total number of jobs by census block group from 2002 to 2011. Most job growth is occurring around the periphery, with notable exceptions of portions of central Madison and south Madison.

C. Geography of Opportunity

Most job growth is occurring around the periphery, with notable exceptions of portions of central Madison and south Madison.

Figure 61 – Change in Total Number of Jobs by Census Tract, 2002—2011



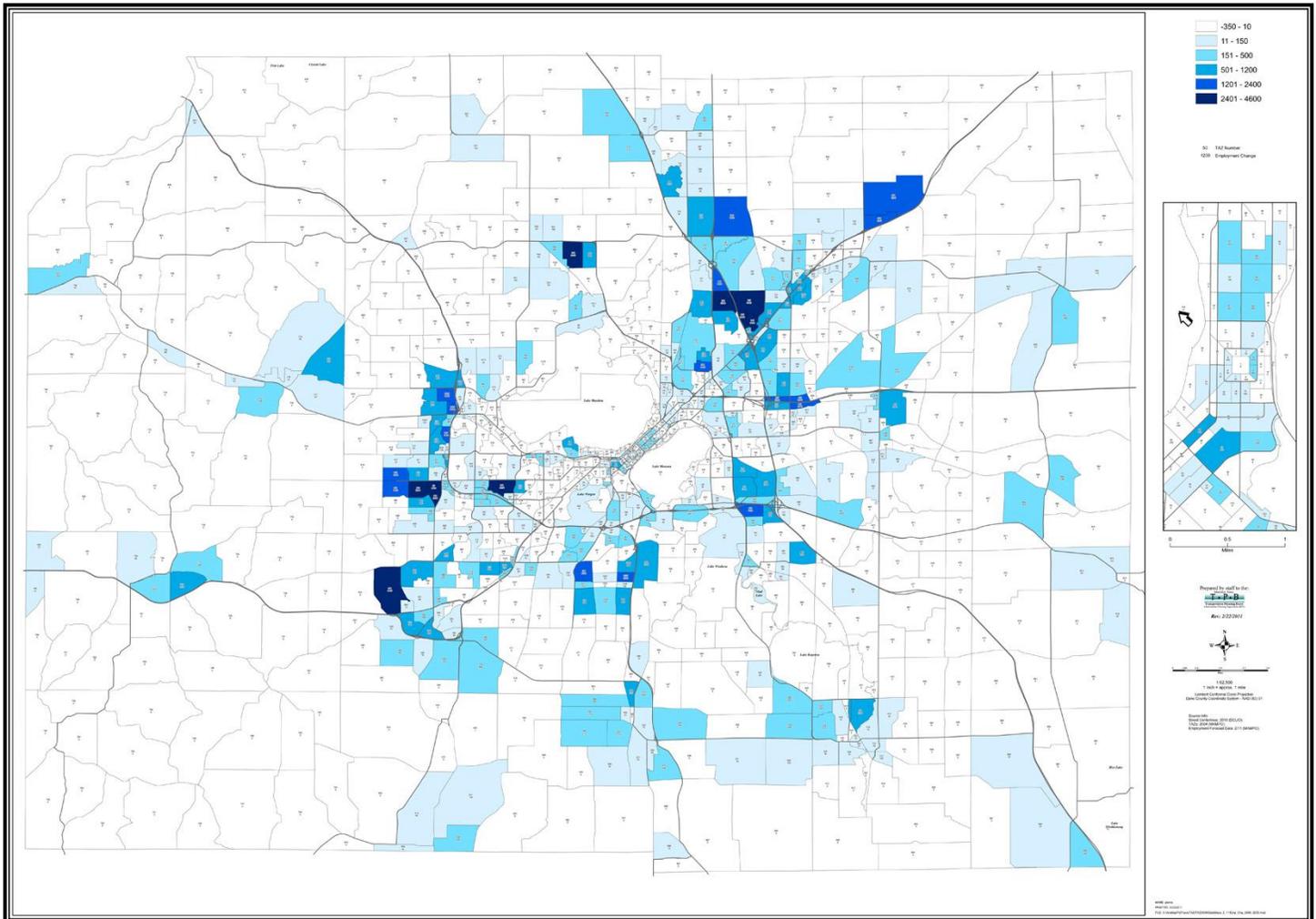
Source: US Census Bureau, Center for Economic Studies, onthemap.ces.census.gov

C. Geography of Opportunity

Decentralization of jobs is expected to continue. The Madison Area Transportation Planning Board (MATPB, the Metropolitan Planning Organization, or MPO, for the region) generates the map in Figure 62 showing continued strong peripheral job growth (see Figure 61).

Job growth is occurring, and projected to occur, in areas with higher annual transportation and housing costs.

Figure 62 – Employment Change 2000—2035 by Traffic Analysis Zone³³



Source: Madison Area Transportation Planning Board

³³ A traffic analysis zone is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, but for a typical metropolitan planning software, a zone of under 3000 people is common. Zones are constructed by census block information.

C. Geography of Opportunity

Note that job growth is occurring, and projected to occur, in areas with higher annual transportation and housing costs – and in areas with limited transit accessibility. Accessing these jobs from such areas with more affordable housing and lower transportation costs (see Figure 70, Figure 71, Figure 74, and Figure 75) will require greater expenses for car travel or lengthy bus rides. For example, weekday A.M. peak period (morning commute) transit travel times from the eight “environmental justice areas (EJ)”³⁴ (areas with concentrations of minority and low-income persons) to the eight primary Madison area employment centers averages 42 minutes.³⁵ While most EJ areas can reach Capital Square in 25 minutes or less, most employment centers require bus rides ranging from 30 to 80 minutes. Travel times will be significantly longer, or non-existent during non-peak travel times.

job growth is occurring in areas with higher annual transportation and housing costs – and in areas with limited transit accessibility.

Figure 63 shows areas with concentrations of barriers to opportunity overlaying employment concentrations and bus routes. The Racial and Ethnic Concentrations of Poverty that meet HUD criteria are shaded pink; tan areas come close to meeting HUD criteria (see Section E—Geography of Opportunity/Barriers to Opportunities: Social and Economic). Red and orange outlined areas exceed multiple “opportunity barrier” thresholds (Figure 44 and Figure 47).

Bay Creek (orange outline in central Madison immediately south of downtown and UW) has high job proximity. South Madison and West Madison areas with opportunity barriers are near concentrations of jobs, although access to nearby employment could be impeded by major roadways.

Areas with significant barriers to opportunity that also have low proximity to employment areas are the:

- Vera Court area (north Madison)
- Allied Drive area (south Madison)

These areas are highlighted on Figure 63. See section, Barriers to Opportunity: Social and Economic, for descriptions of these areas. They are located along bus lines, which gives them transit access to employment centers. However, transit travel times can be lengthy even during peak hours (see section, Transportation and Barriers, below). Other areas with the most concentrated barriers to opportunity have reasonable access to downtown jobs, but limited access to growing employment centers on the periphery of the central urban area.

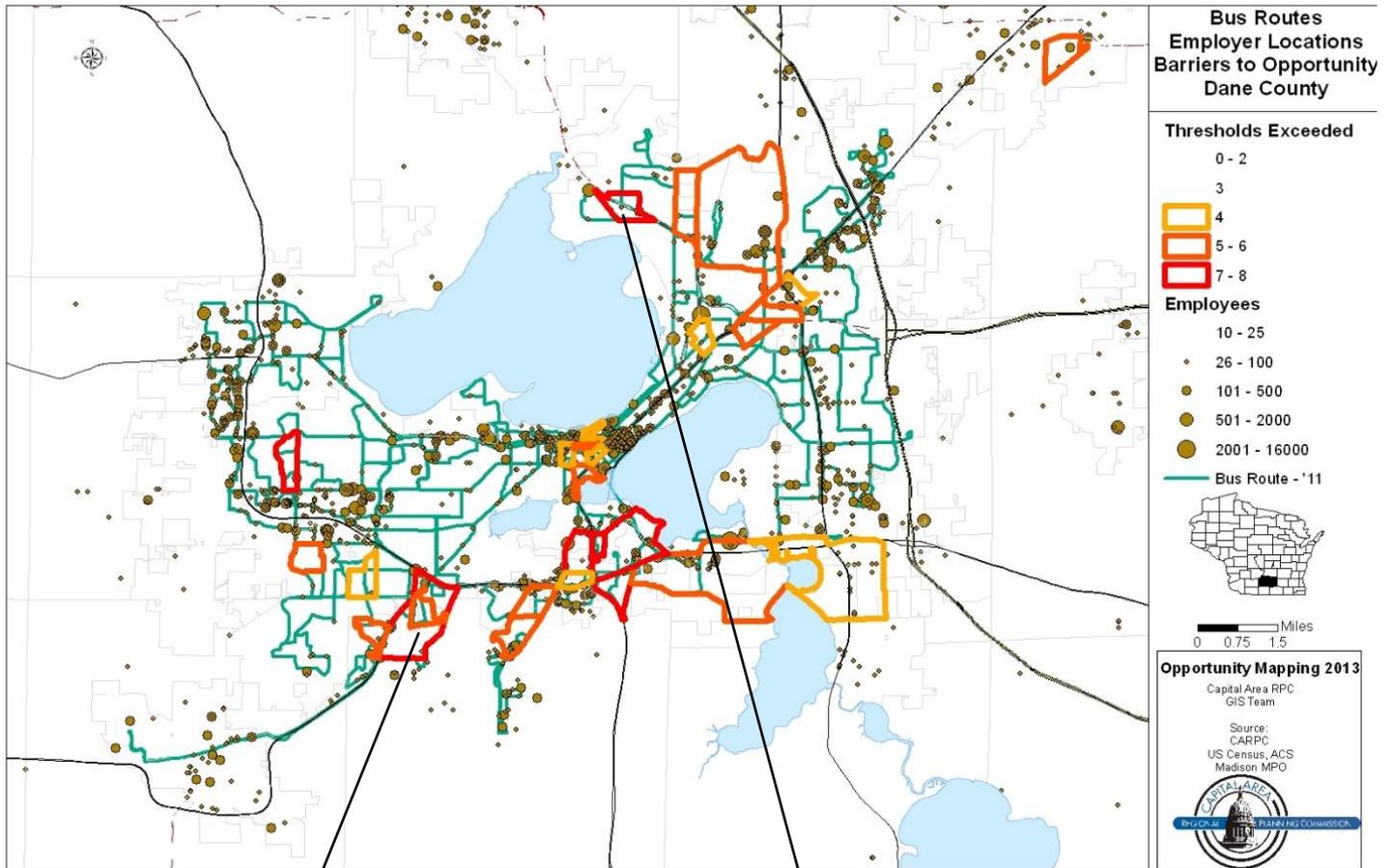
³⁴ Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

³⁵ 2035 Regional Transportation Plan (RTP) Update, March 2012, Madison Area Regional Transportation Planning Board. The RTP includes an Environmental Justice Analysis in compliance with Title VI of the 1964 Civil Rights Act and Executive Order 12898 (1994).

C. Geography of Opportunity

Allied Drive and Vera Court areas have limited access to all employment centers both in terms of proximity and transit access. Other areas with the most concentrated barriers to opportunity have reasonable access to downtown employment but limited access to growing employment centers on the periphery of the central urban area.

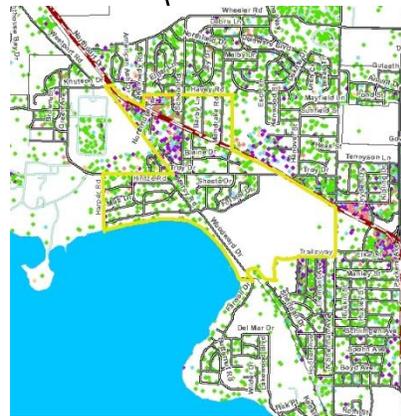
Figure 63 – Employment, Bus Routes, and Barriers to Opportunity, Madison Area 2008-12



Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2008-12, and Employers Info USA, March 2010



Allied Drive – see Figure 49



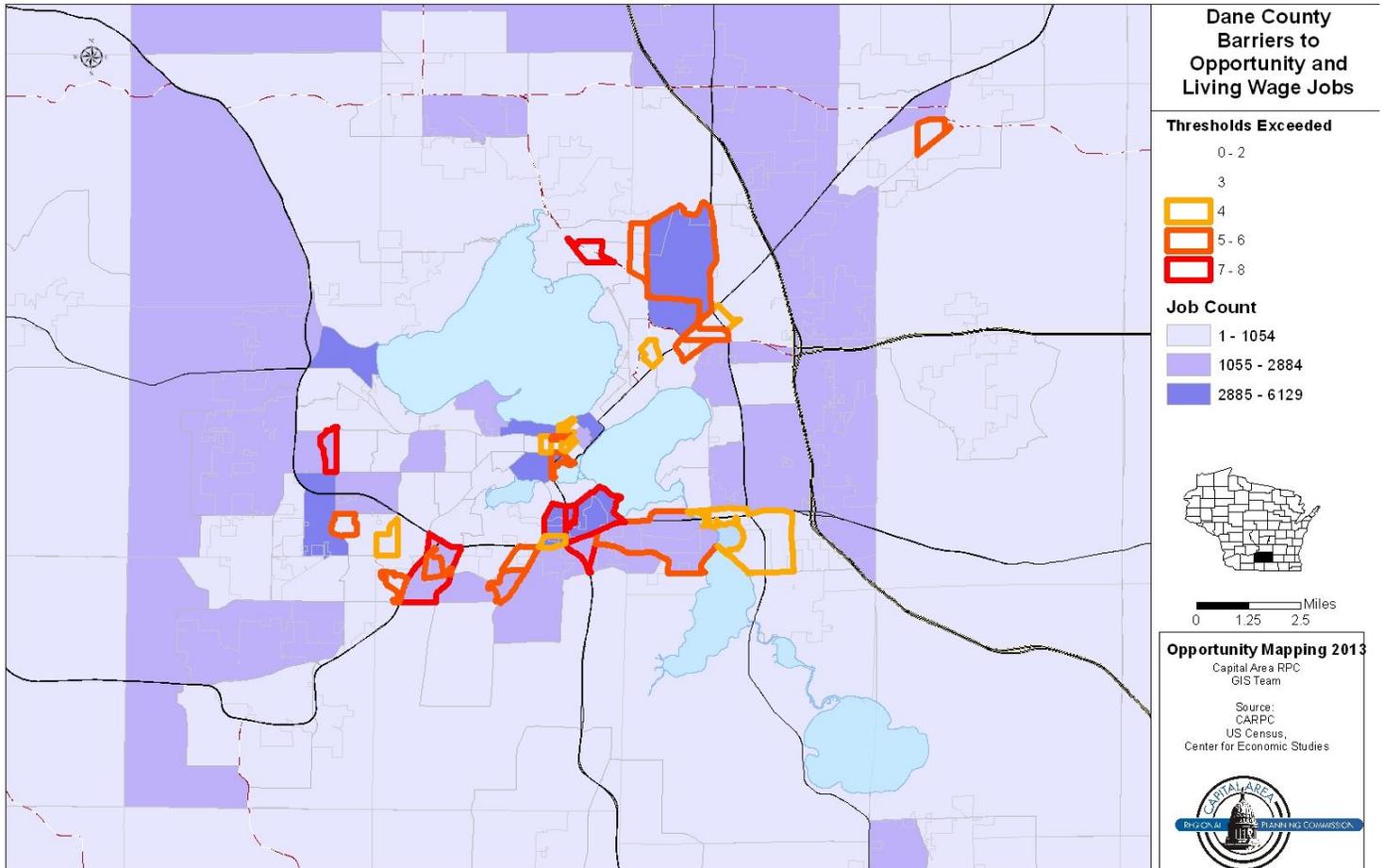
Vera Court – See Figure 52

C. Geography of Opportunity

Figure 64 shows areas with barrier concentrations compared to areas with higher numbers of “living wage” jobs (paying between \$1,253 and \$3,333 per month). The map shows **Vera Court with low access to living wage jobs, and south and west Madison areas with decent access to those jobs.** Allied Drive area has moderate access to living wage jobs. Bay Creek has high access to living wage jobs.

Vera Court to the north has low access to living wage jobs, and south and west Madison areas with decent access to those jobs

Figure 64 – Living Wage Jobs and Areas with Opportunity Barriers, Madison Area 2011



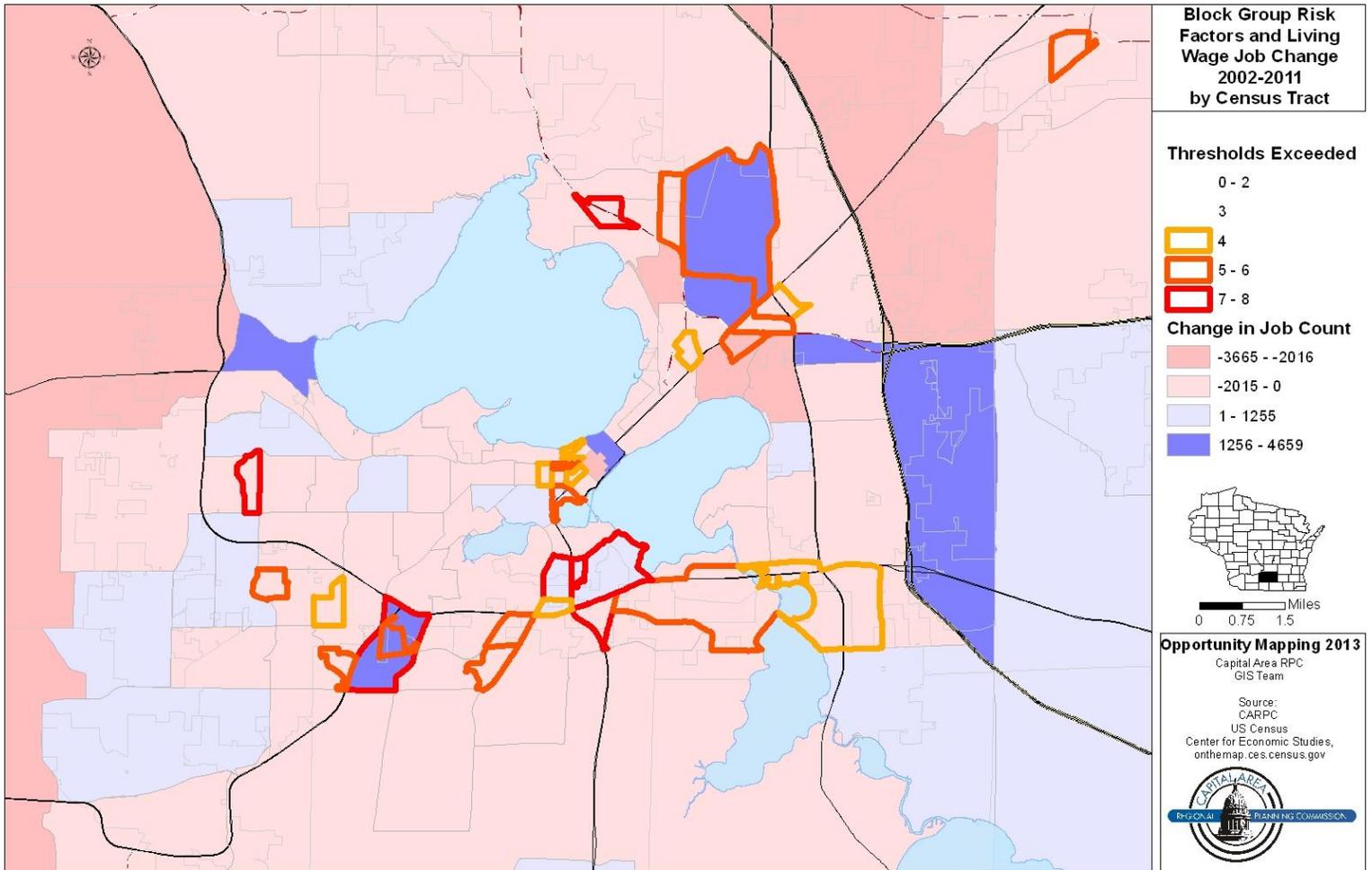
Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2008-12, and Employers Info USA, March 2010

Figure 65 shows that living wage jobs increased from 2002-2011 around the Capitol Square in Downtown Madison, at the airport (NE), southwest (Allied Drive), far east, Middleton, and to a lesser extent in South Madison and portions of west Madison.

C. Geography of Opportunity

Living wage jobs increased from 2002-2011 around the Capitol Square in Downtown Madison, at the airport (NE), southwest (Allied Drive), far east, Middleton, and to a lesser extent in South Madison and portions of west Madison.

Figure 65 – Change in Living Wage Jobs and Areas with Opportunity Barriers, Madison Area 2002-11



Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2008-12, and Employers Info USA, March 2010

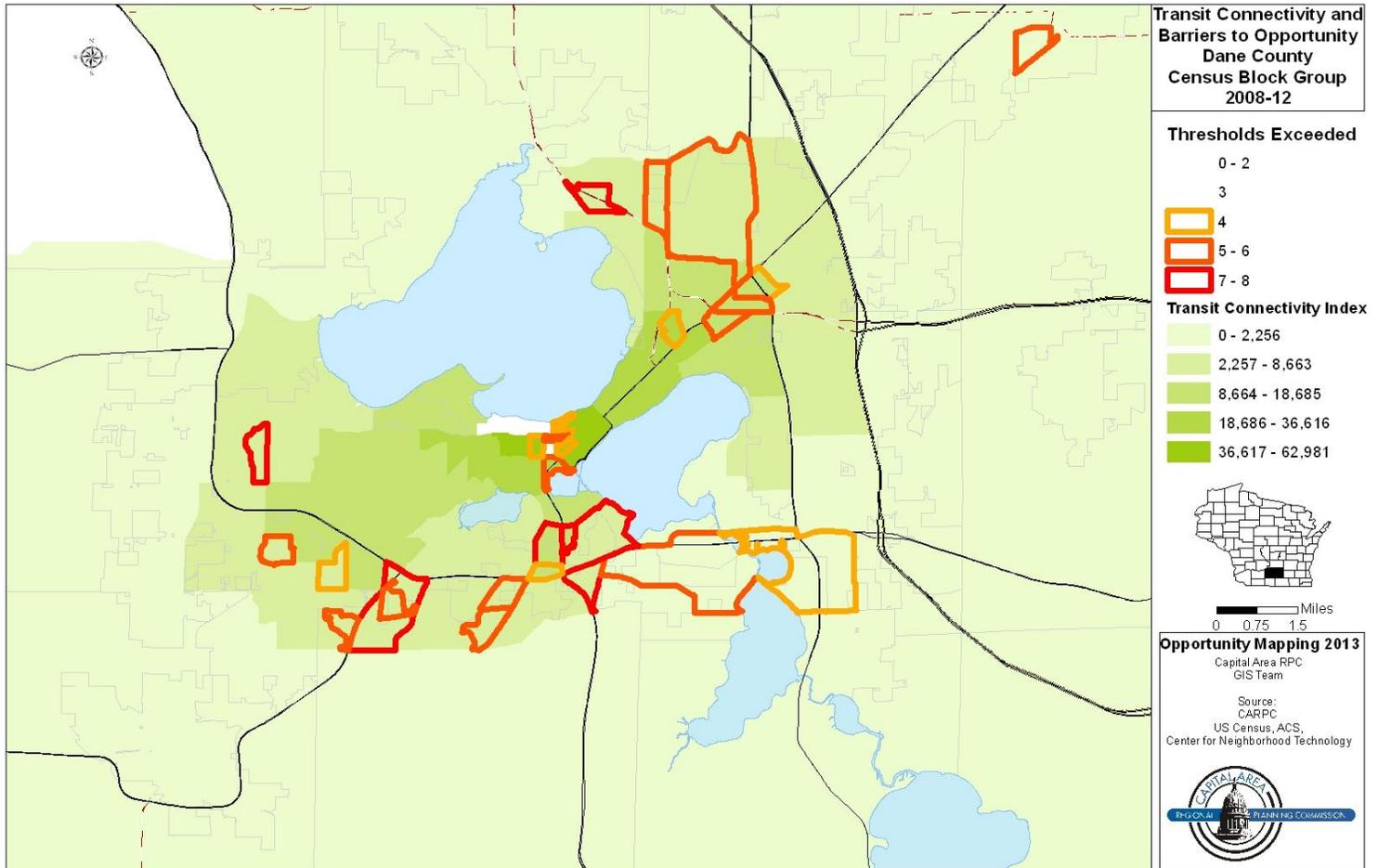
Access to jobs and other opportunities is partly a matter of proximity, and partly a matter of transportation access. Households with adequate and affordable access to automobiles have regional access to opportunities. Areas with low rates of vehicle ownership (see, Transportation Cost Barriers, Figure 79) mean many residents rely on alternatives of transit, walking and bicycling.

Figure 66 shows areas with limited transit access as measured by the Transit Connectivity Index. The Transit Connectivity Index is a measure that reflects transit service levels and transit commute times to employment centers. Dark green areas have high transit connectivity to employment centers; light green areas have low connectivity.

C. Geography of Opportunity

The Fitchburg area with barriers (orange outline, south central) has moderate proximity to employment. The Meadowood area (yellow outline, southwest Madison) has fewer opportunity barriers, but low employment access both in terms of proximity and transit.

Figure 66 – Transit Access and Barriers to Opportunity, Madison Area, 2008-12



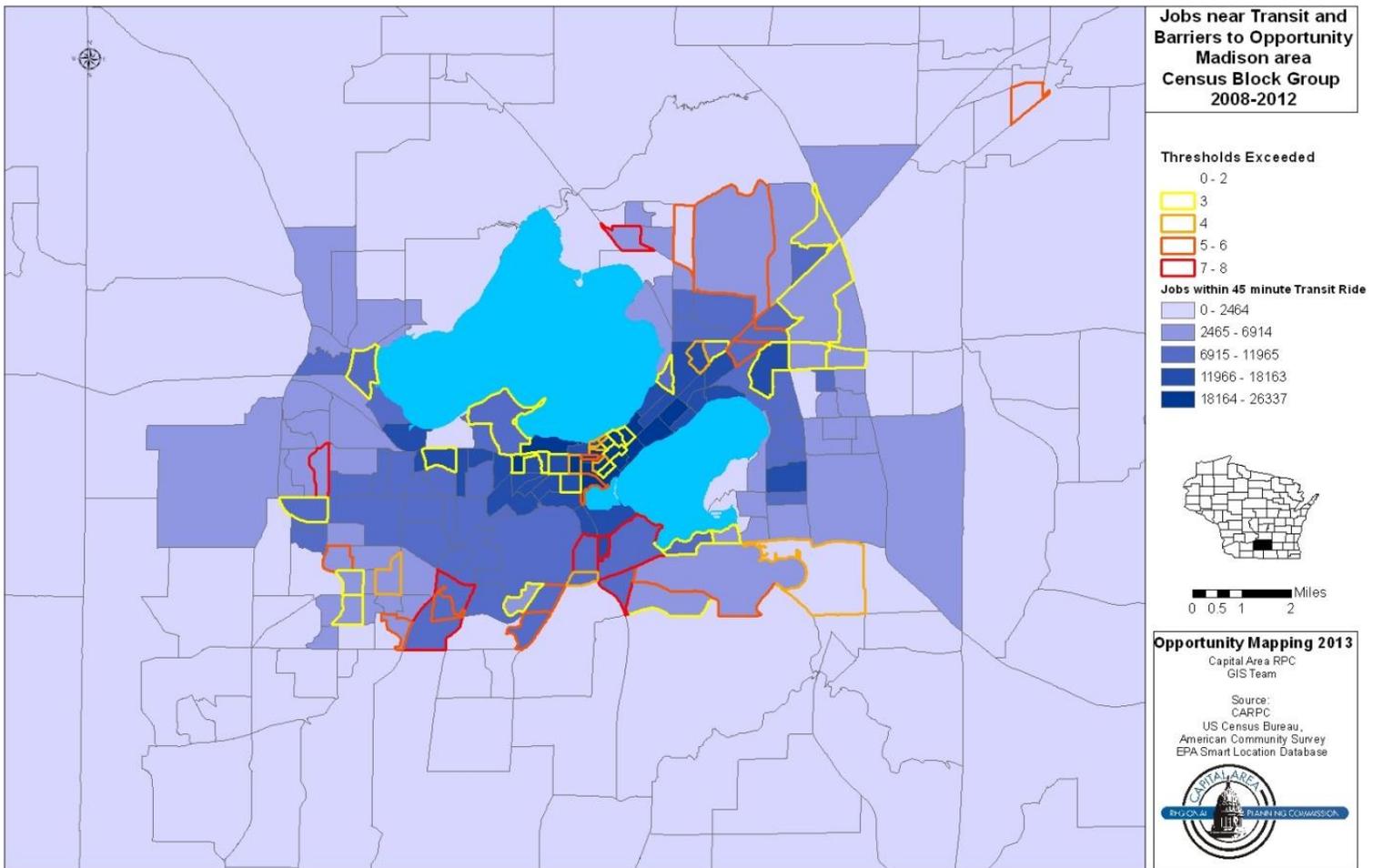
Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2008-12, and Employers Info USA, March 2010

Figure 67 shows how many jobs are within a 45 minute transit ride of each census block group in Dane County, showing the extent of the Madison Metro transit system. Central Madison has the greatest amount of jobs within a 45 minute transit ride, due to both its centralized location and its status as the hub of the transit system. Most of the neighborhoods with at least three barriers to opportunity have some jobs within a 45 minute transit ride, but some areas, including southwestern Madison and southern Sun Prairie, have either no or limited transit access.

C. Geography of Opportunity

Most of the neighborhoods with at least three barriers to opportunity have some jobs within a 45 minute transit ride, but some areas, including southwestern Madison and southern Sun Prairie, have either no or limited transit access.

Figure 67 – Jobs Within a 45 Minute Transit Ride



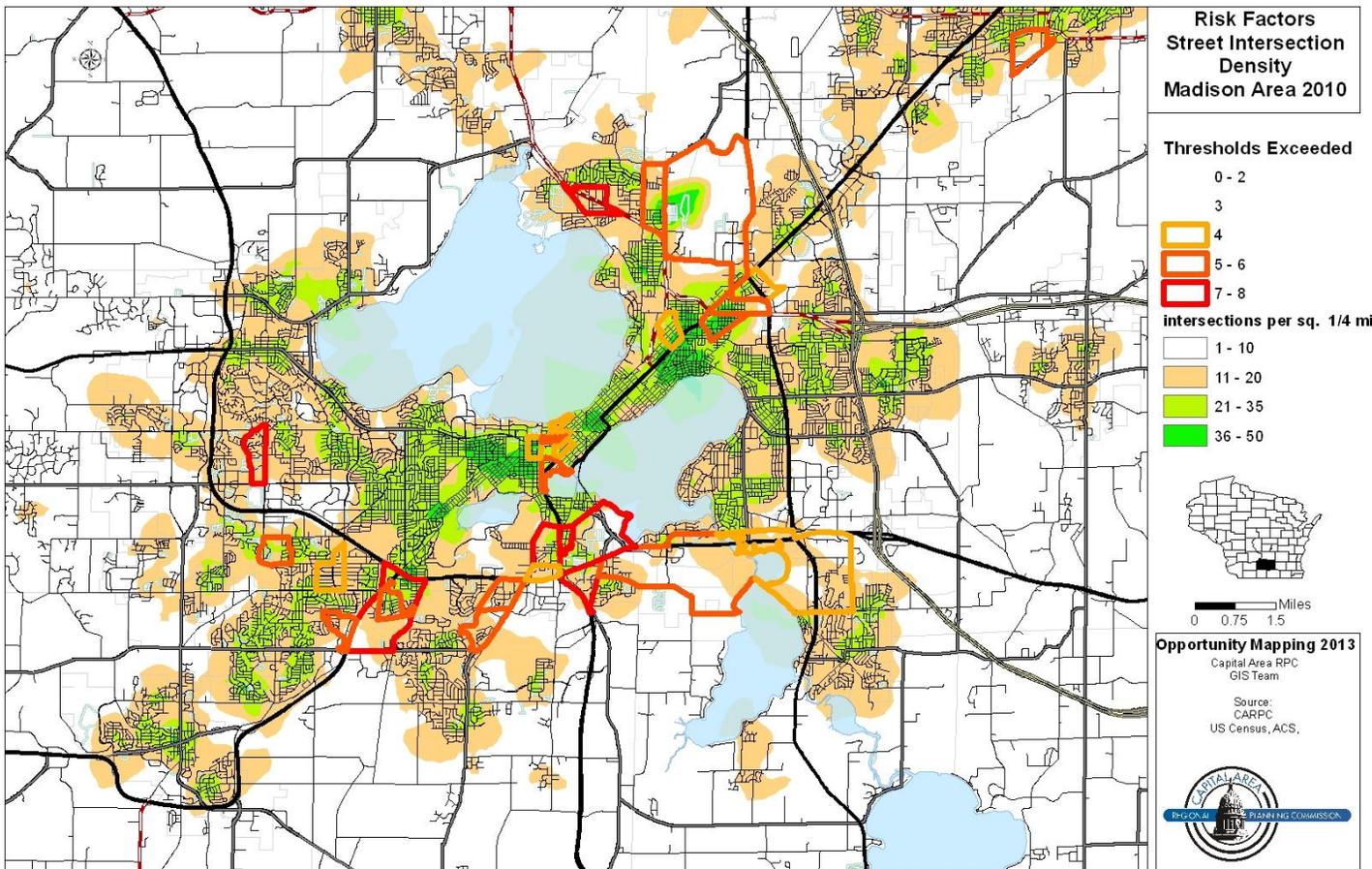
Source: EPA Smart Location Database and American Community Survey 2008-12

Figure 68 and Figure 69 show areas with concentrations of barriers to opportunity combined with walking and biking opportunities. Overall, areas with barriers also have limited walkability as measured by street intersection density. **The only areas with good walkability (dark green) are Bay Creek and the Worthington Park area** (yellow outline at northeast end of Isthmus). Portions of Allied Drive and South Madison have moderately walkable street patterns.

C. Geography of Opportunity

The only high-barrier areas with good walkability (dark green) are Bay Creek and the Worthington Park area.

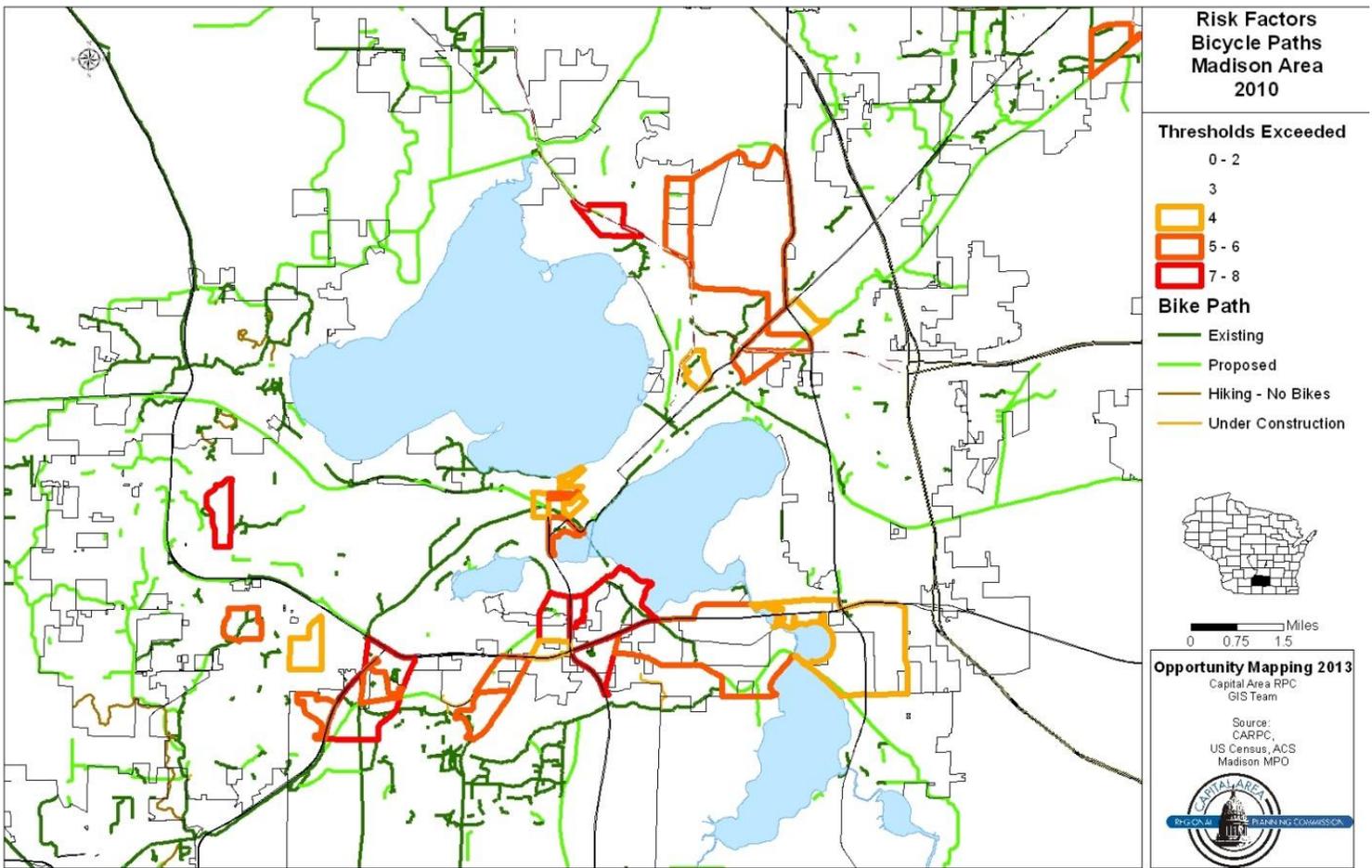
Figure 68 – Street Intersection Density and Areas with Opportunity Barriers, Madison Area 2008-12



Source: Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

Overall, the areas with multiple barriers to opportunity also have limited or moderate access to bike paths, with the exception of the Allied Drive area that has access to the Southwest Bike Path, which goes to downtown Madison, and the Capital City Bike Path. Bay Creek also has good bike path access. Wexford Ridge and Vera Court have very limited access. South Madison, West Madison and Fitchburg areas have limited to moderate access.

Figure 69 – Bicycle Paths and Areas with Opportunity Barriers, Madison Area 2008-12



Source: Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

Transportation Cost Barriers

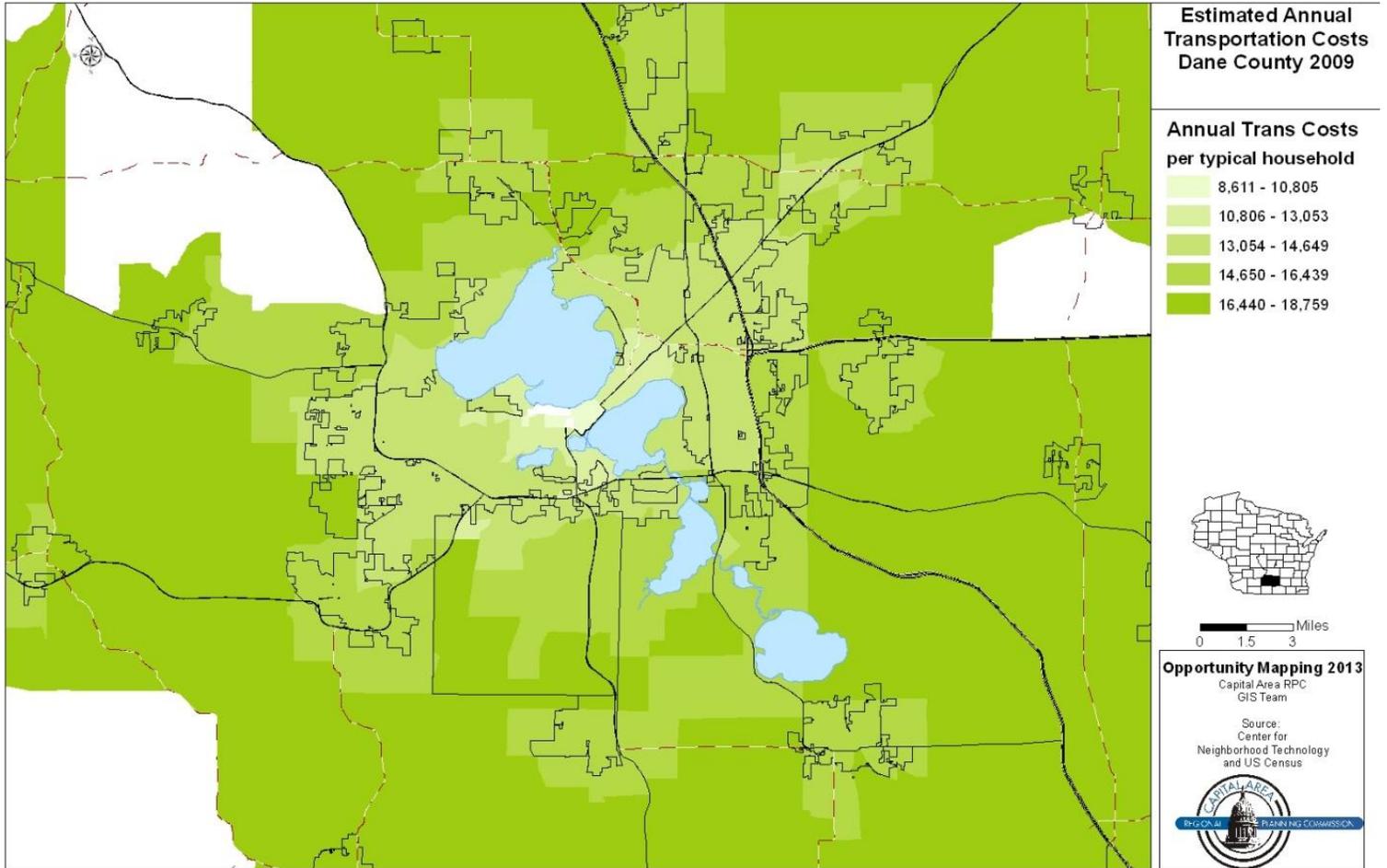
Cost of transportation varies considerably by location. Total household transportation costs are driven primarily by the number of automobiles in the household, and how many miles they drive. These factors, in turn, are heavily influenced by location. Areas with more transportation choices (transit, walking and biking), and more destinations close by, require fewer and shorter car trips. As shown in Figure 70 areas with highest estimated transportation costs³⁶ are located in the rural areas (based on costs for typical regional households). The areas with greatest opportunity to reduce annual transportation costs are in central Madison, the isthmus and south Madison, as shown in greater detail in Figure 71.

³⁶ The transportation model in the H+T® Affordability Index estimates three components of travel behavior: auto ownership, auto use, and transit use. To calculate total transportation costs, each of these modeled outputs is multiplied by a cost per unit (e.g., cost per mile) and then summed to provide average values for each block group. <http://htaindex.cnt.org/about.php>

C. Geography of Opportunity

Areas with more transportation choices (transit, walking and biking) and more destinations close by require fewer and shorter car trips.

Figure 70 – Estimated Annual Transportation Costs, Dane County 2009

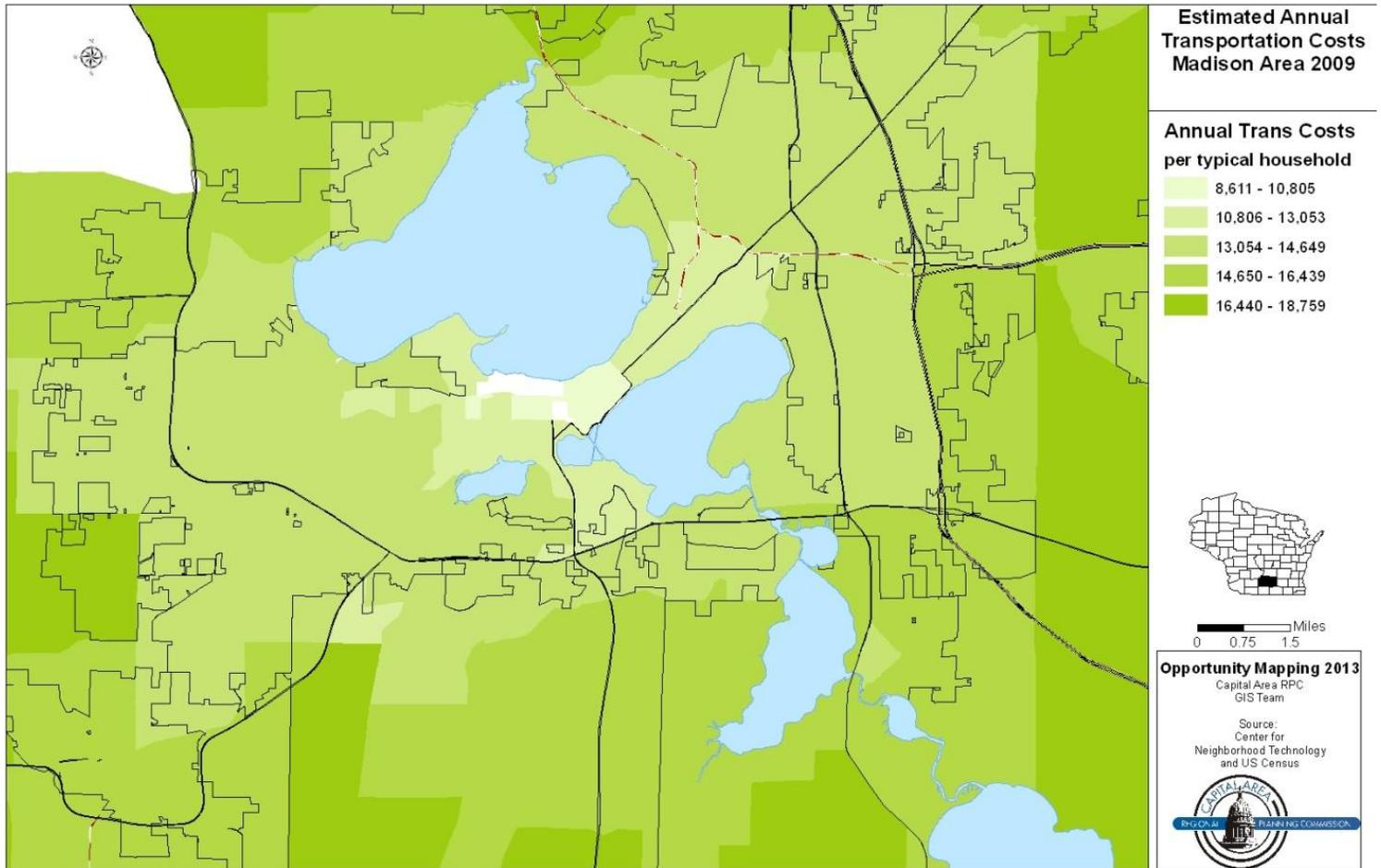


Source: Center for Neighborhood Technology and U.S. Census

C. Geography of Opportunity

The areas with greatest opportunity to reduce annual transportation costs are in central Madison, the isthmus and south Madison.

Figure 71 – Estimated Annual Transportation Costs, Madison Area 2009



Source: Center for Neighborhood Technology and U.S. Census

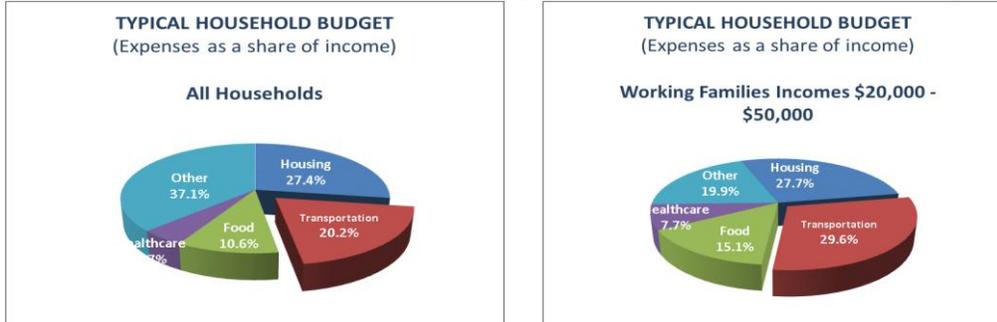
Transportation costs are important to consider because they are rising faster than other costs, and because they can be a particularly heavy burden for lower-income households.

Figure 72 shows that, for all U.S. households, **transportation comprises the second largest single expense, following housing. For working families, however, transportation consumes the largest portion of their budgets.**

C. Geography of Opportunity

For U.S. households, transportation comprises the second largest single expense, following housing. For working families, however, transportation consumes the largest portion of their budgets.

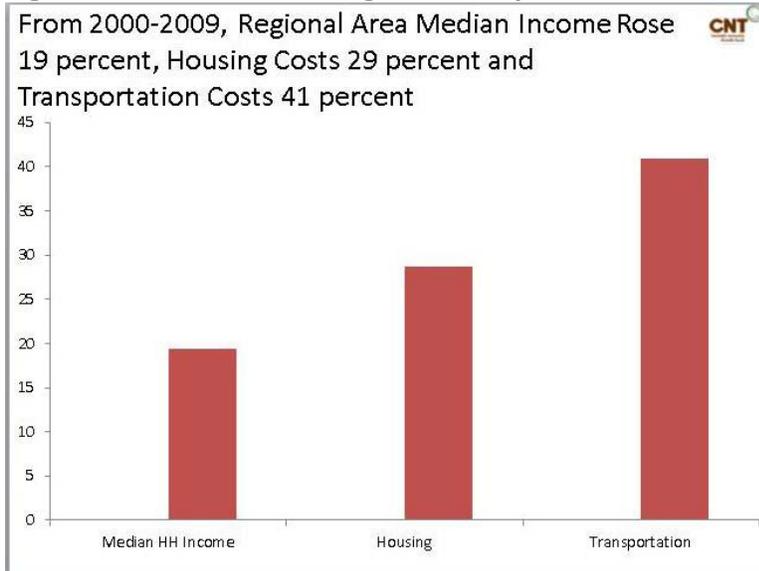
Figure 72 – Typical U.S. Household Budgets: All Households and Working Families



Source: “A Heavy Load: The Combined Housing and Transportation Burdens of Working Families,” Center for Housing Policy, October 2006.

Figure 73 shows increases in income, housing costs and transportation costs from 2000 to 2009 in Dane County. Both **housing and transportation costs outpaced the rise in income, with transportation expenses rising faster than housing.**

Figure 73 – Income, Housing and Transportation Cost Comparison, 2000-2009



Source: “A Heavy Load: The Combined Housing and Transportation Burdens of Working Families,” Center for Housing Policy, October 2006.

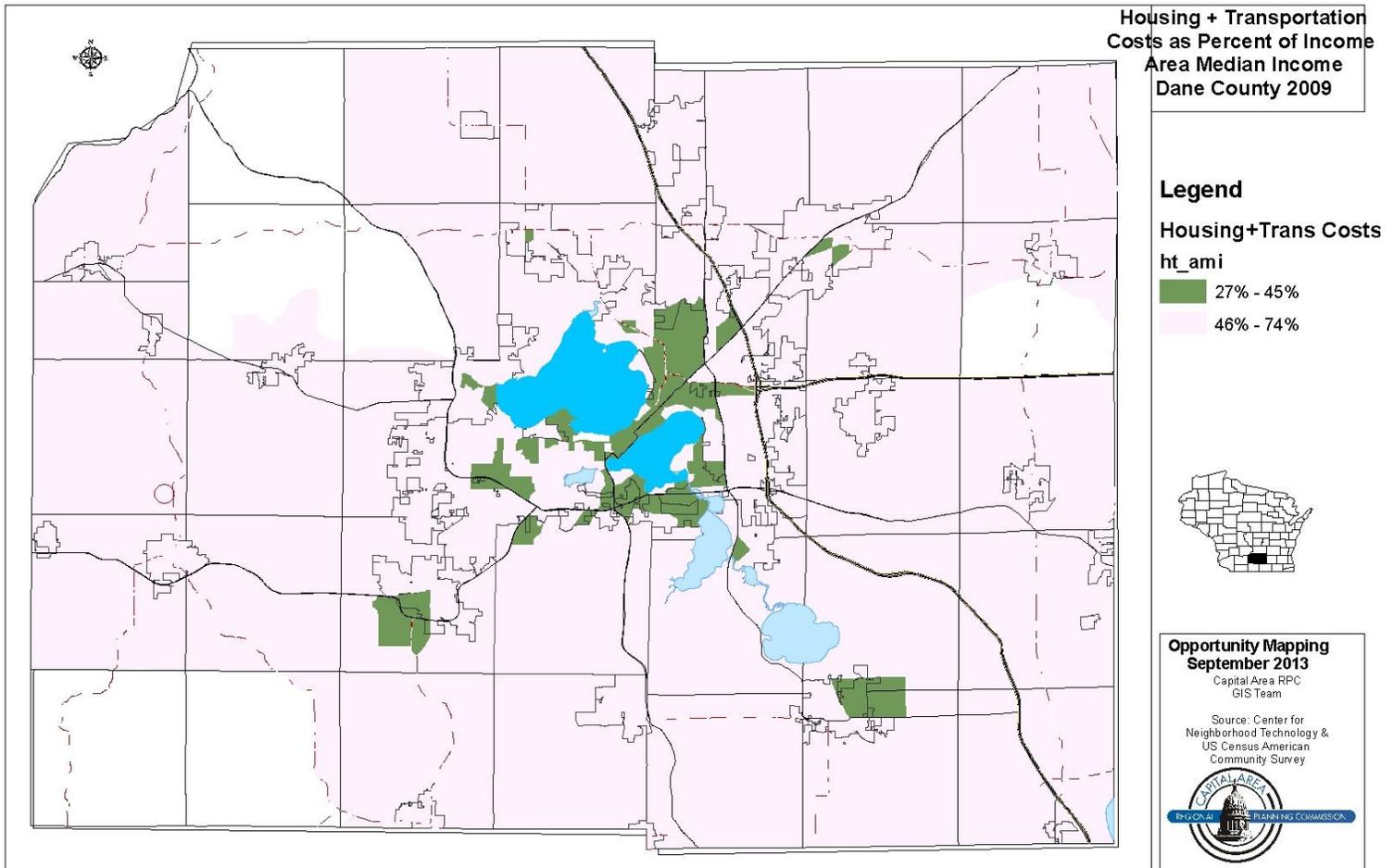
Housing Plus Transportation Cost

Figure 74 shows the areas (in green) where a typical regional household would likely pay 45% or less of their income on the combination of housing and transportation. **Areas that have affordable levels of housing plus transportation costs – for typical households – are predominantly in Madison, on the isthmus, along University Avenue, east and north, south and southwest.** Portions of Middleton, Sun Prairie, Verona, and Stoughton also show up as affordable by this measure.

C. Geography of Opportunity

Areas that have affordable levels of housing plus transportation costs –for typical households– are predominantly in Madison, on the isthmus, along University Avenue, east and north, south and southwest.

Figure 74 – Housing & Transportation Costs as Percent of Income for Households at 100% of AMI, 2009



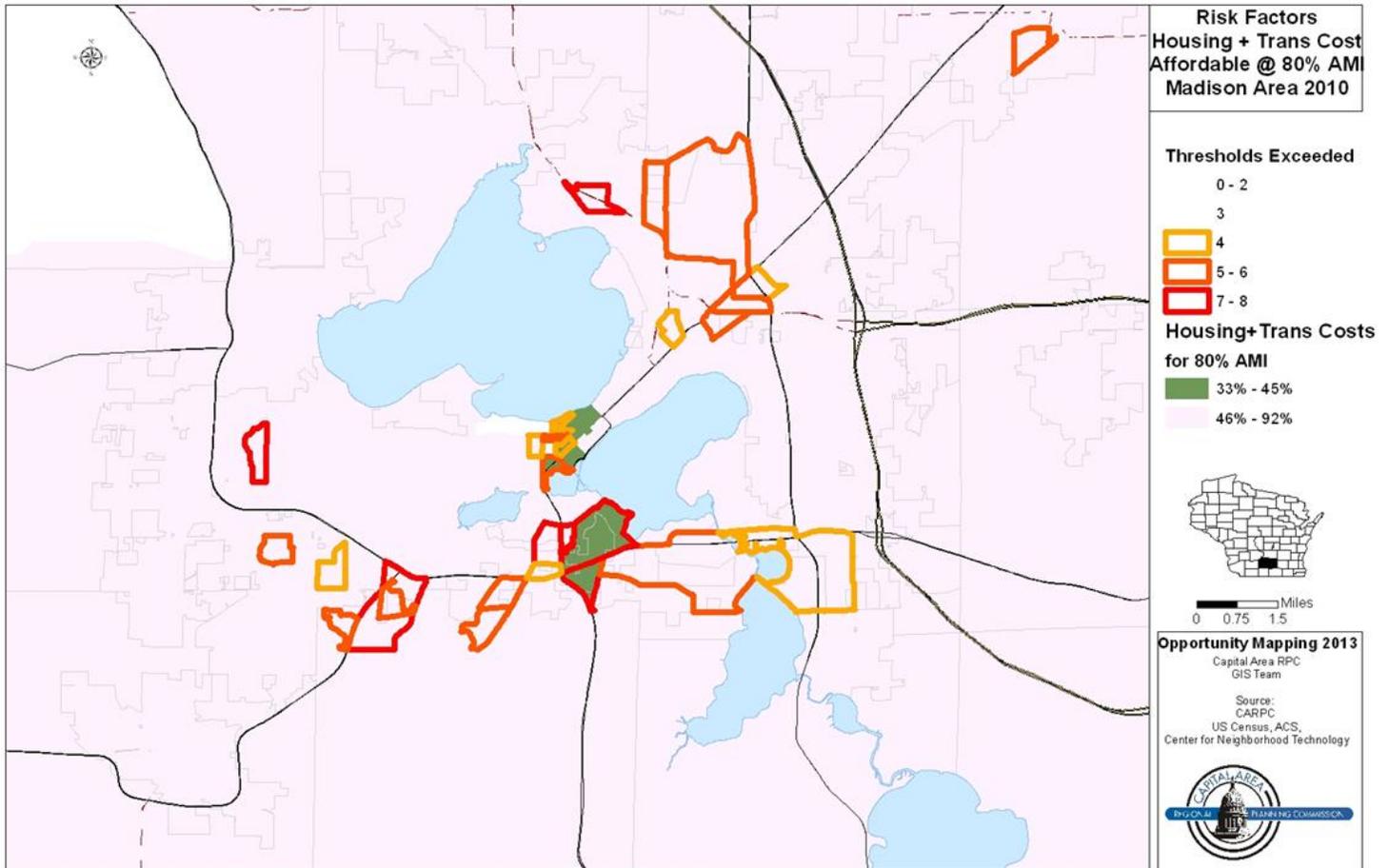
Source: Center for Neighborhood Technology and U.S. Census

The picture changes considerably when housing plus transportation (H+T) costs are modeled for households at 80% of AMI. shows that **the only areas (census block groups) with H+T costs at 45% or less of income for these moderate-income households are downtown Madison and the south side.** This picture underscores the importance of expanding transportation choices, near-by destinations and increasing housing affordability – especially near transit and jobs.

C. Geography of Opportunity

The only areas (census block groups) with H+T costs at 45% or less of income for these moderate-income households are downtown Madison and the south side

Figure 75 – Housing + Transportation Costs as Percent of Income for Households at 80% of AMI, 2009



Source: Center for Neighborhood Technology and U.S. Census

Assisted Housing and Opportunity Barriers

Location of publically assisted housing can reinforce or lower barriers to opportunity. When subsidized housing is concentrated in areas with multiple physical, social and economic barriers to housing, it further concentrates low-income people in areas with reduced opportunity. Such targeting of assisted housing perpetuates poverty and isolation.

This is not to say that some subsidized housing is not needed in low-opportunity areas, especially as a strategy to preserve affordable housing when property values rise, such as from gentrification. Locating some assisted housing in high opportunity areas, however, is also important. Such dispersion of more affordable housing provide a range of housing choices throughout the region. It also offers greater access to opportunities such as good jobs and schools to low-income households.

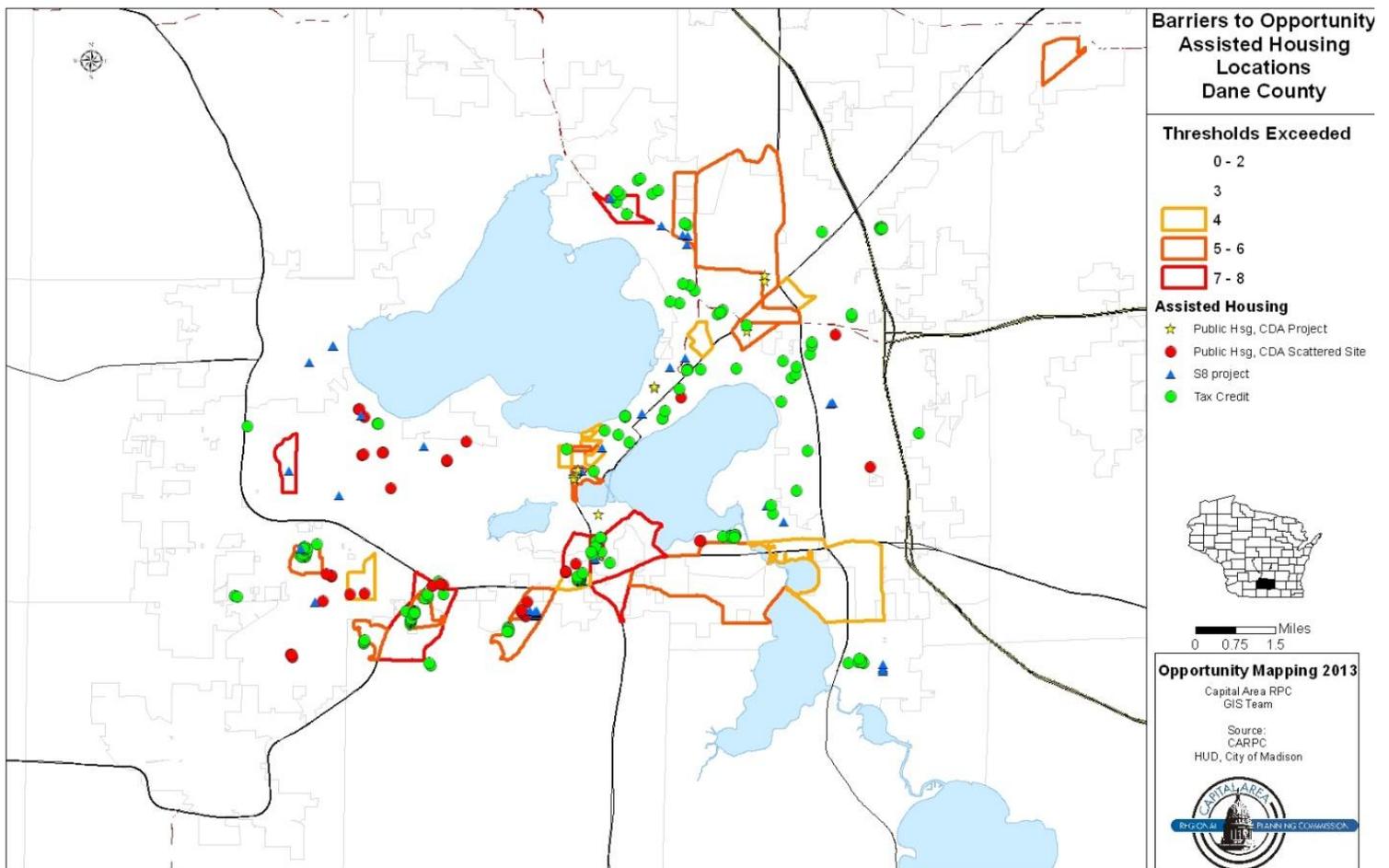
C. Geography of Opportunity

Figure 76 and Figure 77 show the location of assisted housing units within the City of Madison relative to areas with concentrated barriers to opportunity. Assisted units include project based public housing, scattered site public housing, section eight units, and affordable housing tax credit units.

Areas with concentrated barriers to opportunity – in the southwest, south and north – have clusters of scattered site public housing and tax credit housing units. Such units, however, are also distributed in other areas of the city. Section 8 and project-based public housing is fairly widely distributed in both low and high opportunity areas.

While some assisted housing units are clustered in low-opportunity areas, they are also found in high-opportunity areas.

Figure 76 – Assisted Housing Units with Opportunity Barriers, Madison

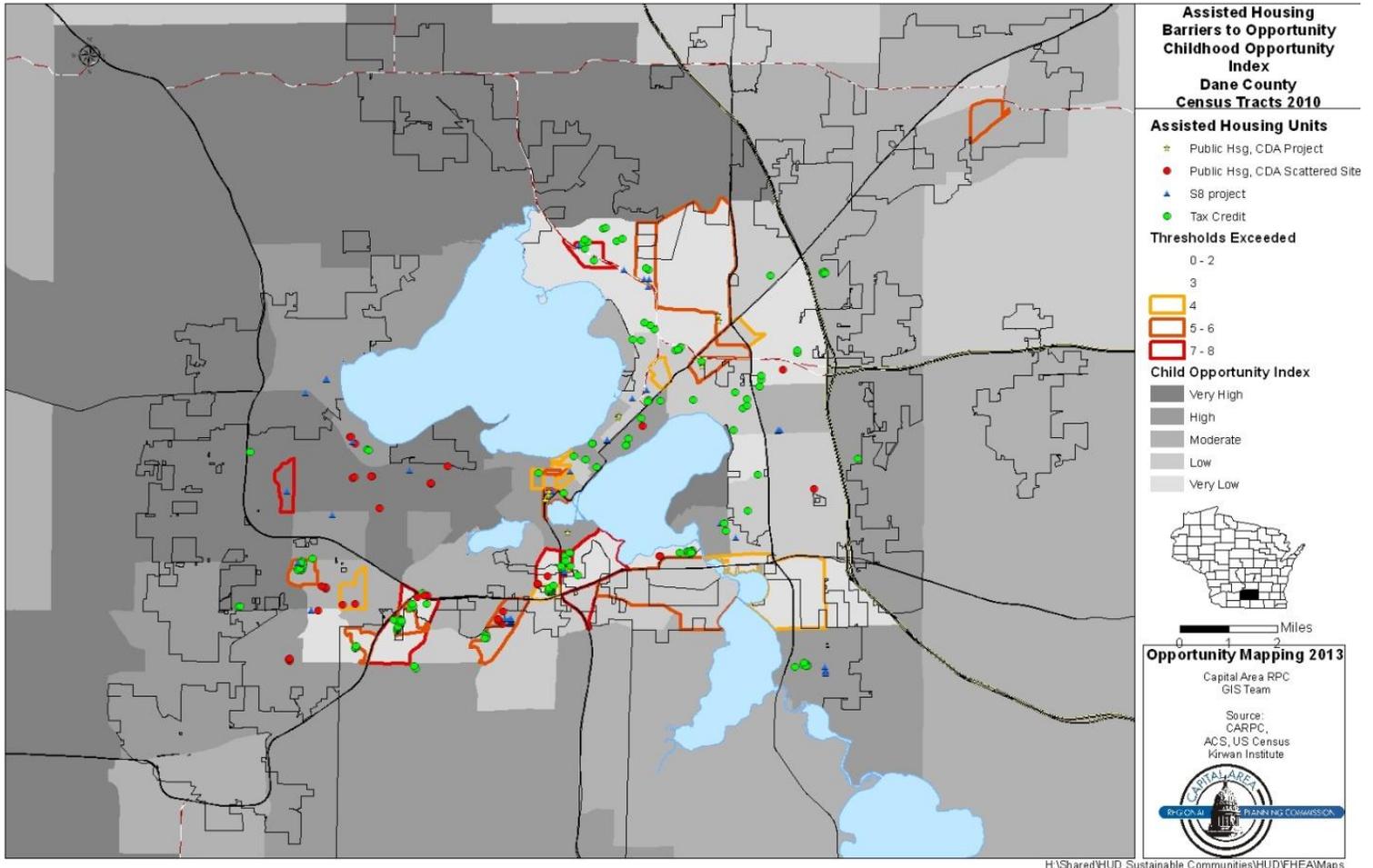


Source: City of Madison, Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

C. Geography of Opportunity

While some assisted housing units are clustered in low-opportunity areas, they are also found in high-opportunity areas.

Figure 77 – Assisted Housing Units and Childhood Opportunity Index, Dane County



Source: City of Madison, Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2008-12, and Kirwan Institute

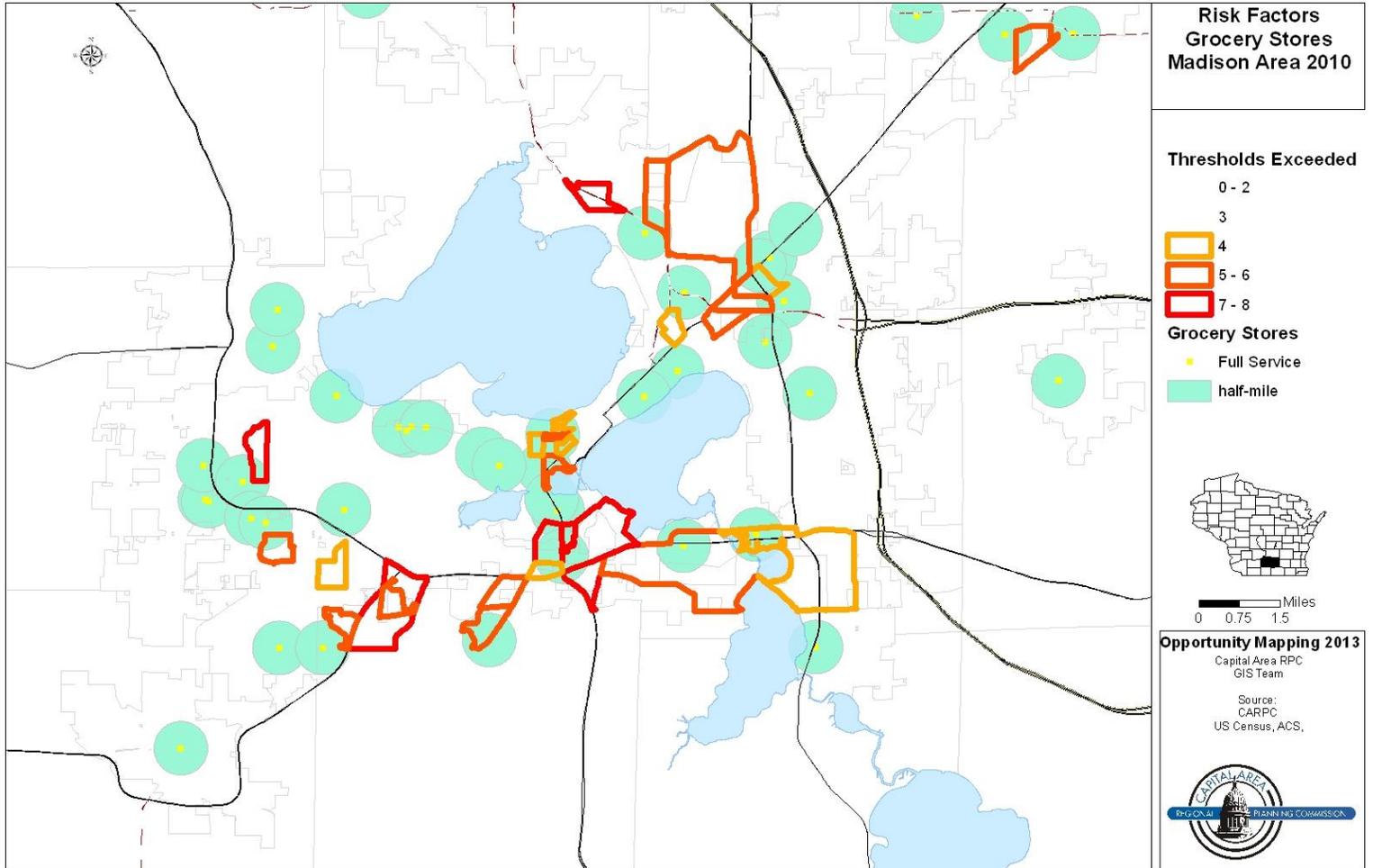
Healthy Food and Barriers

Figure 78 shows that many areas with opportunity barriers also lack nearby access to full-service grocery stores. The areas within a half mile of grocery stores are the Fitchburg area and Bay Creek. Portions of the south Madison and the west Madison areas are close to grocery stores. The remaining areas outlined in red and orange lack access. **Of those areas that are not near grocery stores, many also lack good transit access, such as Allied Drive, Wexford Ridge, Southdale (orange triangular area that is part of south Madison south of beltline) and Vera Court.** Vera Court is within a mile of a grocery store.

C. Geography of Opportunity

Of those areas that are not near grocery stores, many also lack good transit access, such as Allied Drive, Wexford Ridge, Southdale (orange triangular area that is part of south Madison south of beltline) and Vera Court.

Figure 78 – Grocery Stores and Areas with Opportunity Barriers, Madison Area 2008-12



Source: Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

Ability to access full service grocery stores beyond a walking distance requires vehicle access. Households beyond walking distance without access to cars experience reduced access to healthy food choices.

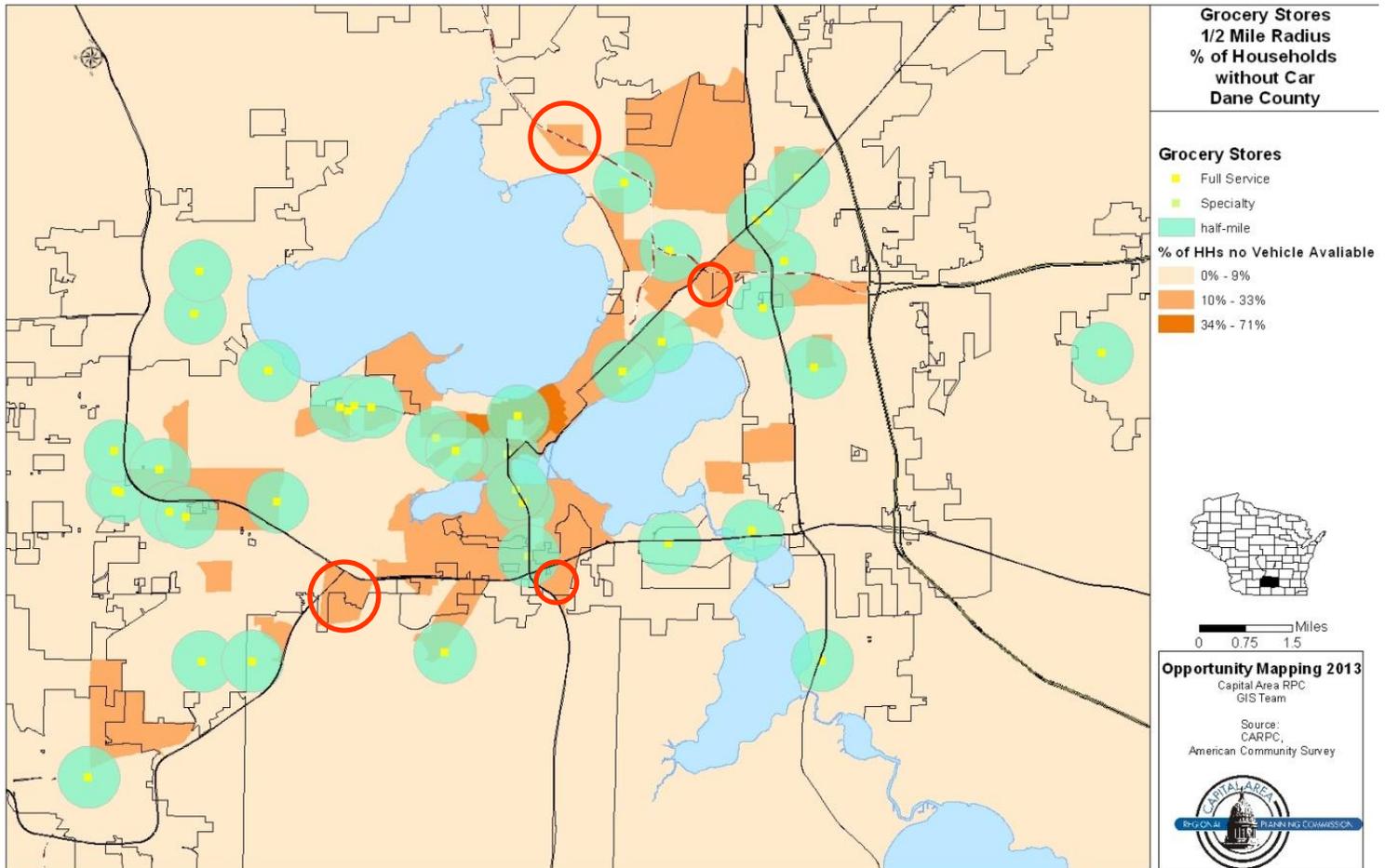
Figure 79 shows full service grocery stores combined with the percentage of households that have no vehicle. Darker orange block groups have higher percentages of households without vehicles (from 13% to 71%). Red circles show areas with higher percentages of car-less households that are farther than a half-mile from a full-service grocery store. The area with the highest concentration of car-less households away from full-service grocery stores is on the Isthmus. A full-service grocery store sell fresh produce during all store hours. This likely reflects a concentration of University students. The other red circles show low-income areas that are under-served by grocery stores.

Households beyond walking distance without access to cars experience reduced access to healthy food choices.

C. Geography of Opportunity

Areas well beyond walking distance of grocery stores – and with many households that have no access to vehicles – are located in south, southwest and north Madison; corresponding closely to areas with concentrated barriers to opportunity.

Figure 79 – Overlay: Full-Service Grocery Stores (2010) and Concentrations of Households with no Car (2007-11)



Source: Capital Area Regional Planning Commission, U.S. Census, American Community Survey 5-year estimates, 2007-11

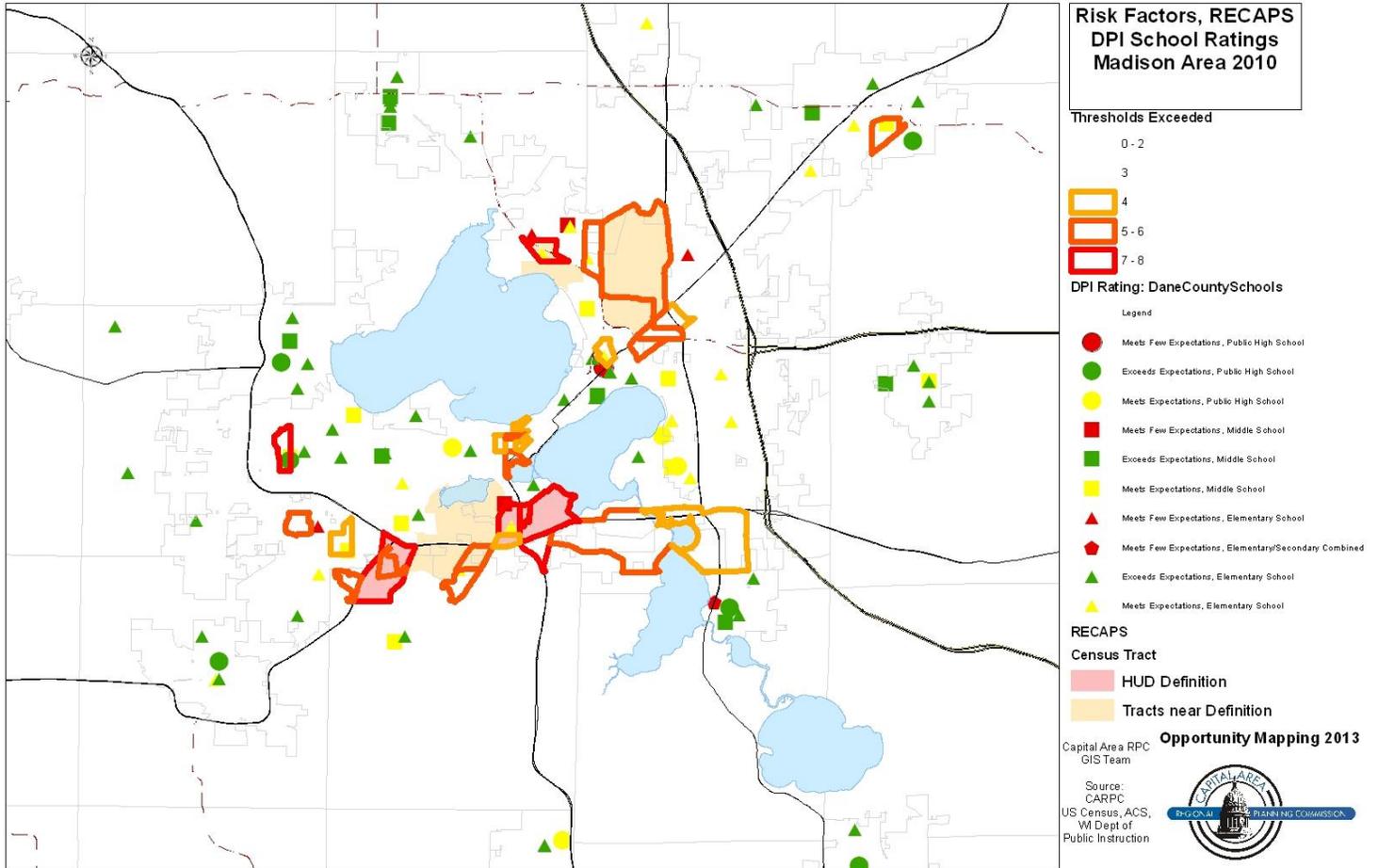
School Quality and Barriers

The South Madison, Vera Court (north) and far northeast areas are served by schools rated as “meets few expectations” by the Wisconsin Department of Public Instruction. Students living in Allied Drive and west Madison area attend many schools rated as “exceeding expectations.”

C. Geography of Opportunity

The South Madison, Vera Court (north) and far northeast areas are served by schools rated as “meets few expectations” by the Wisconsin Department of Public Instruction.

Figure 80 – Public School Ratings and Areas with Opportunity Barriers, Madison Area 2008-12



Source: Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

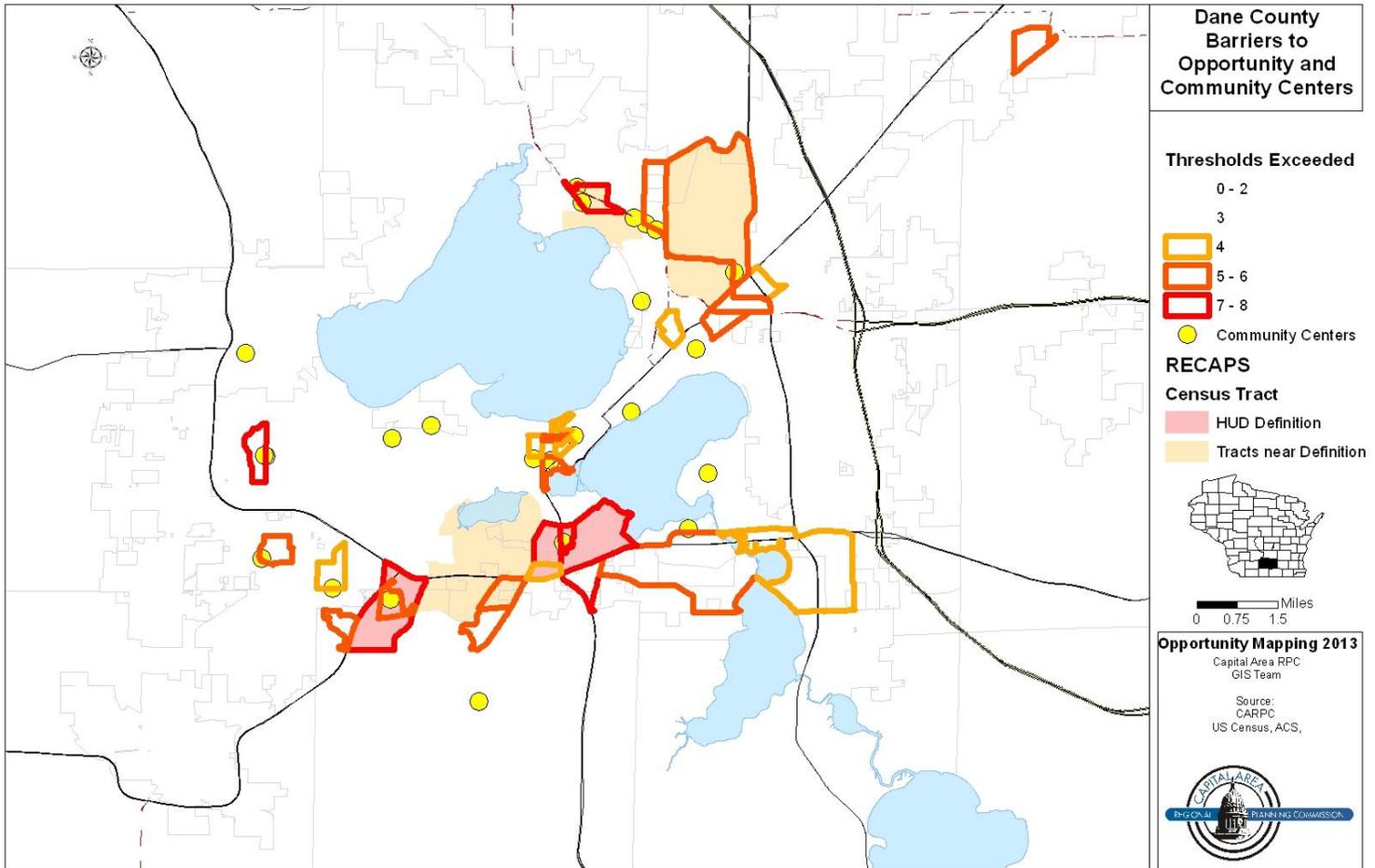
Other Opportunities and Barriers

Figure 81 and Figure 82 show that the **areas with concentrated barriers to opportunity are almost all well served by community centers**. The exception is the Southdale neighborhood in south central area (triangular orange outline), which is in the Town of Madison. Figure 82 shows that **areas with barriers are also generally well served by access to outdoor recreation**. The possible exception is Vera Court, which is just beyond the quarter mile to a large regional park, Warner Park.

C. Geography of Opportunity

Areas with concentrated barriers to opportunity are almost all well served by community centers

Figure 81 – Community Centers and Areas with Opportunity Barriers, Madison Area 2008-12

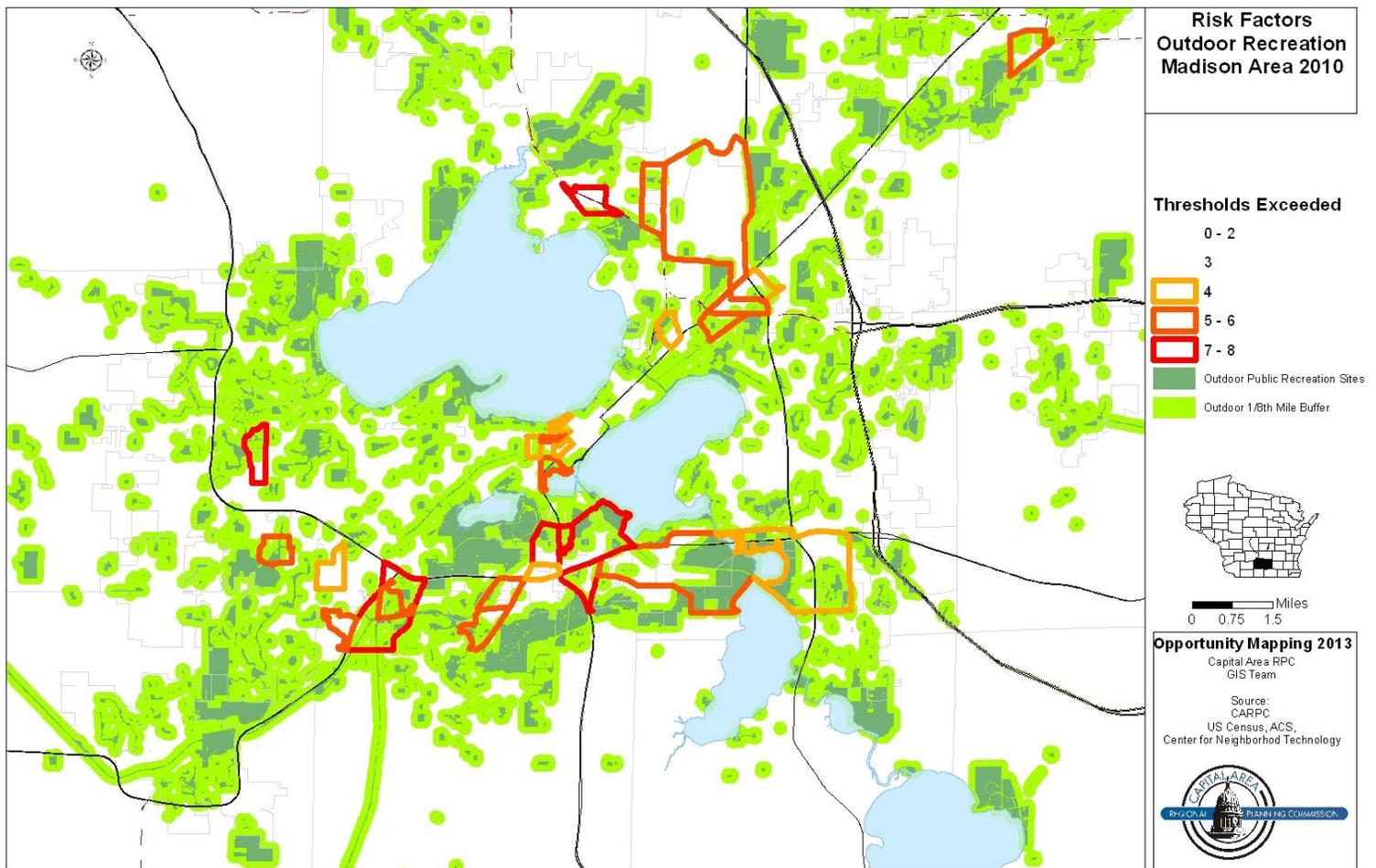


Source: Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

C. Geography of Opportunity

Areas with barriers are also generally well served by access to outdoor recreation

Figure 82 – Outdoor Recreation and Areas with Opportunity Barriers, Madison Area 2008-12



Source: Capital Area Regional Planning Commission and U.S. Census, American Community Survey 5-year estimates, 2008-12

Barriers to Opportunity and Health Outcomes

A large body of research suggests that where one lives can directly affect one's social, economic and physical outcomes. For example, living in isolated areas, with limited choices for walking and biking, can reduce opportunities for physical activity. Less physical activity is associated with higher rates of negative health outcomes including obesity and diabetes.³⁷ This section examines the correlation between the social-economic and physical barriers to opportunity discussed above and health outcomes.

Researchers from the University of Wisconsin, School of Medicine and Public Health examined the correlation between chronic disease and environmental and socioeconomic factors. Health data was extracted from the University of Wisconsin Population Health Informatics Exchange (PHINEX). PHINEX version 5 contains de-identified electronic health record (EHR) data from individuals seen by a primary care physician (i.e. internal medicine, pediatrics, family medicine) at UW Health in 2007 through 2012.

Environmental and Social Variables Defined:

Close Proximity to Highways was defined as the block population within a census block group if a portion of the block was within 100 meters of a state or federal highway, located in a city or village, and less than 50 acres in size (Source: Capital Area Regional Planning Commission GIS analysis).

Healthy Food Access was defined as the percent of residents in a block group within ½ mile of full-service grocery store. Full service grocery stores were identified by CARPC staff based on criteria of selling fresh produce during all store hours (Source: Data generated by CARPC through GIS mapping).

Walkability was defined as the number of street intersections per quarter mile (Source: CARPC, Madison Metro, and U.S. Census).

Transit Usage was defined as the estimated transit trips for a regional typical household using *Means of Transportation to Work* to calculate a percent of commuters using public transit (Source: HUD Location Affordability Index using Census' American Community Survey).

Employment Access Index (2009) was defined as the number of jobs in a census block group divided by squared distance of block groups. The Employment Access Index uses a model that considers both the distance to and quantity of all employment destinations, relative to any given block group. Example: As jobs get farther away from the Census block group their contribution to the Employment Access Index is reduced (Source: HUD Location Affordability Index, calculated using OnTheMap Version 6, which provides Longitudinal Employer Household Dynamics Origin Destination Employment Statistics).

Socioeconomic Factors were described according to methods outlined in Section F of FHEA: Barriers to Accessing Opportunities.

³⁷ Public Health Madison and Dane County, *The Health of Dane County, Health Status Overview Report*, 2013.

C. Geography of Opportunity

In order to test for correlations between the three chronic diseases and environmental and socioeconomic factors, the statistical test *Pearson’s r* was used. A correlation was considered significant if the probability of the association occurring by chance was low (less than 0.01). Significant associations are demonstrated in Figure 83.

In **RED** are the factors that are associated with higher rates of disease in a given census block group. *Example: The higher the percent (%) of residents who are unemployed, the higher the rates of Asthma and Childhood Obesity.*

In **GREEN** are the factors that are associated with lower rates of disease. *Example: The higher the percent (%) of households with no vehicle, the lower the rates of Asthma and Diabetes.*

Figure 83 – Significant Correlation between Disease and Socioeconomic & Environmental Factors

Significant (P < 0.01) correlations between chronic disease and environmental & socioeconomic factors.			
Environmental Factors	Chronic Disease Rates		
	Asthma	Childhood Obesity	Diabetes in Adults
Close Proximity to Highways	X	X	X
Healthy Food Access			X
Walkability		X	X
Transit usage		X	X
Employment Access Index	X	X	X
Socioeconomic Factors			
% of households with no vehicle available	X		X
% Below Poverty Level			X
% of Population non-white alone	X	X	X
% Limited English proficiency	X	X	X
% of Single Parent households	X	X	X
% Under 18 years	X	X	X
% Unemployed	X	X	
% of households paying 50% or more of income on rent			
% Education less than High School			
<p>RED “X” – Higher rates of chronic disease are significantly (P < 0.01) associated with a higher number or percent of the listed environmental and socioeconomic factors.</p> <p>GREEN “X” – Lower rates of chronic disease are significantly (P < 0.01) associated with a higher number or percent of the listed environmental and socioeconomic factors.</p> <p>WHITE – Correlations are not significant.</p> <p>Chronic disease data from PHINEX (Population Health Information Exchange); Socioeconomic & environmental factors from U.S. Census (2010), American Communities Survey 5-year estimates (2007-2011), Madison Metro, U.S. Department of Housing and Urban Development Location Affordability Index, and The Capital Area Regional Planning Commission (analysis of Geographical Information System data layers)</p>			

Source: University of Wisconsin Population Health Informatics Exchange (PHINEX)

C. Geography of Opportunity

Results

Rates of **Asthma** were **higher** in regions with a higher population living close to highways, with a high percent of non-white residents, limited English proficiency, single parent households, and high rates of unemployment.

Rates of **Asthma** were **lower** in regions with a high employment access index and a higher percent of households with no vehicle.

Rates of **Childhood Obesity** were **higher** in areas with a high residential density within 100 meters of a state or federal highway and many social and economic factors that were also associated with asthma (high % of non-white residents, limited English proficiency, single parent households, and high rates of unemployment).

Childhood Obesity rates were **lower** in areas that had higher walkability, transit usage, and in areas where many people had no vehicle. In addition, rates were lower in areas with higher employment access index.

Adult Diabetes was **higher** in regions with a higher number of people living in close highway proximity and similar socioeconomic factors as asthma and childhood obesity (high % of non-white residents, limited English proficiency, single parent households) and a higher percent below the poverty level.

Adult Diabetes was **lower** where there was access to a full service grocery store and where walkability and transit usage were high. Similar to rates of Asthma and Childhood Obesity, low rates of diabetes were associated with a higher employment access index.

Summary

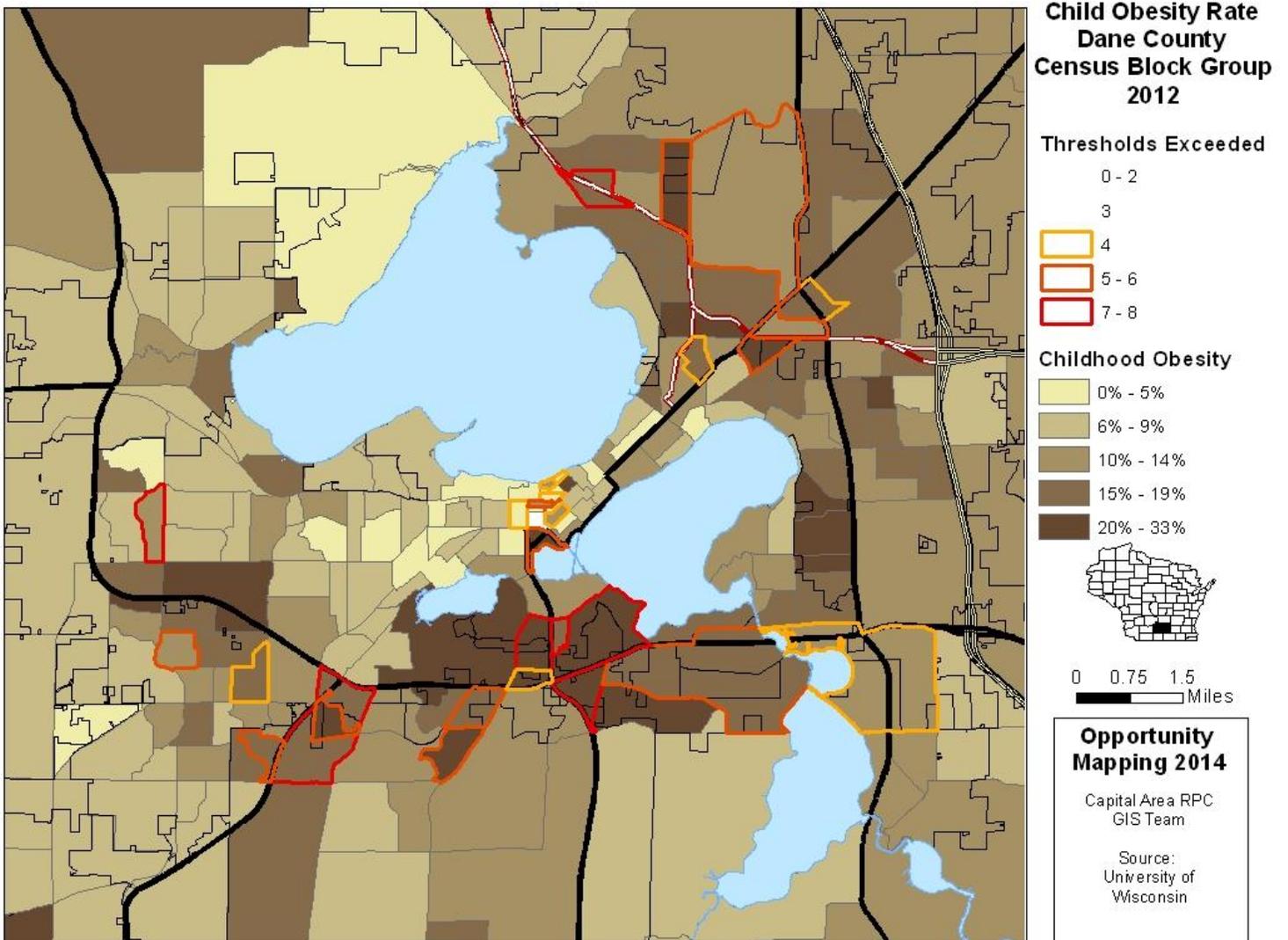
A high employment access index is associated with lower rates of all three chronic diseases: **Asthma**, **Childhood Obesity**, and **Diabetes**. Higher rates of all three diseases were associated with a higher percent of block group residents living in close proximity to highways. Elements of the built environment and transportation such as grocery stores, walkability, and transit usage were more strongly associated with **Childhood Obesity** and **Diabetes**, rather than with **Asthma**.

Notably, not having a vehicle was associated with lower rates of chronic disease and, therefore, may represent a conscious choice by healthy residents living in neighborhoods where no car is needed. Notably, the city of Madison contains The University of Wisconsin and, therefore, has a large college student population (about 30,000 undergraduates), which could account for this difference. There appear to be racial/ethnic associations with all diseases and more studies are needed to tease out the effects of race/ethnicity in the context of poverty and unemployment..

C. Geography of Opportunity

Figure 84, Figure 85 and Figure 86 show the rates of childhood obesity,³⁸ asthma³⁹, and diabetes⁴⁰ and by Dane County Block group. The rates of chronic disease were calculated by census block group, dividing the number of individuals with the condition by those without. Crude rates were mapped and compared to number of barriers to opportunity.

Figure 84 – Childhood Obesity in Dane County



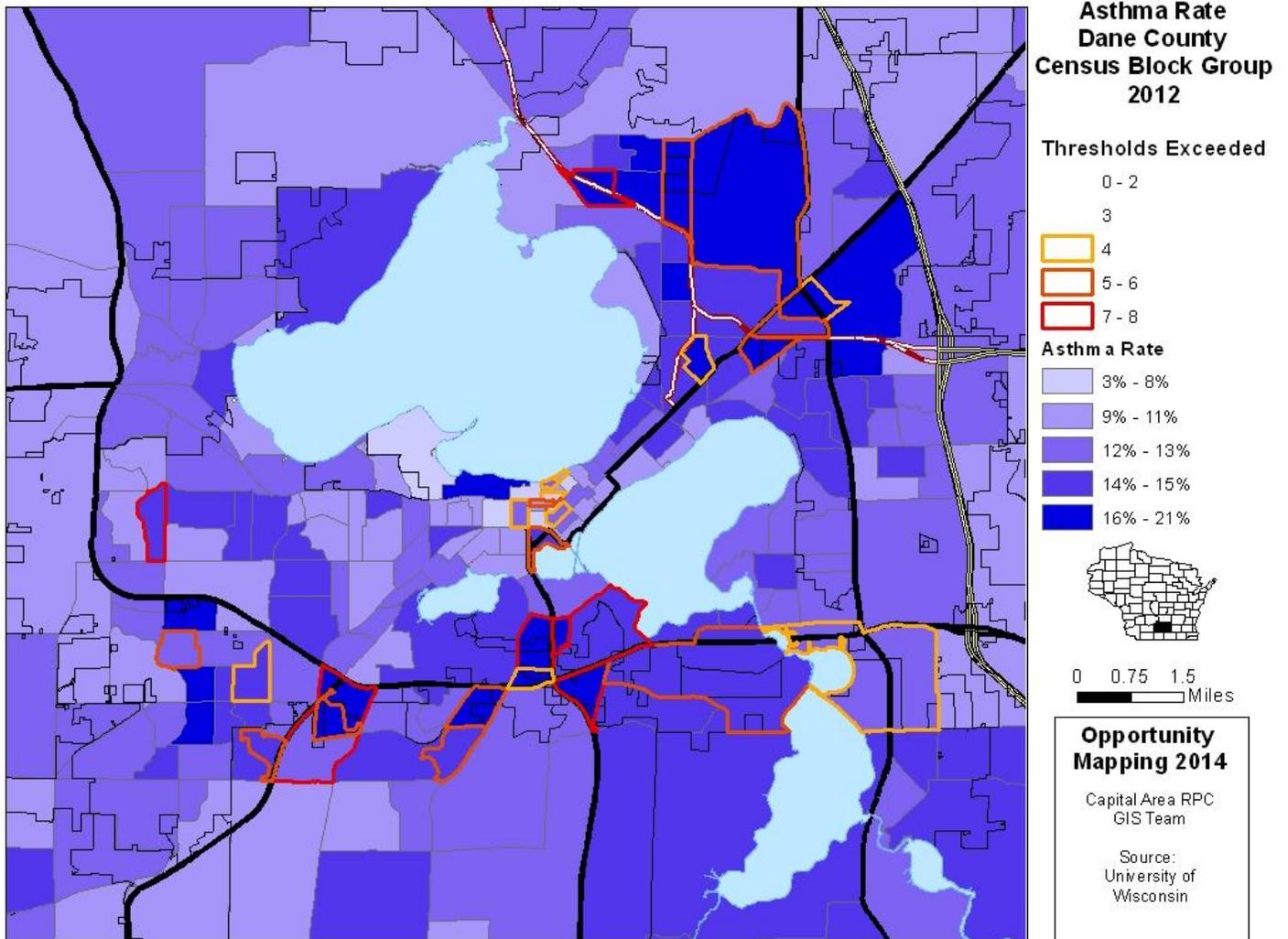
Source: University of Wisconsin Population Health Informatics Exchange (PHINEX)

³⁸ **Childhood obesity** was defined as patients (ages 2 through 17) having an age- and sex-specific body mass index ($BMI = \text{weight}/\text{height}^2 = \text{kg}/\text{m}^2$) at or above the 95th percentile using the Centers for Disease Control 2000 growth charts, as recommended by the American Academy of Pediatrics. Patients with BMI <95th percentile were not considered obese. Body mass index was calculated from heights and weights collected on the same clinic visit. Where multiple BMI values were available, the first available BMI and associated age was used. Where no BMI was available, the patient was excluded, leaving 62,820 patients ages 2-17 with a valid BMI on record.

³⁹ **Asthma** was defined at the individual-level as any patient (ages 0 and higher) with the ICD-9 diagnostic code of 493 in either a clinic encounter diagnosis or problem list fields of the EHR.

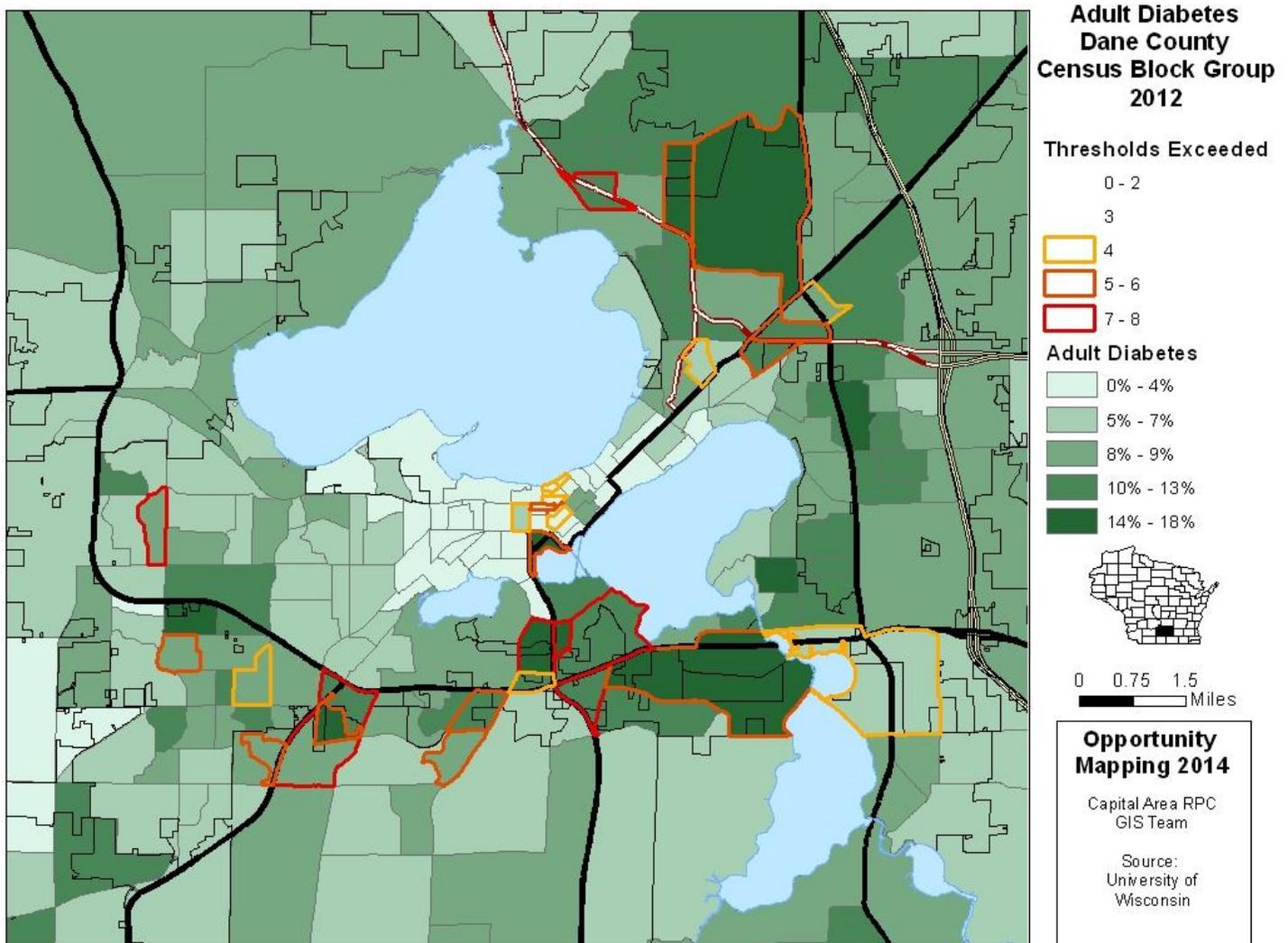
⁴⁰ **Diabetes** was calculated if any PHINEX patient (ages 18 and higher) satisfied at least one of the following: (a) had diabetes diagnosis from both problem list and encounters; or (b) had diabetes diagnosis from problem list or encounters (but not both) and is confirmed with at least two lab tests or one medication prescription/administration.

Figure 85 – Asthma Rates in Dane County



Source: University of Wisconsin Population Health Informatics Exchange (PHINEX)

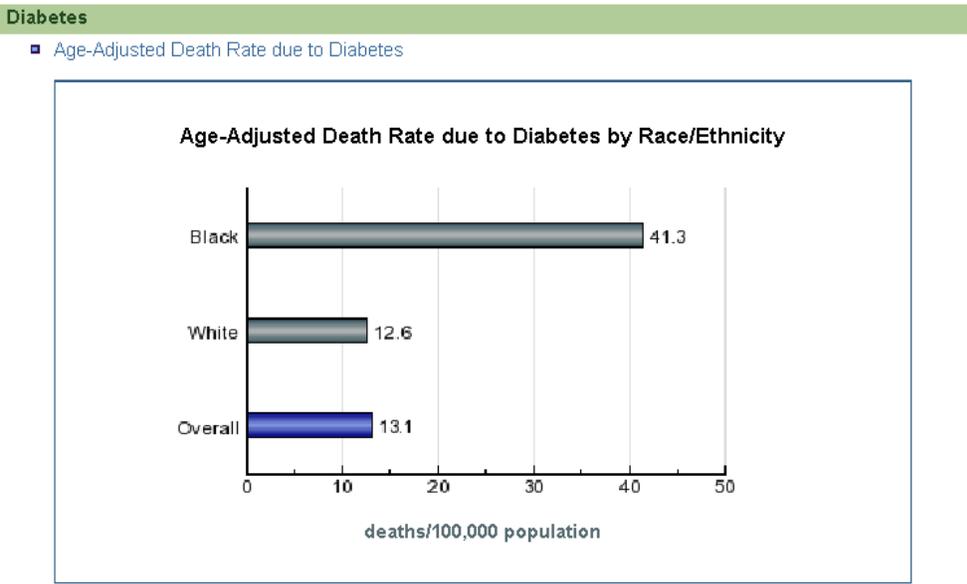
Figure 86 – Diabetes Rates in Dane County



Source: University of Wisconsin Population Health Informatics Exchange (PHINEX)

Figure 87 shows correlation between high rates of diabetes and areas with high concentrations of barriers to opportunity. Since these areas also have high percentages of persons of color, it stands to reason that rates of diabetes are significantly higher among persons of color than among Whites. Figure 87 confirms this, showing age adjusted death rates due to diabetes among Blacks more than three times that among Whites.

Figure 87 – Black-White Disparity in Diabetes Death Rate, Dane County 2012



Source: Public Health Madison & Dane County, <http://healthydane.org/?hcn=DisparitiesDashboard>

The Association Between Close Proximity to Urban Highways and Chronic Disease.

As described in sections above, areas of racialized concentrated poverty, and areas with multiple barriers to opportunity, are located along highways and major roadways in the region. A number of studies correlate adverse health outcomes to proximity to highways.^{41 42} To identify whether such proximity was associated with adverse health outcomes in Dane County, UW researchers examined the rates asthma, childhood obesity and diabetes in block groups close proximity to urban highways.

Their analysis identified residents living in census block groups that contained one or more blocks that particularly close to a busy highway (≤ 100 meters) and examined whether residents living in these high risk regions also had significantly higher rates of chronic disease compared to those who did not.

⁴¹ For a summary literature review, please see: Tegan K Boehmer, “Residential Proximity to Major Highways—United States, 2010,” Center for Disease Control, Division of Environmental Hazards and Health Effects, 2013.

⁴² For additional studies connecting proximity to highways with higher rates of respiratory ailments and cancer, please see the following study listed by conclusion:

“Cardiopulmonary mortality was associated with living near a major road.”

Source: *Association between Mortality and Indicators of Traffic-Related Air Pollution in the Netherlands: A Cohort Study*, Hoek et. al., *The Lancet*, Vol. 360, October 10, 2002.

“Local exposure to traffic on a freeway has adverse effects on children’s lung development, which are independent of regional air quality, and which could result in important deficits in attained lung function in later life.”

Source: *Effect of Exposure to Traffic on Lung Development from 10 to 18 years of age: A Cohort Study*, Gauderman et. al., *The Lancet*, Vol. 369, February 17, 2007

“These results indicate that residence near a major road is associated with asthma.”

Source: *Traffic, Susceptibility and Childhood Asthma*, McConnell et. al., *Environmental Health Perspectives*, Vol. 114, No. 5, May 2006.

“Cough, wheeze, runny nose, and doctor-diagnosed asthma were significantly more often reported for children living within 100 meters of a freeway.”

Source: *Motor Vehicle Exhaust and Chronic Respiratory Symptoms in Children Living Near Freeways*, van Vliet et. al., *Environmental Research* 74, 122-132, 1997.

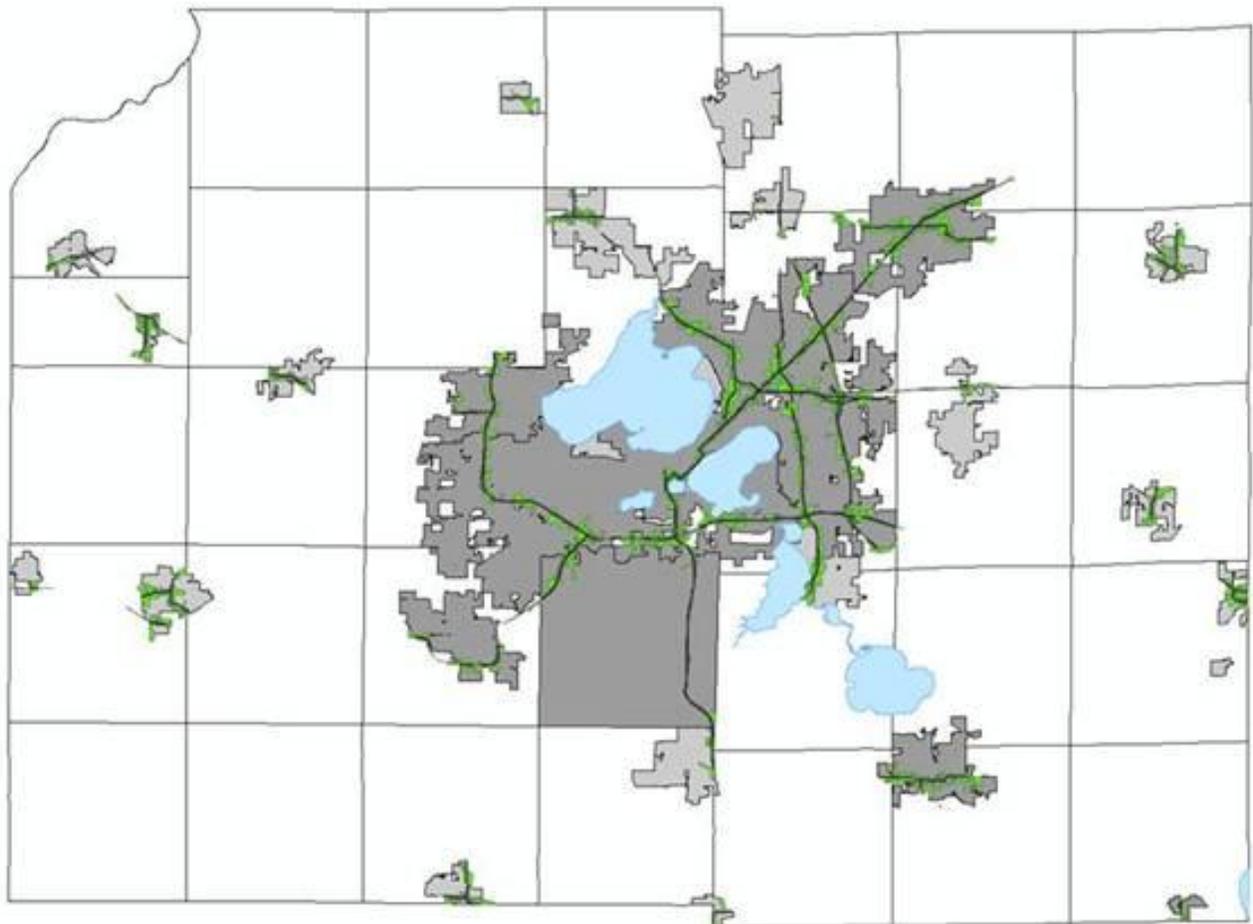
Health Impacts of Close Proximity to Busy Highways

In order to identify **census block groups** containing residents living in close proximity to a busy highway, target blocks were first selected. **Census block groups** are comprised of many blocks. Target blocks were selected if they met all of the following criteria:

- (1) Blocks were less than 50 acres in size (n = 10,584 blocks)
- (2) Blocks with a portion of its boundary located within 100 meters of a state or federal highway
- (3) Blocks are in a city or village (n = 1909 blocks)

Selection criteria were applied within ArcGIS (v. 10.2). If a Dane County **census block group** contained any blocks meeting all three criteria above, it was labeled as being a “high risk” zone (n = 169, label = 1). If a **census block group** did not contain any block meeting the above criteria, it was labeled as “low risk” (n = 139, label = 0). The total residents and housing units in block meeting criteria were summed within each census block group. High risk zones are shown in green in Figure 88.

Figure 88 – Census Block Groups at “High Risk” due to Proximity to Busy Highways



Source: Capital Area Regional Planning Commission

Analysis

Low risk and high risk *census block groups* were compared in regards to census block group rates of **Asthma, Diabetes, and Childhood Obesity**. The calculation of disease rates has been described previously. In order to test for significant differences, a t-test was applied (*independent 2-tailed, t-test assuming equal variance*).

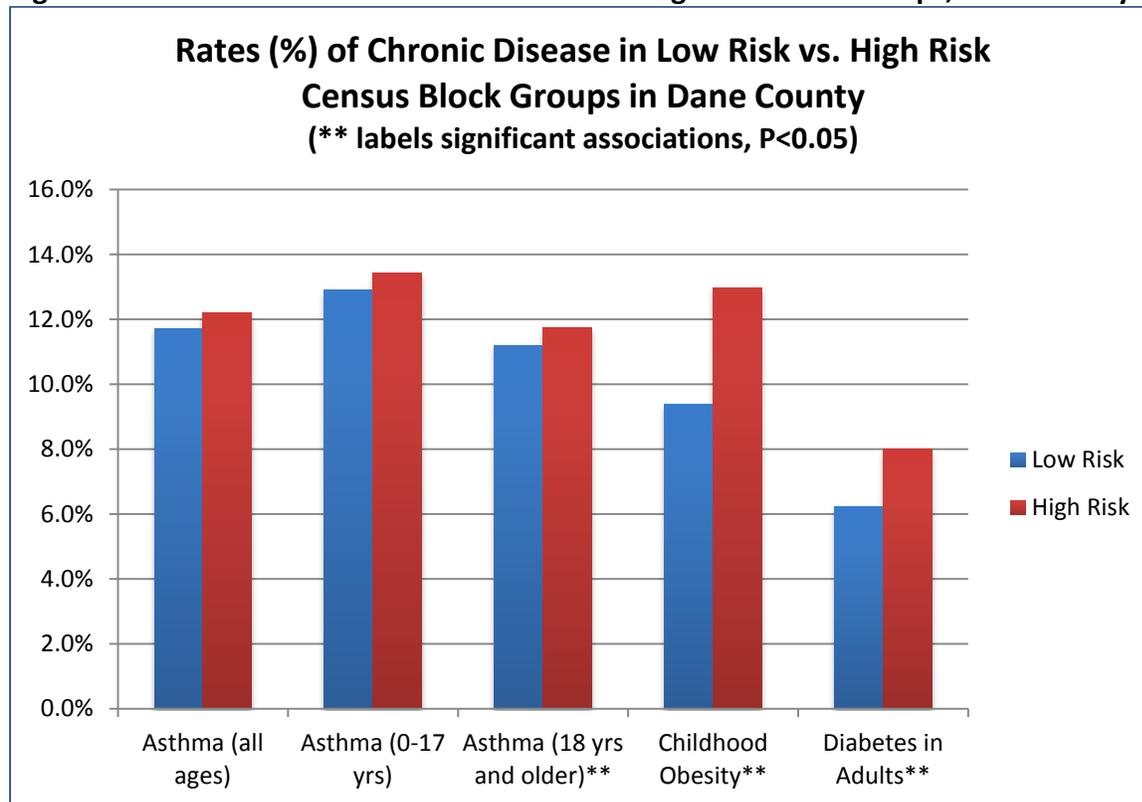
Results

There were significant differences between low risk and high risk census block groups. High risk census block groups had adults with significantly ($P < 0.05$) higher rates of **Diabetes and Asthma**. Asthma differences were minimal and, indeed, childhood **asthma** was not significantly associated with census block group risk. Children in high risk census block groups *were* more likely to have **Childhood Obesity** compared to low risk regions (Note: The probability of this association occurring by chance was $P < 0.05$). (See Figure 89)

Adults in block groups close to busy highways had significantly higher rates of diabetes and obesity. Childhood asthma was not significantly associated with census block group risk.

Results must be interpreted with caution as high risk regions were also associated with many barriers to opportunities. Notably, high risk census block groups had significantly ($P < 0.05$) higher rates of non-white residents, limited English proficiency, single parent households, and percent unemployment. All of these barriers are *also* associated with rates of chronic disease. More studies are needed to determine which factors are *independently* associated with chronic disease as many seem to co-exist in regions.

Figure 89 – Rates of Chronic Disease in Low and High Risk Block Groups, Dane County



Source: University of Wisconsin Population Health Informatics Exchange (PHINEX)

Conclusion

The examination of geography of opportunity in the Madison region shows an uneven distribution of access to economic, educational, environmental, social, and health opportunities. High opportunity areas are found on the west and north of the central portion of the county. Lowest opportunity areas are found in along the periphery of Madison, including Fitchburg; especially along the south Beltline highway.

Access to opportunities in Dane County could be a predictor of race and ethnicity. Persons of color are concentrated in low opportunity areas, while White people are mostly found in high opportunity areas. This disparity shows in various measures of segregation in the region, and resulting disparity in access to opportunity. Person of color living in these low opportunity areas experience multiple barriers to opportunity, ranging from poverty, single-parent families, lack of education, limited English proficiency, transit dependency, unemployment and reliance on food stamps.

Despite these barriers to opportunity, residents have many assets in the form of civic leaders, local organizations that offer a range of services, community centers, and neighborhood parks. Residents build on these assets to advocate for greater access to opportunity and livable communities.

Low opportunity areas also tend to be physically isolated, with limited transit service to employment and shopping districts. In some cases they are food deserts, beyond walking distance of grocery stores that sell fresh produce, yet housing higher numbers of transit-dependent families.

Most low-opportunity areas are not very walkable or bikable, limiting both access to destinations and physical activity. The resulting need for cars to access most destinations increases transportation costs for residents, offsetting more affordable housing costs. South Madison is an exception, with greater transit and employment accessibility.

Many of the areas with many barriers to opportunity were developed as large concentrations of low-rise apartment complexes. Many have clusters of publically assisted housing, others are privately operated. Most residents in these communities attend lower performing schools, although test scores are only one measure of educational outcomes.

Living in areas with many barriers to opportunity corresponds to poor health outcomes. An analysis of electronic medical record data by the University of Wisconsin, School of Medicine and Public Health found that areas with greater segregation, limited English proficiency, single-parent households, unemployment, living close to busy highways, and numbers of children experienced statistically significantly higher rates of asthma, childhood obesity and diabetes.

On the flip side, people living in areas that are walkable, have high transit use, and good access to jobs and grocery stores experience significantly lower rates of diabetes in adults. Walkability and transit use also correspond to lower rates of childhood obesity, and greater employment access also corresponds to lower rates of childhood obesity and asthma.

D. What Contributes to Barriers to Opportunity?

Previous sections of the Geography of Opportunity painted a picture of opportunities in the Madison region: which areas face multiple barriers to opportunity, how race and ethnicity are highly correlated with concentrations of opportunity barriers, and how these disparate accesses to opportunities correspond to worse health outcomes. This section examines some of the causes behind those concentrations of barriers. It describes history of housing discrimination and fair housing, siting of assisted housing, zoning and land use, land and infrastructure availability, community opposition to affordable housing, and local residency preferences.

History of Housing Discrimination

Today's built and social environment is rooted in past decisions. While Fair Housing laws have removed policies, such as redlining, that created or reinforced racially segregated areas, the legacy of these policies remains in current housing patterns and neighborhoods around the country. The following passages provide an historical overview of such policies and practices on a national level⁴³:

Going back to the Federal Housing Administration (FHA) in 1934, virtually all branches of the housing industry, along with the government agencies that regulated it, practiced explicit, overt racial discrimination. Early FHA underwriting manuals stated that “if a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same social and racial classes.” (FHA 1938, par. 937). Racially restrictive covenants assured that properties in the more desirable neighborhoods would stay in white hands until the Supreme Court prohibited enforcement of such agreements in the 1948 case *Shelley v. Kraemer*. Until 1950, the National Association of Realtors stated in its code of ethics, “a realtor should never be instrumental in introducing into a neighborhood . . . members of any race, nationality or any individuals whose presence will clearly be detrimental to property values in that neighborhood.” Training materials used until the 1970s by the American Institute of Real Estate Appraisers included the following example to illustrate sound neighborhood analysis: “The neighborhood is entirely Caucasian. It appears that there is no adverse effect by minority groups.”^{44 45}

This practice [of using race and national origin explicitly as factors in assessing borrower risk] was perfected by the Home Owners' Loan Corporation (HOLC), a federal agency established in 1933 in response to the foreclosure crisis associated with the Great Depression. The HOLC used a discriminatory risk rating system that favored prospective borrowers if the neighborhood in which they wanted to purchase a home was “new, homogenous, and in demand in good times and bad.” Properties would be ranked low (and thus judged high risk) if they were “within such a low price or rent range as to attract an undesirable element,” which often meant that they were located near an African American neighborhood. On the so-called residential security maps used to make these classifications, the lowest ranking (riskiest) neighborhoods were labeled “fourth grade” and shaded in red. . . Private financial institutions incorporated the new rating system in their own appraisals, thereby beginning the widespread institutionalization of the practice

⁴³ From *Foreclosure to Fair Lending: Advocacy, Organizing, Occupy and the Pursuit of Equitable Credit*, New Village Press, 2013.

⁴⁴ “Occupy Wall Street: A New Wave of Fair Housing Activism Squires, Gregory D. and Hartman, Chester?” from *Foreclosure to Fair Lending*. Citations in the quoted text are omitted.

⁴⁵ It is important to note that today the Realtor® Code of Ethics states Realtors® “shall not deny equal professional services to any person for reasons of race, color, religion, sex, handicap, familial status, national origin, sexual orientation, or gender identity” nor shall a Realtor® be “parties to any plan or agreement to discriminate against a person or persons on the basis of race, color, religion, sex, handicap, familial status, national origin, sexual orientation, or gender identity.”

D. What Contributes to Barriers to Opportunity?

known as redlining. These discriminatory policies and practices spread within the real estate sector as private banks began to adopt the underwriting guidelines established by the federal government in the HOLC program.

In the 1940s and 1950s, the HOLC risk rating system came to inform the FHA and Veterans Administration (VA) loan programs. The FHA made it possible to purchase a house with just 10 percent down payment, as compared to the customary 33 percent down payment required before its establishment. Loan terms were also extended for up to thirty years. The VA program provided similar benefits, all the while following the FHA in rating properties in large part on the basis of the “stability” and “harmoniousness” of neighborhoods.

As a result, the increased access to mortgage credit and homeownership made possible through a reduced down payment and better loan terms was available to only some Americans. According to the FHA’s policy, “If a neighborhood is to remain stable, it is necessary that properties shall continue to be occupied by the same racial and social classes. Changes in social or racial occupancy contribute to neighborhood instability and the decline of value levels.” To implement this policy, the FHA even went so far as to *recommend* the use of restrictive covenants to ensure neighborhood stability and racial homogeneity.

The home appraisal industry adopted the notion that race had a direct impact on property values, and appraisers were trained to evaluate properties using race as a factor. Lists that ranked race and nationality in order of preference would remain in appraisal manuals long after the Fair Housing Act was passed in 1968. . . Similar policies were employed in the insurance industry as well. Homeowners’ insurance companies adopted policies that resulted in either the outright denial of insurance in communities of color or the availability only of policies that provided inadequate protection at excessive costs to consumers.⁴⁶

The 1968 Civil Rights Act, commonly referred to as the Fair Housing Act, passed in the wake of riots following the assassination of Martin Luther King Jr., declared discrimination in housing markets to be unlawful but provided weak measures to enforce the law. Congressional action against discrimination in mortgage lending was even later in coming. Not until 1974 did Congress pass the Equal Credit Opportunity Act to outlaw discrimination against Black borrowers, and it was not until 1977 that Congress passed the Community Reinvestment Act to ban the practice of redlining by which financial institutions had long channeled funds away from black neighborhoods.⁴⁷

“By the late 1970s, of course, much of the damage to urban black America had been done. Decades of isolation and disinvestment had left urban blacks in a very vulnerable position and the stage was set for even more pronounced declines with the rise of income inequality during the 1980s, which drove up the spatial concentration of poverty within black neighborhoods to unprecedented levels. The concentration of poverty, in turn, only served to exacerbate the disadvantage that African Americans experienced because of their race and class, isolating them from societal resources and exposing them to uniquely high levels of violence and disorder that would have grave consequences for well-being on a variety of dimensions.”⁴⁸

⁴⁶ “The More Things Change, the More They Stay the Same: Race, Risk, and Access to Credit in a Changing Market,” Goldberg, Debby and Rice Lisa, from *Foreclosure to Fair Lending*. Citations in the quoted text are omitted.

⁴⁷ “Undoing the Bitter Legacy of Segregation and Discrimination,” Massey, Douglas S., from *Foreclosure to Fair Lending*

⁴⁸ Ibid. from *Foreclosure to Fair Lending*. Citations in the quoted text are omitted.

D. What Contributes to Barriers to Opportunity?

Leading up to and following the housing market crash in 2008, home lending policies and practices continued to result in disparate impacts on low-income and communities of color. Automated credit rating that allowed higher volumes of loans, higher returns for high risk loans, relaxed regulatory oversight, and large flows of foreign capital all contributed to a very large rise in high-risk, subprime loans. Such loans typically went to borrowers with lower credit ratings, and carried higher and/or adjustable mortgage interest rates and prepayment penalties. Following the crash of 2008, these loans were significantly more likely to be seriously delinquent or foreclosed upon than a thirty-year fixed-rate mortgage without a prepayment penalty.⁴⁹

Research by the Center for Responsible Lending (CRL), as documented in their report *Lost Ground*, demonstrates that African American and Latino borrowers were much more likely to receive mortgages with these harmful features. Such practices of targeting poor and minority communities for sub-prime loans have been referred to as reverse redlining. “For example, African American and Latino borrowers with FICO [credit] scores above 660 were three times more likely to have a higher interest rate mortgage than white borrowers in the same credit range. Although the majority of foreclosures have affected white borrowers, *Lost Ground* confirmed that African American and Latino borrowers have faced a disproportionate number of foreclosures and delinquencies compared to white borrowers within every income range.”⁵⁰

Following the housing crisis, the FHA established credit score requirements of 580 FICO scores. Yet many major lenders added “credit overlays” that required scores of 620 or even 640 for FHA loans, despite the fact that they were federally guaranteed. This occurred at a time when the FHA stepped forward to shore up the housing market, increasing its share of mortgages from around three to five percent to thirty percent. These higher requirements further burdened low-income and persons of color, whose credit scores suffered from many of the policies discussed above.⁵¹

One of the major effects of the foreclosure crisis is the disproportionate concentration of vacant, bank-owned, or real estate owned (REO) properties in communities of color. When banks fail to do routine maintenance and professionally market REO properties, they result in an additional set of negative effects on the surrounding neighborhoods, further inhibiting revitalization of the community.

An extensive investigation by the National Fair Housing Alliance (NFHA), of the current practices shaping the REO market today, “uncovered deeply troubling patterns of neglect and mistreatment of REO homes in communities of color. Consistently, homes in predominantly white communities are clean, well-presented with manicured lawns, and marketed with professional ‘For Sale’ signs and flattering photos on the multiple listing services or the bank’s website. By contrast, the REO properties in predominantly nonwhite neighborhoods have missing ‘For Sale’ signs, overgrown lawns and shrubs, and unsecured or broken doors and windows, creating a condition that attracts vandalism and dumping of trash. This not only creates blight in once vibrant homeowner communities but also defers families from purchasing REO homes in communities that desperately need new homeowners to recover. The poor maintenance and marketing also makes the REO targets for investor purchases, resulting in absentee landlords that further harms recovery. One result of this investigation and research has been the resolution of the NFHA’s housing discrimination complaint against Wells Fargo Bank.

⁴⁹ “Opportunity Lost: How Low-Income and Minority Households Were Denied Access to Historically Low Home Prices and Interest Rates,” Sermons, M. Willaim, from *Foreclosure to Fair Lending*. Citations in the quoted text are omitted.

⁵⁰ Ibid.

⁵¹ “Onward and Upward: The Fight to Ensure Equal Access to Credit via the Federal Housing Administration,” Berenbaum, David and Forrest, Katrina S., from *Foreclosure to Fair Lending*.

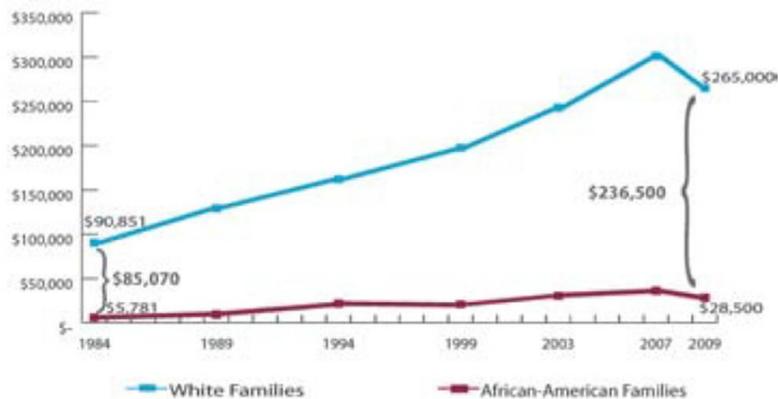
D. What Contributes to Barriers to Opportunity?

As part of a HUD conciliation agreement, Wells Fargo Bank made a commitment to more equitably and more aggressively maintain and market its REO properties.⁵²

In sum, during the first two thirds or three fourths of the twentieth century legal and institutionalized practices of discrimination throughout public and private real estate markets resulted in isolating persons of color in low-opportunity neighborhoods in the U.S.. Starting with the Fair Housing Act and continuing with successive legislation, such discrimination was banned. Yet disparate impacts on low-income communities of color have continued in recent years through home lending practices in subprime loans, higher than required credit scores for FHA loans, and differential handling of REO properties.

Another reason disparate outcomes continue is the generational impact of wealth disparities. One study followed the same set of nearly 1,700 households from 1984 to 2009. They found that the total wealth gap between White and African-American families nearly triples during this period, from \$85,000 in 1984 to \$236,500 in 2009 (see Figure 90). Researchers analyzed a number of possible factors that might explain this growing gap. They found that the number of years of homeownership was the largest predictor of the racial wealth gap than any other factor, including income, unemployment, education and inheritance.⁵³

Figure 90 – Median Net Worth by Race, 1984-2009



Source: Shapiro, T., Meschede, T., & Osoro S, *The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide*, Institute on Assets and Social Policy, Research and Policy Brief, February 2013

⁵² "The Tale of Two Recoveries: Discrimination in the Maintenance and Marketing of REO Properties in African American and Latino Neighborhoods across America," Abedin, Shanti and Smith Shanna L., from *Foreclosure to Fair Lending*.

⁵³ Shapiro, T., Meschede, T., & Osoro S, *The Roots of the Widening Racial Wealth Gap: Explaining the Black-White Economic Divide*, Institute on Assets and Social Policy, Research and Policy Brief, February 2013

D. What Contributes to Barriers to Opportunity?

In explaining why homeownership is so strongly correlated with growing racial wealth gap, the authors reported that:

Residential segregation by government design has a long legacy in this country and underpins many of the challenges African-Americans face in buying homes and increasing equity. There are several reasons why home equity rises so much more for whites than African-Americans:

- Because residential segregation artificially lowers demand, placing a forced ceiling on home equity for African-Americans who own homes in non-white neighborhoods⁵⁴;
- Because whites are far more able to give inheritances or family assistance for down payments due to historical wealth accumulation, white families buy homes and start acquiring equity an average eight years earlier than black families⁵⁵;
- Because whites are far more able to give family financial assistance, larger up-front payments by white homeowners lower interest rates and lending costs; and
- Due to historic differences in access to credit, typically lower incomes, and factors such as residential segregation, the homeownership rate for white families is 28.4 percent higher than the homeownership rate for black families⁵⁶

In addition to the generational impact of wealth disparities, the impact of institutionalized racial discrimination continues in deep seated biases and attitudes. Even when overt discrimination is diminished, evidence shows that decisions such as hiring and promotion remain influenced by subconscious bias created by a variety of societal messages and experiences.

The above discussion focuses on the national level, for which substantial research has been published. How and to what extent discriminatory housing practices and policies, or practices that resulted in disparate impacts, were carried out in the Madison area is largely beyond the scope of this report. However, given federally sanctioned and legal discrimination, and widespread discriminatory practices throughout the real estate industry in the U.S., it is reasonable to infer that such practices existed in Madison.

One report addressed the housing conditions for African Americans in Madison in the 1950s and found that, “three quarters of Black families lived in 2 wards, in the Greenbush and South Madison neighborhoods. The report concluded that “this illustrates that Negroes are restricted from moving freely within the city. The families who have moved away from the traditional areas have done so through almost exclusively personal contacts.”⁵⁷

⁵⁴ Shapiro, Thomas, *The Hidden Cost of Being African American*, Oxford University Press, 2004, as cited in reference Shapiro, Meschede and Osoro above.

⁵⁵ Joint Center for Housing Studies analysis of American Housing Survey, 2009, tabulations of 2009 AHS, as cited in reference Shapiro, Meschede and Osoro above.

⁵⁶ Joint Center for Housing Studies, *State of Nation's Housing*, 2012, as cited in reference Shapiro, Meschede and Osoro above.

⁵⁷ *Negro Housing in Madison*. National Association for the Advancement of Colored People, Madison Branch. 1957

D. What Contributes to Barriers to Opportunity?

Additionally, Richard Harris, Ph.D. described, in his book *Growing up Black in South Madison*, how the low-income neighborhood of the Triangle (bordered by Park Street, West Washington, and Regent Street) was demolished for urban renewal in the 1960s. The neighborhood housed a significant African American population that had significant difficulties finding new housing due to discriminatory barriers in many neighborhoods.⁵⁸

Much of the increase in the populations of persons of color in the Madison area occurred after legal discrimination ended. It is possible that more recent practices described above - home lending practices in subprime loans, higher than required credit scores for FHA loans, and differential handling of REO properties – may have contributed to racialized pockets of poverty in the area. Other factors, such as zoning and land use barriers discussed below, are also likely contributors to such isolation.

Housing Discrimination and Fair Housing

In 1988, Congress amended the Fair Housing Act to give the U.S. Department of Housing and Urban Development and the Department of Justice a federal enforcement mechanism. The Fair Housing Amendments Act supported the funding for both private fair housing agencies and state and local government human rights agencies to enforce access to housing regardless of a person's race, color, religion, sex, familial status, or disability.

Fair Housing complaints, for both rental and home purchase, are investigated by a number of different agencies on behalf of Dane County residents. In the case of City of Madison residents, the City's Equal Opportunities Division (EOD) reviews reports of discrimination and handles the majority of the complaint process, determining whether probable cause exists for complaints. Appeals are considered by the Equal Opportunities Commission. For all other jurisdictions within Dane County, the Fair Housing Center of Greater Madison (FHCGM)—a satellite office of the Metropolitan Milwaukee Fair Housing Council (MMFHC)—is responsible for the intake of fair housing complaints, investigation, and attorney referrals.

The Dane County Corporation Counsel is the agency responsible for prosecution of Dane County fair housing discrimination complaints. Despite their names, the FHCGM and MMFHC are able to address complaints for all of Dane County and Wisconsin respectively. Both offices also maintain outreach and education, fair lending, and inclusive communities programs.

Fair housing complaint investigation also exists within the State of Wisconsin's Department of Workforce Development, Equal Rights Division with the Labor and Industry Review Commission (LIRC) handling appeals. Fair housing complaints may also be filed by Dane County residents at the Federal level with the Department of Housing and Urban Development. Complaints can be filed at the regional, state, or federal levels. Four complaint options exist for Madison residents and three exist for Dane County residents. Definitions of protected classes do differ between the Federal, State, and regional/local levels, becoming most inclusive of classes at the County/City level.

⁵⁸ Harris, Richard Ph.D., *Growing up Black in South Madison: Economic Disenfranchisement of Black Madison*, RoyTek Publishing, 2012

D. What Contributes to Barriers to Opportunity?

Complaints in 2011 increased by 12 over the previous year, bringing the total to 86.

Figure 91 – Fair Housing Complaints for Dane County

	2008	2009	2010	2011
Grounds:				
Age	3	3	2	6
Arrest/Conviction Record	7	6	8	3
Disability	19	19	19	19
Familial Status	7	3	4	6
Lawful Source of Income		1	9	2
Marital Status	2	2	2	1
National Origin	4	2	1	1
Political Beliefs	n/a	n/a	n/a	1
Race	20	9	14	23
Refusal to provide SS#	n/a	n/a	n/a	1
Religion	3	1	0	2
Section 8 Participation	6	1	12	12
Sex	4	4	2	6
Sexual Orientation	1	1	1	3
Total	76	52	74	86

Source: Metropolitan Milwaukee Fair Housing Council Annual Reports

According to “The City of Madison: Analysis of Impediments to Fair Housing Choice” written by MSA Professional Services, Inc., during 2010-2012, Madison had 45 reported cases of fair housing discrimination. Fifteen of these cases were withdrawn, 16 were found to have “no probable cause,” and 2 were “dismissed.” Of the remaining cases, 4 were “settled” and 5 were reported as still “pending.” Complaints based on “race” or “color” accounted for 38% of the cases reported to the City; complaints based on “conviction record,” “disability,” and “age” also accounted for a significant number of complaints at 12, 11, and eight percent respectively. Between 2008 and 2012, 29 cases were filed for Madison at the Federal level. “Disability” and “Race” at 15 and 11 cases apiece account for the majority of those filed with the Department of Housing and Urban Development (HUD).

Fair housing complaints in Dane County—filed with the Metropolitan Milwaukee Fair Housing Council—have averaged 72 complaints per year in the four year period from 2008-2011. Complaints in 2011 increased by 12 over the previous year, bringing the total to 86. Both “race” (19 cases) and “disability” (23 cases) account for a large portion of those cases filed in 2011. Also notable are the 12 cases filed in 2010 and 2011 on the grounds of “Section 8 participation.” It is likely that most complaints are related to rental housing.

Lending Analysis

The United States has a history of discriminatory practices in the owner-occupied housing market, as described above. Analysis of lending data in both the City of Madison and outlying communities in Dane County was made possible via the Home Mortgage Disclosure Act (HMDA) of 1975, which allows for the provision of publically available loan data to be used to determine whether financial institutions are serving the housing needs of their communities.

As of 2003, lenders are required to obtain transaction data on race, ethnicity and gender from telephone interviews of an applicant. This new policy has increased the reliability of data regarding lending practices and the potential for discrimination in lending. Figure 92 and Figure 93 present information on the mortgage loan application data in both the City of Madison and in outlying communities in Dane County.

Figure 92 shows the breakdown of all 53,577 mortgage applications originating in the City of Madison in 2009 by race. The numbers in the figure reflect a disproportionately lower proportion of non-white applicants for home loans when compared to the city demographics as a whole, with white households accounting for 86.8% of all loans originating in the City of Madison. Furthermore, additional data from HMDA indicates that **Black households are rejected from home loans at a 14-17% rate, while Hispanic households are rejected at rates between 26-30%, compared to a 9-10% rejection rate amongst white households.** Although the rates of rejection from black and Hispanic households are based on a small sample size that limits its validity, the large scale difference amongst Hispanic and white households is likely to be statistically significant. Thus, it is likely that Hispanic households in the city of Madison have fewer housing choices due to fewer attempts and lesser success securing home loans.

Figure 92 – Applications by Race/Ethnicity: Madison Area, 2009

Table 2-32. Applications by Race/Ethnicity Source: 2009 HMDA Data	All loans	Conventional	FHA, FSA/RHS & VA	Percent of City householders
White households	86.8%	85.8%	89.7%	84%
Asian households	2.3%	3.8%	1.7%	6.2%
Hispanic households	1.1%	1.6%	1.7%	4.4%
Black households	0.7%	0.5%	1.9%	5.8%
American Indian / Alaska Native households	0.2%	0.2%	0.2%	0.4%
Hawaiian / Pacific Islander households	0.1%	0.1%	0.1%	0.02%

Source:MSA Professional Services

In outlying communities of Dane County, there were 2,158 applications for a home purchase loan, of which 1,666 (77.2%) were approved. Figure 93 indicates that of these approved loans in outlying communities, 45.8% of approved applicants made more than 100% of the AMFI, while only 12.0% made less than 50% of the AMFI. This indicates a disproportionately higher amount of wealthy individuals apply for and receive home loans in Dane County, limiting housing choices of less wealthy individuals.

D. What Contributes to Barriers to Opportunity?

Additional data from outlying communities in Dane County indicate that 88.1% of all applicants were from White households, with 1.7% of applicants from Black households and 1.2% from Hispanic or Latino households. A further look at this distribution by race and ethnicity indicates that 78% of all applications by White households resulted in loan origination, versus 68% by Black households and 54% by Hispanic households. Denial rates also showed that 11% of all White households were denied loans outright, versus 17% of Black households and 30% of Hispanic households. However, small sample sizes amongst all demographics necessitate caution drawing conclusions from these numbers.

Figure 93 – Applications by Percentage of Area Median Family Income, Dane County Outlying Communities, 2009

TABLE 40 DISPOSITION OF APPLICATIONS FOR HOME-PURCHASE LOANS DANE COUNTY 2009									
Category	TOTAL	Less than 50% AMFI		50% to 79% AMFI		80% to 99% AMFI		More than 100% AMFI	
	No.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Applications Received	2,158	292	13.5%	628	29.1%	304	14.1%	934	43.3%
Loans Originated	1,666	200	12.0%	456	27.4%	247	14.8%	763	45.8%
Apps. Approved But Not Accepted	74	11	14.9%	15	20.3%	10	13.5%	38	51.4%
Applications Denied	246	68	27.6%	71	28.9%	31	12.6%	76	30.9%
Applications Withdrawn	157	24	15.3%	42	26.8%	22	14.0%	69	43.9%

Sources: Federal Financial Institutions Examination Council; Maxfield Research Inc.

Source: Maxfield Research Inc.

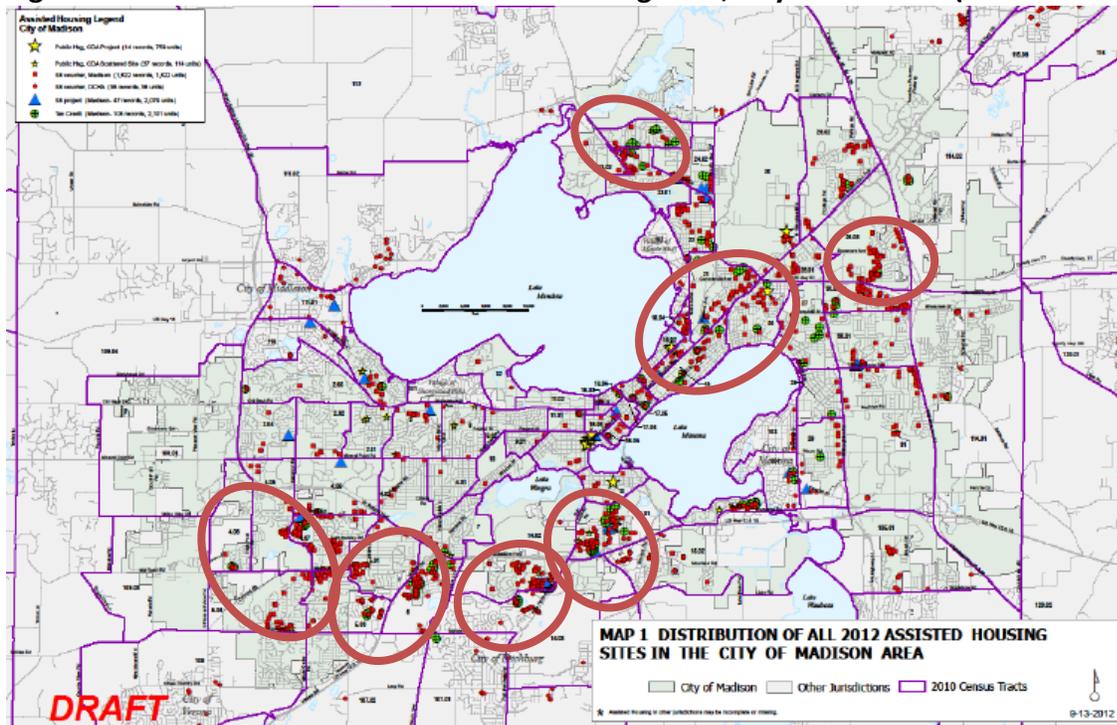
Siting of Assisted Housing

Where developers and policy makers chose to locate low income or affordable housing can directly affect segregation. Below is a 2008 map of the siting of assisted housing in and around the City of Madison. The housing on the map generally fall in two categories being Section 8, Section 42 and CDA public housing, and community based residential facilities and temporary housing.

Section 8, Section 42 and CDA public housing is shown on the map above. There are several areas with high concentrations of these types of units, including south of the beltline between Gammon and Fish Hatchery Roads and just North of the beltline between Fish Hatchery Road and the Yahara River. Other concentrations occur along East Washington Avenue around Highway 30, and north along Packers Drive. Many of these areas also have the densest concentrations of assisted housing, as measured by the number of assisted units compared to a census tract's total number of housing units. The highest concentration reached 23% in census tract 6, which is south of the beltline and east of Verona Road (Allied Drive neighborhood). In comparison, assisted units comprise only 6% of all housing units in the City of Madison. Approximately 500 Madison landlords participate in the Section 8 program. Demand for public housing projects is high—wait lists for most assisted housing sites in the Madison area were closed as of early 2013. Demand for Section 8 vouchers is also high – waiting lists for vouchers have been closed since 2007.

D. What Contributes to Barriers to Opportunity?

Figure 94 – Distribution of 2012 Assisted Housing Sites, City of Madison (circles added)



Source: City of Madison

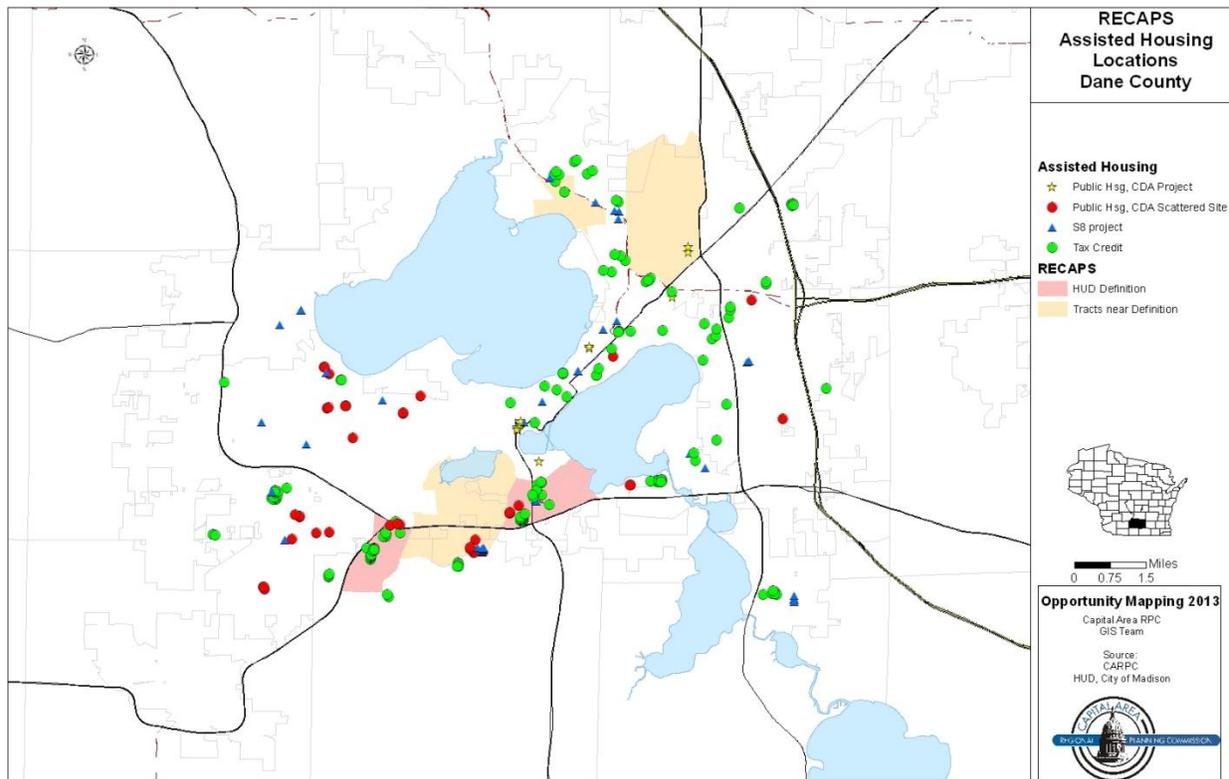
Concentrations of People of Color and Distribution of Assisted Housing Units

When compared to racial and ethnic composition, some locations with high concentrations of assisted housing appear to have higher levels of persons of color. (For comparison see Figure 44 on p. 46 and Figure 94 on p. 109.) These include areas south of the beltline along Gammon, Verona and Fish Hatchery Roads, near Park Street and Badger Road and West Washington, near Hwy 30 and East Washington and on Northport Drive.

When looking at income, some of the concentrations of assisted housing appear to be located in low-income areas, however the gradients of income appear less dramatic. While all concentrations mentioned are in block groups with median household incomes below the 2010 county median (\$60,519, ACS 5 year estimates), there are many blocks groups that meet this criteria, with the lowest household income block groups (concentrated around the university) having relatively few assisted units. Another issue could be causality of incomes in a census block group due to the presence of assisted housing. Assisted residents are low income, and high concentrations of units would result in an overall lowering of the median income. Data is not precise enough to determine whether the assisted housing is located in an area where non-assisted housing is low-income, or whether the non-assisted housing is average or higher income, with concentrations of assisted housing bringing down the average.

The community base residential facilities and temporary housing are primarily located by the University, the Capitol and on the isthmus and do not seem to have any relation to racial/ethnic composition or income.

Figure 95 – Assisted Housing Units and RECAPS Areas



Source: City of Madison, Department of Housing and Urban Development

Zoning and Land Use Barriers

Land development policies can directly impact the affordability of living in a specific place, and some policies in place in Dane County limit the amount of affordable housing that can be created. Many communities have minimum lot sizes for their primary single family residential category and place limits on the number of multifamily units that can be created in a year. Other limitations on duplexes or secondary dwelling units can present barriers to affordable housing.

Many communities have a preference for owner-occupied and higher end units, in contrast to rentals and affordable units. One of the primary motivations is for schools and municipal budgets, however this often results in the exclusion or limitations of more affordable units.

Dane County's Analysis of Impediments to Fair Housing Choice 2010 identified zoning and land use barriers to fair housing. The Analysis of Impediments (AI) reviewed area comprehensive plans available online and found the following areas of concern:

- *Limiting multi-family units* – many cities and villages have identified policies in their comprehensive plans to keep single-family homes the predominant housing type, usually establishing the percent of single-family homes to between 65% and 75% of the total housing inventory.
- *Lot size* – higher minimum lot sizes in some localities make affordable housing unobtainable, especially as land costs have escalated in recent years.

D. What Contributes to Barriers to Opportunity?

- *Promoting higher levels of owner-occupied housing* – some jurisdictions have goals promoting housing ownership or maintaining a set home ownership rate, which, although providing stable neighborhoods, can also be a disincentive to providing rental units.
- *Design standards* – use of language such as requiring enforcement of high-quality design standards for multi-family construction, requiring multi-family buildings to conform to existing neighborhood architectural design, or requiring multi-family buildings to have brick facades or concrete drives can increase costs enough to prohibit rental apartments.
- *Slowing the rate of residential growth* – many of the cities in Dane County have recorded significant residential growth over the last decade, causing some to reevaluate development patterns and, in some cases, limit the rate of expansion of urban service areas, which can have the unintended consequence of increasing land costs which then raise housing prices.
- *Increasing housing prices* – median housing prices in some jurisdictions are well above the county average, and beyond the reach of many area employees; some of these cities and villages lack policies or programs to encourage affordable housing.

City of Madison's Analysis of Impediments to Fair Housing Choice 2013 reached the following conclusions related to land use policies:

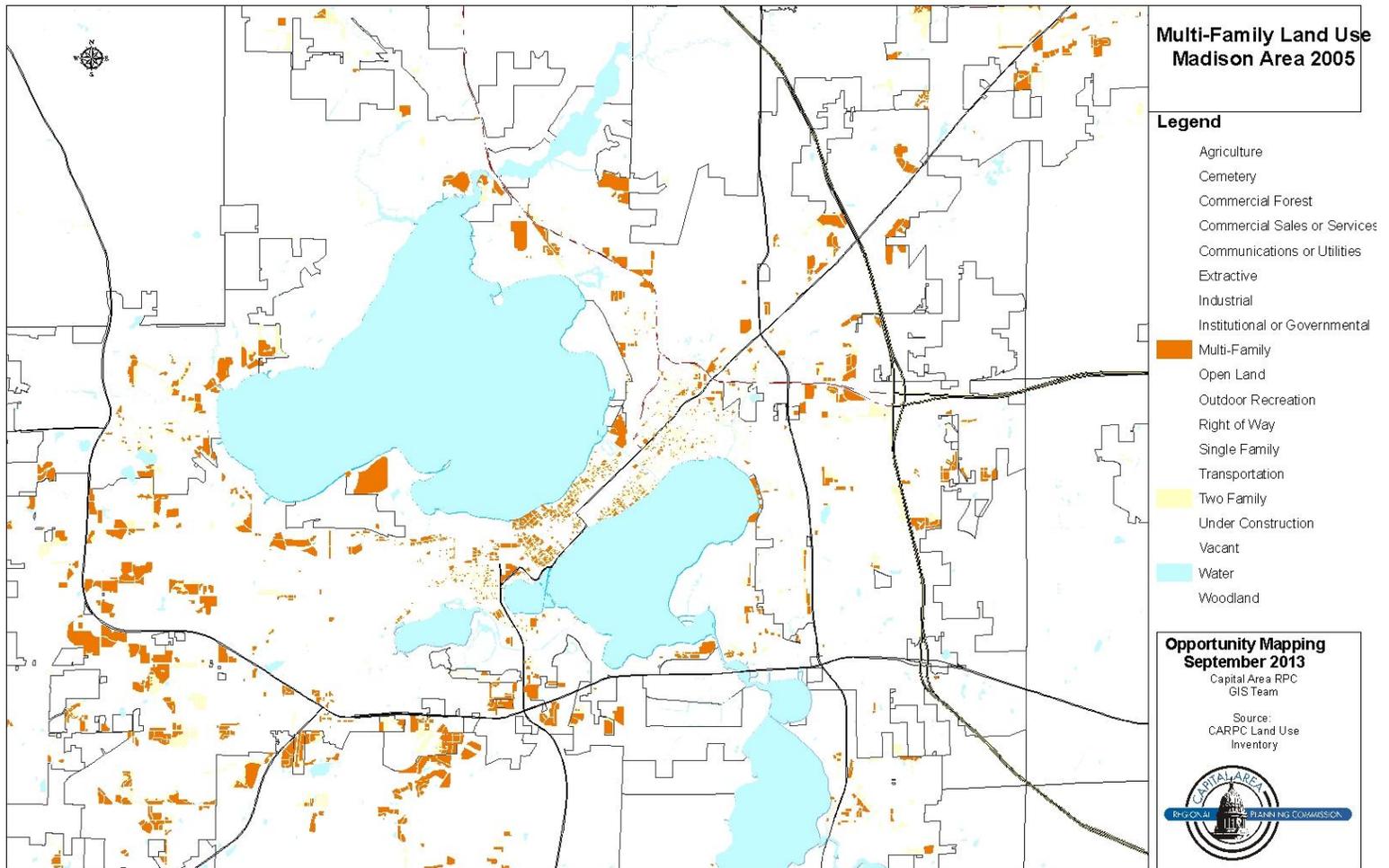
- Building cohousing or accessory dwelling units (ADUs) are options for improving affordability of housing and should be encouraged. However, these building types are not allowed in all areas and often face opposition from neighbors (NIMBYism).
- Affordable housing is currently directed toward low income neighborhoods. The document recommended that a comprehensive housing strategy be implemented, one that ensures affordable housing and units representing a greater range of price points are constructed in all neighborhoods.
- Areas that are zoned to allow multi-family housing—where affordable housing projects are currently located—are often spatially disconnected from important infrastructure. These areas of the city often have poor access to grocery stores and long commute times using public transportation.

Another issue that arises when affordable or rental units are permitted is the compartmentalization or isolation of these units (see Figure 96). Urban planning best practices suggest that mixed income housing, with small multifamily units, duplexes and smaller lot single family integrated with larger lots supports stronger neighborhoods.

D. What Contributes to Barriers to Opportunity?

Urban planning best practices suggest that mixed income housing, with small multifamily units, duplexes and smaller lot single family integrated with larger lots supports stronger neighborhoods.

Figure 96 – Multi-Family Land Uses, Madison Area 2005

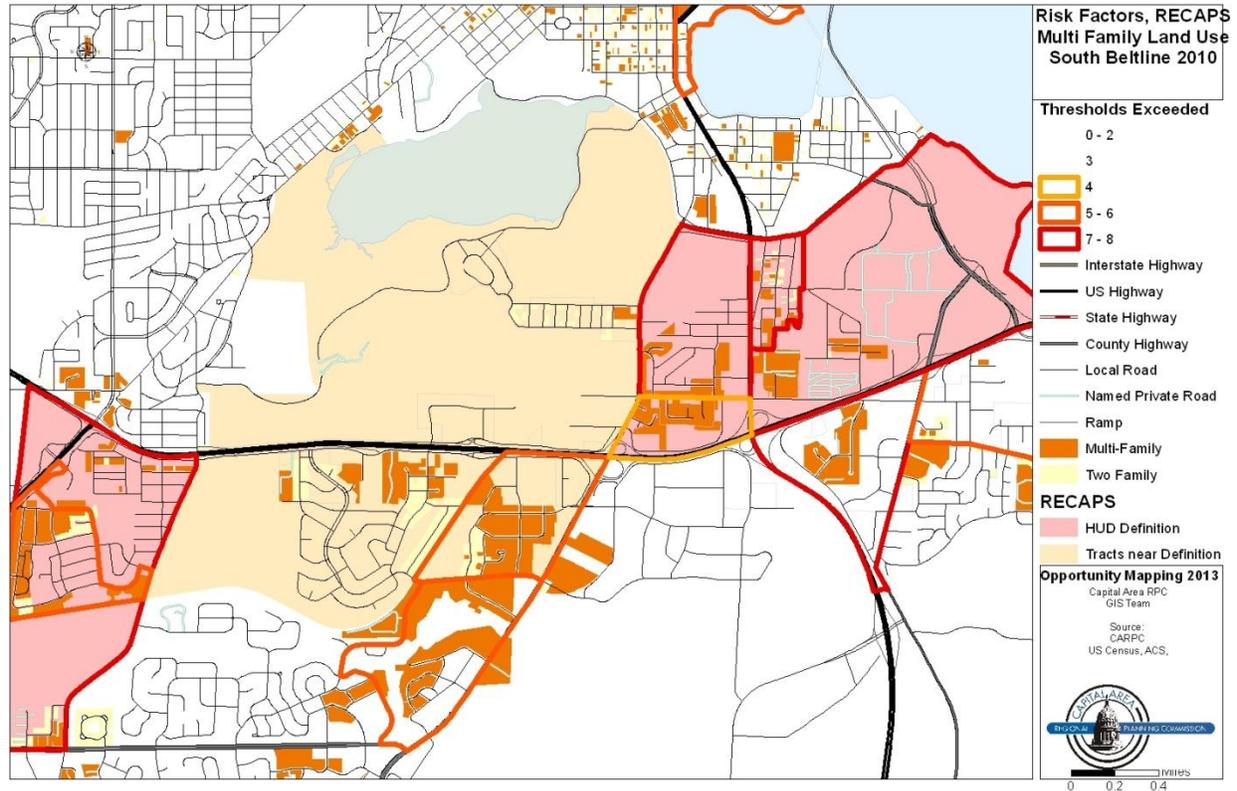


Source: Capital Area Regional Planning Commission

D. What Contributes to Barriers to Opportunity?

Concentration of two- and multi-family land uses between John Nolen Drive and Verona Road along the Beltline.

Figure 97 – Multi-Family Land Uses and Concentrated Barriers to Opportunity, South Madison and Fitchburg



Source: Capital Area Regional Planning Commission

One of the locations in the county where this compartmentalization accompanies other challenges to equal opportunity is along the border between Madison and Fitchburg. Figure 97 illustrates the concentration of two- and multi-family land uses between John Nolen Drive and Verona Road along the Beltline. There is a high correlation between land uses in this area and both the HUD defined Racial and Ethnic Concentrations of Poverty and areas nearing that definition (Section—Barriers in Accessing Opportunities) as well as block groups identified in this report as exceeding more than four thresholds of barriers in access to opportunity (Section G—Comparing Opportunity and Barrier Areas).

Land and Infrastructure Availability

Lakes geographically define Madison to a large extent. The narrow strip of land is home to the state's capitol, its flagship university and thousands of residents and employees. Consequently, land is at a premium in many locations, and land sales often occur at premium prices.

CARPC has created an infill and redevelopment assessment as part of a BRT feasibility study. This assessment identified potential for over 8,000 residential units along four major corridors emanating from the Capitol. The study did not address market issues, nor how many units would be affordable.

D. What Contributes to Barriers to Opportunity?

CARPC also commissioned a market study from the Center for Neighborhood Technology, to estimate the potential demand for housing and commercial space along the possible BRT corridors. The study found that, if current development trends continue over the next 25 years, there will be an unmet demand for 15,788 multi-family and small-lot single family housing units. The study also found a demand for between 115,000 and 490,000 square feet of commercial space along the BRT corridors.

In certain areas of Madison such as the isthmus, development of affordable housing without subsidy will be challenging due higher construction and land costs and the potential for environmental and soil issues. The study acknowledges that redevelopment is unpredictable and responds to strong market demand.

Infrastructure costs can also be a challenge for affordable housing on greenfield sites. As part of Future Urban Development Area planning (FUDA), CARPC found one mile of road, sewer and water lines costs on average \$3.6 million dollars. This creates another financial hurdle in communities which limit density, as low-density developments tend to have a longer amounts of road per household, which increase the per unit cost.

Certain communities have placed an emphasis on low-income senior housing, which satisfies a municipality's low income housing requirements but does little to assist low-income families. There are 3,865 LIHTC (Low Income Housing Tax Credits) units in Dane County that are currently designated for low income residents. Of those at least 366 are specifically for low income seniors. Some smaller municipalities have only utilized LIHTC for senior housing, for example Monona, Belleville, Cottage Grove and Mount Horeb.

Community Opposition

Affordable, low-income and frequently market-rate rental housing can have an uphill battle during the approval process. Communities often discuss the need for and desire to provide affordable housing in their comprehensive plans, however when a proposal surfaces neighboring residents regularly object. Common complaints include decrease in property value for neighborhoods, increased traffic and crime, negative impacts on schools and that its not appropriate for, or will detract from, the surrounding context.

An example of such community opposition occurred in Shorewood Hills, a village centrally located and surrounded by the City of Madison. In 2010, a developer withdrew an affordable housing development proposal in the Village. The proposal encountered opposition stemming from concerns such as those cited above, as well as lack of experience of the developer and unfamiliarity with the Madison market. A very similar project was subsequently built across the street in the City of Madison by a different developer.

In this example, the Village undertook an effort to proactively address affordable housing needs and issues. Following rejection of the proposed affordable housing project, the Village of Shorewood Hills undertook a multifamily housing study to better understand the facts related to affordable housing development and to address misconceptions about multifamily and affordable housing. With facts in hand, the Village then began to work proactively on an affordable multi-family housing project. The Village contributed \$2M in Tax Increment District (TID) financing to a project an 80-units apartment project, 30 units are qualified Section 42 affordable housing including at minimum 11 three bedroom, 9 two bedroom and 6 one bedroom units. There was little to no opposition to this project.

D. What Contributes to Barriers to Opportunity?

Local Residency Preferences

It is difficult to have a full understanding of residency preferences given the diversity of residents in Dane County. One preference that data may suggest is for residents choosing to live amongst those of the same racial or ethnic background. This is supported by relatively defined concentrations of Hispanic and Asian residents, possible for language reasons.

HCV (Housing Choice Voucher) Landlords Lacking

The local residents in Dane County prefer Section 8 Vouchers which is demonstrated by the long waiting list to receive a voucher. This can be a problem because if a resident is not able to get on the waiting list or is not selected to receive a voucher that is a barrier to entry into the community. The waiting list for the City of Madison has been closed since 2007 which is an absolute barrier, for the past five years no one new has been able to sign up to receive, let alone be selected to receive, a Section 8 voucher. Residents prefer Section 8 vouchers because of the deep subsidy it supplies; no matter where the resident or household finds housing the voucher will cover what they can't afford. In contrast, housing that is priced to be affordable for people making 30% of AMI is a shallow subsidy because if the household only makes 20% AMI they are still having to pay the full amount of rent.

Participation of landlords in Section 8 or other rental assistance programs is voluntary, which can result in participants being concentrated in certain locations, as seen in the assisted housing maps above. Landlords choosing not to accept vouchers could be viewed as discriminating, because "lawful sources of income" is a protected class in Wisconsin and Dane County. However, Section 8 vouchers are not included in this category as a result of the 1995 court ruling in *Knapp v. Eagle Property Management Corp.*, 54 F.3d 1272, 63 USLW 2750 (1995).

Currently the Madison area has over 500 landlords participating in the Section 8 program and 1,600 households are being helped through this program.

Tax Credit and Funding Availability

The availability of Tax Credits and other forms of funding for low income housing is very limited. Current funding restrictions require creative partnerships between lenders, local governments, organizations, agencies and developers.

WHEDA (Wisconsin Housing and Economic Development Authority) is the Agency that distributes LIHTC funding throughout the state. They have over 3 billion dollars in assets which include money to lend to developers who are interested in providing low income housing through new development or rehabilitation of existing housing.

E. Promoting Equitable Access to Opportunities

As discussed in the previous sections, the geography of opportunity in the Madison region is unevenly distributed. Residents in some areas have access to a wealth of opportunities while residents in other areas face compounding barriers to opportunity. A history of discriminatory housing policies combined with land use practices and community opposition continue to perpetuate isolated areas where persons of color disproportionately face limited access to good jobs, healthy foods, good neighborhood schools, and safe walking environments. Limited physical access along with economic and social barriers, including poverty and single-parent homes, correlate with higher rates of childhood obesity, asthma, and adult diabetes.

Ensuring equitable access to opportunity for all not only helps those facing multiple barriers, it benefits everyone in a region. As stated succinctly by the Kirwan Institute:

A region is a collection of communities sharing not just borders, but a linked economic and social fate. ... **In today's global economy, a metropolitan region must harness the productive capacities of all of its residents, businesses and institutions in order to stay competitive, sustainable, vibrant, and healthy.** The difference between regional vibrancy and regional vulnerability depends upon the success of maximizing opportunity for all of a region's neighborhoods and people. (Kirwan, 2007)

The imperative of harnessing the productive capacities of all residents is evident in the Madison region. As shown above, persons of color comprise a third of young children in the region and will constitute a majority of the workforce in coming decades. Yet educational attainment of persons of color currently lags behind the levels required for most new job openings. Failure to close this educational gap will make the Madison area less competitive in an increasingly diverse nation; ultimately reducing economic opportunity for all residents.

Understanding inequities in access to opportunity is only one step in the process to reduce barriers. As the U.S. Department of Housing and Urban Development (HUD) states, the Fair Housing Equity Assessment process includes the three "Ds:" data, deliberation, and decision-Making. The sections above presented the data. This section presents a framework for deliberation and decision-making. It further reviews some opportunities in the region for promoting equitable access.

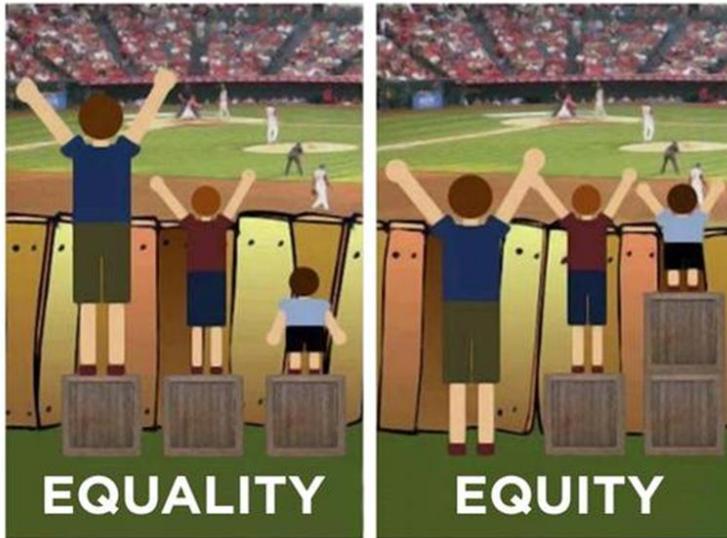
Framework for Promoting Equitable Access to Opportunity

The Equity Work Group of Capital Region Sustainable Communities (CRSC) investigated best practices in equity, equitable development and equitable access. Appendix E, Best Practices for Incorporating Equity and Inclusion in Planning, summarizes this investigation. This section draws from their work.

What does equitable access, and equity, mean? Equity is fair and just inclusion by creating the conditions that allow all to reach their full potential. Equity does not mean treating everyone the same, for example, providing stairs to everyone equally does not give people in wheelchairs equitable access. Figure 98 below illustrates the principle of equitable access.

eq-ui-ty ek-wi-te, noun. Just and fair inclusion. An equitable society is one in which all can participate and prosper. The goals of equity must be to create conditions that allow all to reach their full potential. In short, equity creates a path from hope to change.
- PolicyLink

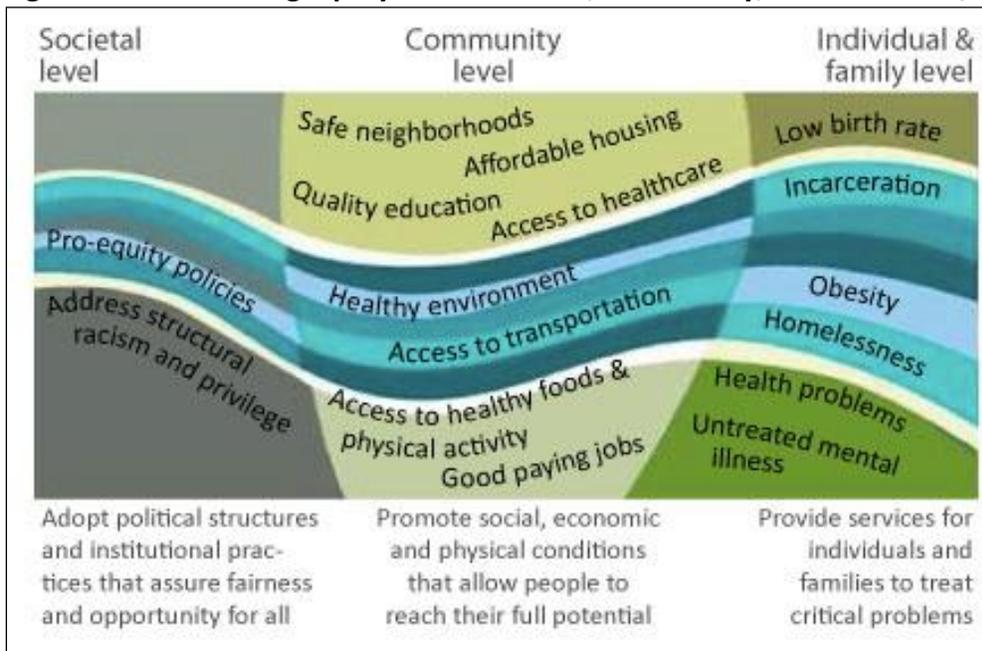
Figure 98 – Equality vs. Equity



Source: Public Health Madison Dane County

An important best practice for identify potential actions comes from the field of public health. When considering actions to improve public health outcomes, an “upstream” versus “downstream” framework is sometimes used. Figure 99 shows how this framework can be applied. Providing services to address health problems like low birth rate and homelessness are downstream treatments. They address the outcomes or symptoms of community and societal conditions.

Figure 99 – Addressing Equity at the Societal, Community, and Individual/Family Level



Source: Public Health Madison Dane County

E. Promoting Equitable Access to Opportunities

Improving conditions of education, housing and access to health care helps people reach their full potential. These “mid-stream” actions go further than downstream services to address underlying causes. To fully change conditions leading to poor health outcomes, however, requires system, or societal-level changes: adopting political structures and institutional practices that assure fairness and opportunity for all.

One of the model strategies described in Appendix E, that has particular relevance to addressing barriers to opportunity at the societal level, is the Communities of Opportunity (COO) Model developed by the Kirwan Institute. COO has two goals: to bring opportunities to opportunity-deprived areas, and to connect people to existing opportunities throughout the metropolitan region.

The COO model seeks to bring opportunities into under-resourced neighborhoods by improving education, stimulating investment and expanding employment opportunities. The model also advocates for improving housing mobility, providing fair and effective public transportation, managing growth in order to reduce the drain of jobs and resources from existing communities, and the fair investment in all of a region’s people and neighborhoods.

The COO Model identifies the following needs:

- Invest in places by supporting neighborhood development initiatives, attracting jobs with living wages and advancement opportunities, and demanding high-quality local services for all neighborhoods, such as local public schools that perform.
- Encourage better links among people and places, fostering mobility through high-quality public transportation services and region-wide housing mobility programs.
- Build human capital through improved wealth-building, educational achievement, and social and political empowerment.

Invest In Places

One approach to investing in place are targeted community revitalization initiatives that address specific problems. An example is the CRSC project initiative to close a food desert is the Capital Region Sustainable Communities project, the South Madison Food Enterprise. This partnership between Dane County, the South Madison Farmers Market, and the Alexander Company seeks to develop a food enterprise to provide healthy food choices to nearby low-income residents.

Such targeted investments are important to directly improving lives in under-resourced communities. However, experience shows that resources allocated for such efforts often fall well short of the needs.

Another approach to investing in place is to “apply an equity lens” to on-going community investments. Governments and private enterprises make significant investments in places every year to improve transportation, public spaces, infrastructure such as sewer and water services, community facilities such as schools and libraries, and for economic development. By applying an “equity lens” to such investments, communities can identify ways to leverage them to increase access to opportunity for all. Below are examples of investments in place that could be viewed through such an equity lens.

E. Promoting Equitable Access to Opportunities

Dane County Alliant Energy Center Facility Planning

Dane County is in the process of facility planning for the Alliant Energy Center (AEC). The Center is a multi-building event venue for expositions, conventions, conferences, meetings, banquets, consumer shows, outdoor events, concerts, and more. The large campus encompasses 164 acres in the Town of Madison, fronting Rimrock Road near the Beltline/US 12-151,

The County budgeted \$155,000 for the first phase of the planning, conducting a strategic feasibility study. This study will analyze the AEC's strengths, weaknesses, opportunities, threats, and other information.⁵⁹ The County established the Alliant Energy Center Design Study Committee to oversee the study. The next phase, targeted for 2015, is a visioning process. County officials identified the need for a visioning process because AEC is an under-utilized facility, close to downtown Madison with excellent transportation access.

AEC is also adjacent to one of the areas, South Madison, identified above as having multiple barriers to opportunity (see Figure 41). A significant investment that upgrades AEC to include new commercial and residential infill could well serve as a catalyst that attracts private investment to adjacent properties. New investment raises land values and housing costs, which can result in displacement of low-income people.

Given the size and strategic location of AEC, and its proximity to areas with multiple barriers to opportunity (with potential for displacement), the planning process offers an excellent opportunity to apply an equity lens to the visioning process. Applying an equity lens would likely entail broadening the visioning area boundary to include surrounding neighborhoods. It would also entail inclusive participation by community members in the visioning process. Such inclusive participation goes beyond the tokenism of adding selected community representatives to serve on an advisory committee.

Inclusive participation entails activities such as: attending events and meetings within under-resourced communities to listen to concerns; providing resources for participation such as stipends for "community liaisons" to act as a bridge between the visioning effort and neighborhoods; involving community members at the initial stages in the design and execution of the visioning process; and using non-traditional methods of community participation such as walking audits and photo-mapping. A more detailed discussion of best practices is available in Appendix E.

Capital Budgets

The Alliant Energy Center is but one example of community investment in place. Governments spend many millions every year on buildings, roads, parks, sewer and water and other physical projects. How and where they spend this money, and for what purposes, can impact access to opportunities in a variety of ways. Below are some examples.

⁵⁹ Request for Proposals, Department of Administration, County of Dane, Wisconsin, Department of Planning and Development, #113104, Strategic Feasibility Study of the Alliant Energy Center (AEC). <http://danedocs.countyofdane.com/webdocs/pdf/purch/rfp113104.pdf>

E. Promoting Equitable Access to Opportunities

City of Madison Capital Budget

The 2013 Capital Budget for the City of Madison was \$192.1 million. The largest categories were Major Streets Engineering (\$58 million), Water Utility (\$27.8 million), and Planning & Community & Economic Development (\$21.4 million). Sample projects listed in the 2014 Capital Budget are:

Streets

- Biodigester Facility and related equipment - \$21 million

Planning, Community and Economic Development

- Neighborhood Centers - \$9.4 million 2014-2019
- Public Market – \$11.5 million 2014-2017
- SRO Housing Facility - \$4.2 million 2014-2016
- Park Str./Drake St. Area Housing Revitalization \$1 million
- 800 Block of E. Washington Ave. Redevelopment - \$7.9 million
- 100 Block of W. Mifflin St. Redevelopment \$2.6 million 2014-2016

Water Utility

- Lakeview Reservoir - \$5 million
- Operations Building replacement \$7.2 million

Dane County, school districts, Madison College and State of Wisconsin also spend significant funds for capital improvements. While beyond the scope of the FHEA, a more comprehensive assessment of capital projects, applying an equity lens, could identify opportunities to increase access to opportunities for low-income communities of color.

Another opportunity to leverage private investments for “investing in place,” are community investment requirements under the Affordable Care Act. ACA requires that non-profit hospitals meet community benefit requirements as a condition for tax exempt status. The law requires hospitals to develop community health needs assessments, participatory processes, implementation plans, and evaluation procedures. The IRS has indicated that a broad range of activities, including community organizing, may qualify as “community benefits.” These requirements offer an opportunity to work with tax-exempt hospitals to encourage community benefit efforts that engage community residents in local planning processes, and to prioritize investments that address the environmental and social determinants of health.

E. Promoting Equitable Access to Opportunities

Encourage Better Links

The second part of the Communities of Opportunity framework is encouraging better links between people and opportunities. Sections above describe the many transportation challenges faced by areas with concentrated barriers to opportunity such as long transit travel times to employment centers and limited access to grocery stores. The sections also identify barriers of high housing costs in high opportunity areas. This section explores opportunities to improve transportation and housing connections to opportunities.

Transportation Linkages

Analysis above identified the following areas as having significant barriers to opportunity that also have low proximity to employment areas:

- Wexford Ridge area (red outline in southwest area of Madison)
- Vera Court area (north Madison)
- Allied Drive area (south Madison)

Transportation linkages can be improved through greater access to cars, greater walkability and bikability, and increased transit service. One example of a private initiative is the YWCA JobRide program that provides transportation for low-income people going to/from work and employment-related activities (i.e. interviews, training, childcare, etc.)⁶⁰

As with investing in place, it is useful to look beyond targeted programs and examine the potential to apply an equity lens to transportation investments. For example, Metro Transit's Capital Funding Projects average \$13.7 million a year between 2014 through 2018 for buses, maintenance, ADA paratransit service, and other items. In another example, the Madison Area Transportation Planning Board designates transportation projects for federal funding. For example, the 2014 budget for East Johnson Street reconstruction is \$5.8 million, funding for County Trunk Highway M is \$10.9 million in 2015 and \$11.8 million in 2016.

Another project underway, that has potential to impact transportation linkages for areas along the Beltline, is Wisconsin Department of Transportation's (WisDOT) **Madison Beltline Study**. WisDOT is currently in the second phase of this long term planning study for the Madison Beltline (US 12, 14, 18, and US 151) between Middleton and Cottage Grove. Given the prevalence of neighborhoods along this stretch of the beltline that face multiple barriers to opportunity, it will be important to apply an equity lens and inclusive participation to the project.

The importance of applying an equity framework to major highway improvement projects was highlighted in the recent experience with the interchange at the Beltline and US 151/Verona Road. A recent paper, "Community-Based Advocacy at the Intersection of Public Health and Transportation,"⁶¹ looked at the expansion of Verona Road (Allied Drive neighborhood) in the Madison region and documented how significant amounts of neighborhood engagement had limited effects on final project design. The design was primarily influenced by regional transportation objectives – to meet forecasted regional demand. Many community proposals, to mitigate impacts of highway expansion on residents, were not acted on because they were deemed impractical from a regional transportation perspective.

⁶⁰ <http://www.ywcamadison.org/site/c.cuWLiO0JqI8E/b.7978209/k.CAFF/JobRide.htm>

⁶¹ Carolyn McAndrews and Justine Marcus, *Community-Based Advocacy at the Intersection of Public Health and Transportation: The Challenges of Addressing Local Health Impacts within a Regional Policy Process*, Journal of Planning Education and Research, <http://jpe.sagepub.com>, May 9, 2014.

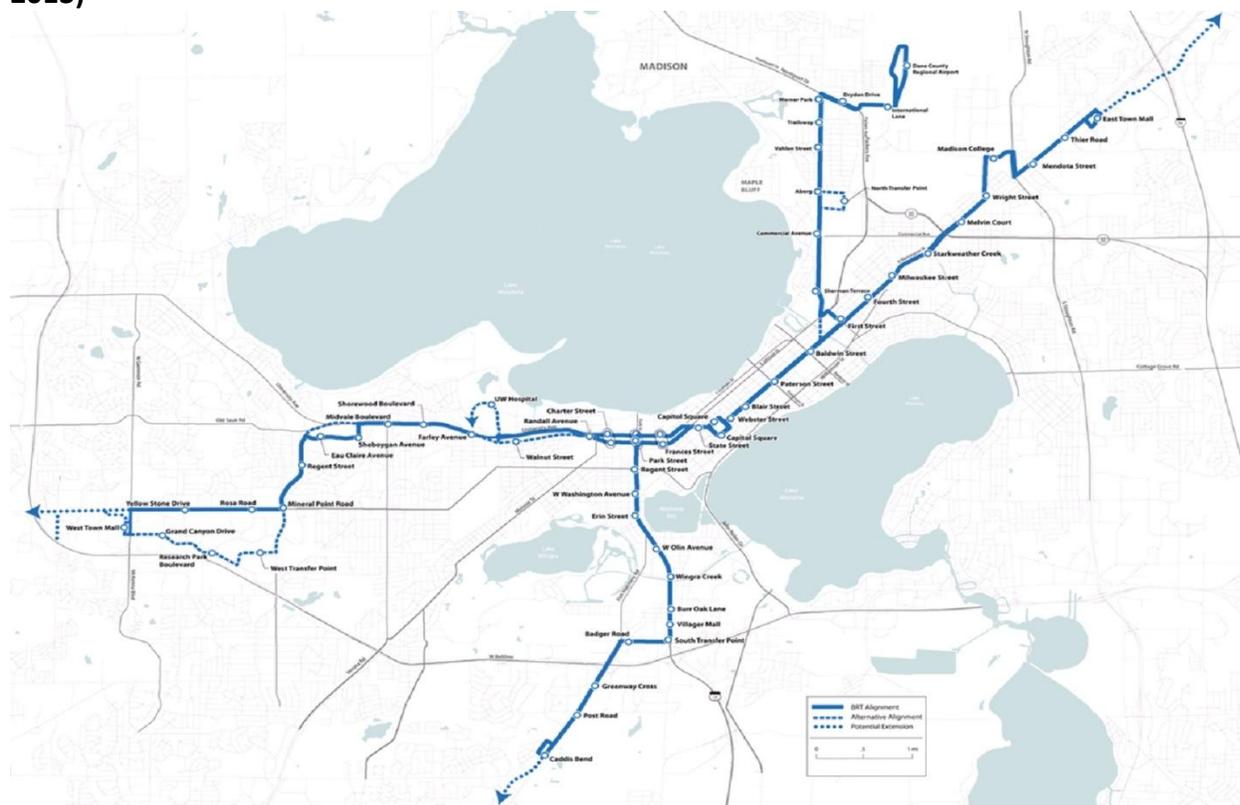
E. Promoting Equitable Access to Opportunities

A **potential transit investment** that would impact areas with many barriers to opportunities is Bus Rapid Transit, or BRT. BRT is high-frequency, limited-stop service that offers faster service and improved urban mobility. BRT has been described as a bus system that acts similarly to a light rail.

A recent study of the feasibility of BRT in the Madison area, funded by CRSC, concluded that a BRT system would serve 15,000 – 20,000 riders a day over coming decades while reducing travel times from 19% to 42%. The study concluded that “there is good potential for successful implementation of BRT in the Madison area.”⁶²

One of the goals of the BRT Study was to: “Improve connections between low income and/or transit dependent neighborhoods and centers of employment and activity.” To measure how well the proposed system achieved this goal the Study identified potential travel time savings low income and/or transit dependent areas to an employment or activity center. When the existing and proposed travel times were compared, the proposed system provided an average 15% travel time savings. The Study concludes “that the proposed system does a good job of improving connections between low income and/or transit dependent neighborhoods and centers of employment and activity.”

Figure 100 – Potential Bus Rapid Transit Corridors Considered by Transit Corridor Study (2012-2013)



Source: Madison Area Transportation Board and Capital Region Sustainable Communities, 2012

⁶² Madison Transit Corridor Study: Investigating Bus Rapid Transit in the Madison Area, May 2013.
http://www.madisonareampo.org/BRT.cfm#BRT_REPORT

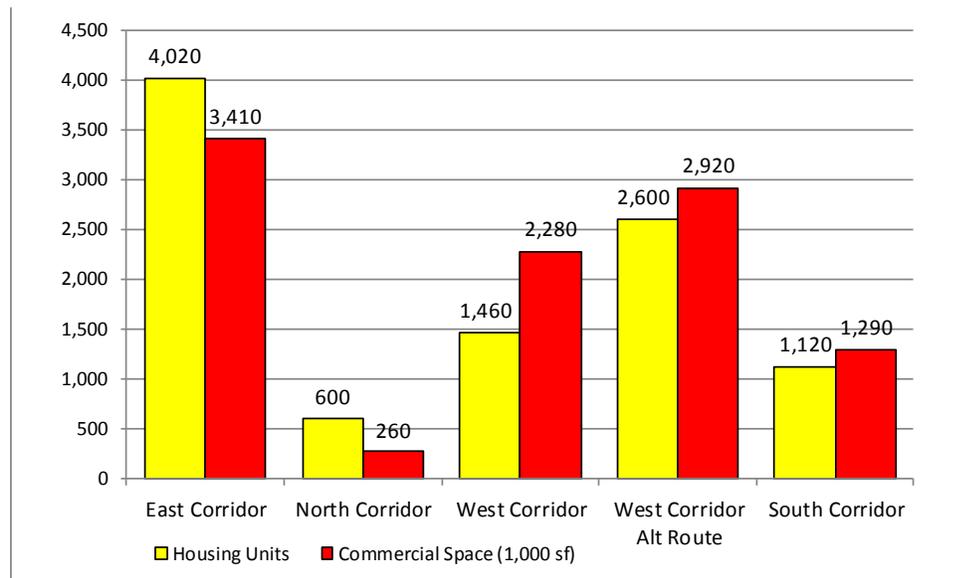
E. Promoting Equitable Access to Opportunities

While the BRT routes recommended in the Study would increase access for some isolated areas to some employment centers, in other isolated areas, BRT would likely need to be enhanced with additional connections, particularly to Allied Drive, Meadowood (southwest Madison), Owl Creek (southeast) and north Madison.

While BRT is a relatively new method of mass transit, some systems have shown the ability of BRT to spur transit-oriented development along the routes. Cleveland's Healthline, which links the city's downtown and University Circle area, is regarded as one of the most successful systems in terms of economic impact, spurring development and leveraging investment in the surrounding corridors. Since the Healthline opened in 2008, over \$4 billion in new development and redevelopment has occurred along the corridor.

It is envisioned the Madison BRT would also support redevelopment along its corridor, providing investment into depressed areas and creating more opportunities for residential and commercial development leveraging rapid transit. To assess the redevelopment potential along the potential BRT corridors, CARPC conducted two studies. The first inventoried possible redevelopment sites along the potential BRT corridors. The inventory concluded, "Overall, the sites along the primary routing identified have the potential for approximately 7,200 housing units⁶³ and over 7,000,000 square feet of commercial space. (See Figure 101 below.)

Figure 101 – Infill and Redevelopment Potential by Corridor



Source: Capital Area Regional Planning Commission

CARPC also commissioned a market study to estimate the demand for housing and commercial space around the potential BRT stations. The market study concluded that BRT, coupled with policies promoting redevelopment, would generate demand for approximately 8,300 additional housing units and between 115,900 and 491,300 square feet of commercial space over a 25 year period.

⁶³ Physical capacity on specific parcels is estimated to be 7,200 units whereas the proportion of the market demand expected to locate within one quarter mile of Bus Rapid Transit (BRT) stops is an estimated 8,000 units.

E. Promoting Equitable Access to Opportunities

Market Study consultants conducted a design workshop to prepare concept plans for how BRT could help stimulate development around stations. The illustrative plan below shows plans and images for how redevelopment could occur around Park Street and Wingra Creek. The plan would accommodate approximately 800 housing units and 350,000 square feet of office and retail space. See Figure 102.

Such levels of investment would increase land values, which would increase housing costs. A study of the impacts on land values, resulting from the central corridor light rail line in Minneapolis-St. Paul, found that property values were increasing around station areas, while decreasing region-wide.⁶⁴ Rising housing prices displace low-income residents who can no longer afford the rent or property taxes.

To minimize displacement stemming from public investments such as transit systems, communities need to be pro-active; putting policies in place prior to decisions to pursue such investments. Pro-active policies can reduce displacement by capturing portions of the value created by public investments, and making captured value available to preserve affordable housing. Such investments could include land banking and publically assisted housing.

Figure 102 – Park Street – Wingra Creek Transit Oriented Development Illustrative Plan



Source: Dane County Market Demand Study: Bus Rapid Transit and Other Local Investments in Walkable Transit-Supportive Communities

⁶⁴ *Healthy Corridor for All: A Community Health Impact Assessment for Transit-Oriented Development Policy in St. Paul, MN*, PolicyLink, Take Action Minnesota, and ISAIAH, 2011

E. Promoting Equitable Access to Opportunities

Housing Linkages

The analysis above identified lack of housing that, when combined with higher transportation costs, is affordable to low- or moderate income households in many high opportunity barriers. Planning, zoning, and community opposition all come into play to some degree to limit housing choices where good jobs and schools are more prevalent.

Strategies to increase housing investments in high opportunity areas can draw on the growing demand for housing in walkable, mixed-use centers. Many high opportunity communities are under-resourced when it comes to walkable, mixed-use places. Investments to boost existing areas, such as downtown districts in suburban communities, and develop new walkable, mixed-use centers could be combined with investments in a range of housing choices, including some affordable housing. Public investments such as BRT systems could be leveraged to foster affordable housing projects in high-opportunity, location-efficient areas.

Build Human Capital

The third component of Communities of Opportunity is building wealth, fostering educational achievement, and promoting social and political empowerment. In terms of wealth building and educational achievement, a range of efforts exist to improve educational and economic outcomes for families facing multiple challenges and barriers. Private organizations such as the Urban League of Greater Madison, Centro Hispano and the Boys and Girls Clubs, the Goodman Center and many others offer programs that help children and adults fulfill their potentials. Schools and churches also offer many programs.

Human Capital: “The collective skills, knowledge, or other intangible assets of individuals that can be used to create economic value for the individuals, their employers, or their community” – Dictionary.com

In addition to such services, communities need social and political strength. The sections above described a number of opportunities to leverage investments to benefit under-resourced communities and residents. Key to capturing such leveraging opportunities, however, is the social and political strength to influence the decisions made about those investments.

For example, the above section described how significant amounts of neighborhood engagement had limited affects on final project design of the Beltline-Verona Road interchange project, which were primarily determined by regional transportation objectives. The authors of the study found that lack of broader social and political capital was a key factor in the minimal impact of community engagement:

Issues that pose this regional-local conflict require a more complex solution [than the incremental changes adopted for the project]. Integrating arterial roads planning into regular planning practice involves not only developing a set of design alternatives and operations strategies but engaging in a discussion about regional development and equity: who is served by the regional facility and what communities experience its negative effects. *In this case, there was no forum in which this conversation could happen, nor were planning techniques or analyses used that would relate local and regional transportation impacts or needs. [emphasis added]*⁶⁵

⁶⁵ Op. Cit. McAndrews and Marcus.

E. Promoting Equitable Access to Opportunities

Examples of Existing Human Capital Initiatives

Progress is being made in the Madison area to empower communities with barriers to opportunity. Following on the heels of the Race to Equity Report⁶⁶, Reverend Alex Gee penned “Justified Anger” article in the Capital Times⁶⁷ describing his experiences with racial profiling and racism in Madison. The article, building on the acute racial disparities presented in the Race to Equity report, generated an outpouring of concern and conversation. African-American leaders, including Reverend Gee and others, came together to provide direction to this energy. They organized a Town Hall meeting February 15 that drew 700 people to hear the call to action from this leadership team. The Justified Anger initiative continues to build capacity to make change in areas of education, economic development and incarceration.

In addition to the Justified Anger initiative, governments are also making significant efforts to reduce racial disparities and increase access to opportunity in under-resourced neighborhoods. Public Health Madison & Dane County hired two Health Equity Coordinators to assist the agency’s emphasis on addressing the “social determinants of health.” For example, they are leading a Health Impact Assessment (HIA) to evaluate potential health impacts of converting a golf course in the City of Fitchburg into a public park. The golf course is surrounded by apartment buildings that mostly house low-income persons of color.

Dane County also hired an Equity Coordinator who works out of the County Board of Supervisor’s Office. The City of Madison allocated staff to focusing on addressing racial disparities. They provided support for a City Council resolution, “Declaring the City of Madison’s Intention to Adopt an Equity Impact Model,” that passed in October 2013. The City continues to develop the Equity Impact Model. The Madison Metropolitan School District has taken a number of steps to address disparities, including replacing its zero-tolerance discipline policy with a policy balancing accountability and support for good behavior. The zero-tolerance policy disproportionately expelled African-American students and fed the “schools to prison” pipeline.

The Wisconsin Council on Children and Families followed their successful release of the *Race to Equity* report with an outreach effort. WCCF staff met with numerous bodies to communicate the need for closing racial disparities. They received grant funding to hire community liaisons from communities of color to engage residents of those communities in equity initiatives.

These examples are among the many efforts and initiatives underway. It will be important that the Justified Anger, and the governmental efforts, coordinate efforts and work together towards shared goals. For such coordinated efforts, governmental entities should look to leadership and participation from under-resourced communities for guidance on policies and investments.

To help foster such leadership and participation from under-resourced communities, CRSC awarded six Community Building grants. The grants totaling \$70,000 funded projects in low-income and communities of color in the Madison Wisconsin region. The purpose of the grants was to: 1) increase community capacity; 2) increase resident participation; and 3) connect community projects on a regional level to advance equity. Appendix G, Community Building Grants Summary Report, describes the program in greater detail.

⁶⁶ *Race to Equity: A Baseline Report on the State of Racial Disparities in Dane County*, Wisconsin Council on Children and Families, 2013.

⁶⁷ “Justified Anger: Rev. Alex Gee says Madison is failing its African-American community,” The Capital Times, December 18, 2013

Action Plan

Applying the COO framework to promote equitable access to opportunity is the next step. Capital Region Sustainable Communities selected “ensure equitable access to opportunity” as one of its five priority goals. As CRSC moves into phase 2, or the implementation phase, a continued focus will be on applying the COO model, and equity lens, to its broader mission of a healthy and flourishing place for all, now and forever.

Figure 103 shows the five priority challenges of Capital Region Sustainable Communities. While ensuring access to opportunity is the primary challenge for the FHEA, CRSC priority challenges are interconnected: pursuit of one should address multiple challenges where possible. When evaluating potential strategies and actions, consideration should be given to how they may affect other priority challenges.

As part of implementation, CRSC prepared indicators and metrics for its priority goals. Final draft indicators and metrics⁶⁸ for ensuring equitable access to opportunity are:

Priority Challenge: Ensure equitable access to opportunity

Objectives: build human capital, invest in places, and encourage better links

Indicator: Access to affordable housing and transportation

Metrics (by race/ethnicity):

1. BELLWETHER - Percent of households with affordable access to housing and transportation (paying 45% or less of income for housing plus transportation)
2. Percent of housing units affordable to lower-income households (e.g. cost not greater than 30% of household income)

Indicator: Access to education and employment

Metrics (by race/ethnicity):

3. BELLWETHER: Percent of children achieving 3rd grade reading proficiency
4. Percent of children living in poverty
5. Percent of students graduating on time
6. Unemployment rate

In addition to CRSC other units of government and private organizations can use the Geography of Opportunity (GO) and the Communities of Opportunity framework to increase access to opportunity for all. Here are some of the ways that entities are using, or could use, Geography of Opportunity:

- The Capital Area Regional Planning Commission (CARPC) will consider approving GO and use it as a guide for the update of the regional development framework.
- The City of Madison is considering a resolution to adopt GO as a framework for its equity initiatives. The City could also use GO as the basis for evaluating public investments such as Bus Rapid Transit.

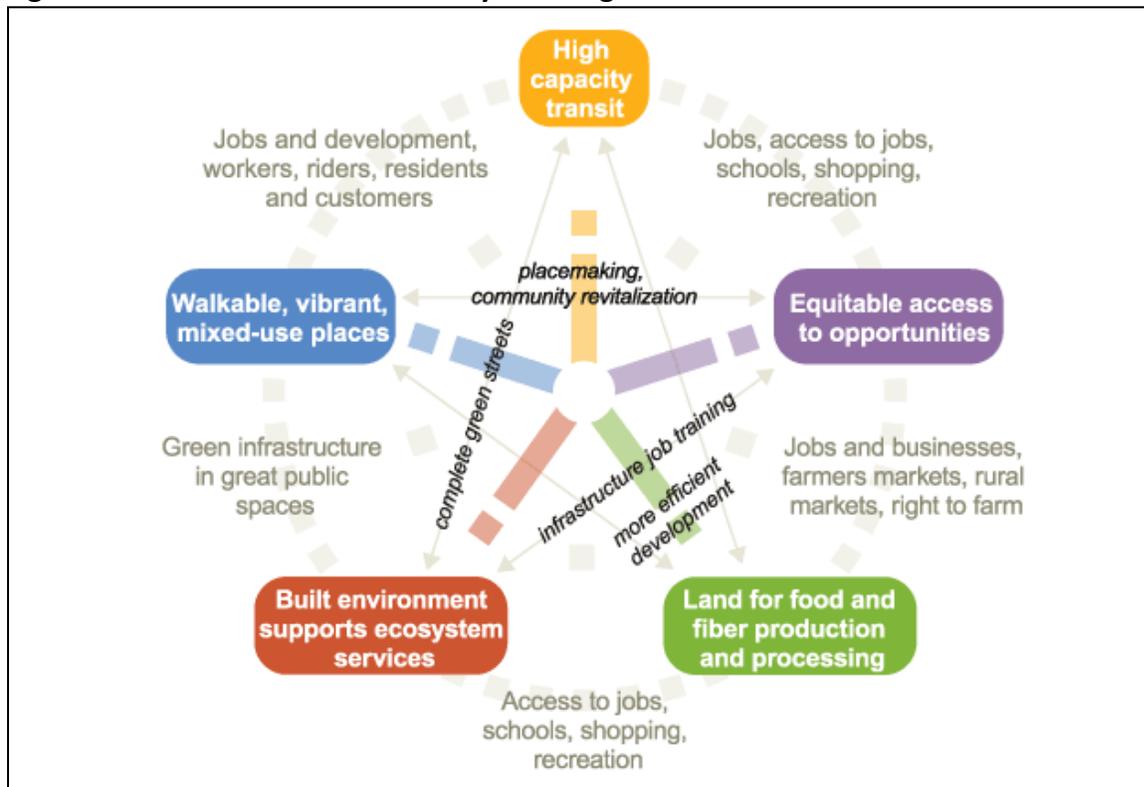
⁶⁸ As noted in the Memorandum of Understanding for phase 2 of CRSC, final draft indicators and metrics will be applied on a trial basis. The term of phase 2 MOU is 2014-2016.

E. Promoting Equitable Access to Opportunities

- All local units of government could incorporate GO into the updates of their comprehensive plans, and any subsequent revisions to their ordinances and policies.
- The Wisconsin Housing and Economic Development Authority (WHEDA) could use GO as a guide to their scoring criteria for award of low income housing tax credits.
- Dane County could use GO as a framework for applying an equity lens to planning and investments in the Alliant Energy Center.
- Leaders and organizations from communities with multiple barriers to opportunity could use GO as a framework for developing a regional equity network or alliance.
- Public Health Madison and Dane County could use GO, especially the health outcomes analysis, as a guide for health equity initiatives.
- United Way of Dane County used GO to make the case to outside funders that their neighborhood targeting was grounded in objective analysis.
- Other non-profit and community organizations can use GO to advocate for prioritizing planning and investments in areas with concentrated barriers to opportunity.

Undoubtedly, there are many other ways that GO could be used to promote equitable access to opportunities. Ongoing deliberation and decision-making will identify more such opportunities.

Figure 103 – CRSC Connected Priority Challenges



Source: Capital Region Sustainable Communities