THE GEOGRAPHY OF OPPORTUNITY
Mapping to Promote Equitable Community Development and Fair Housing in King County, WA

Commissioned by
Northwest Justice Project

Project funded by
The Poverty & Race Research Action Council (PRRAC) Small Grants Programs

April 2010

Jason Reece, AICP
Senior Researcher

Samir Gambhir
Senior Research Associate

Craig Ratchford
GIS/Demographic Analyst

Matthew Martin
Research Associate

Jillian Olinger
Research Associate

john a. powell
Executive Director

Andrew Grant-Thomas
Deputy Director

KIRWAN INSTITUTE
FOR THE STUDY OF RACE AND ETHNICITY
THE OHIO STATE UNIVERSITY
Staff Contributors

So-Young Lee, Graduate Research Associate
Brandon Moss, Graduate Research Associate
Stacey Chan, Summer Intern (2009)

Photo Credits

www.flickr.com
King County, WA Opportunity Mapping

Mapping to Promote Equitable Community Development and Fair Housing
Commissioned by: Steve Fredrickson, Advocacy Coordinator, Northwest Justice Project

EXECUTIVE SUMMARY

The following report assesses the “State of Opportunity” in King County, Washington. An “opportunity mapping” analysis conducted by the Kirwan Institute was made possible through a small grant funded by the Poverty and Race Research Action Council (PRRAC). The Kirwan Institute is a national leader in conducting opportunity mapping to support social and racial justice initiatives. The goal of the opportunity mapping initiative is to explore how low income groups and racial and ethnic populations are situated within King County’s geography of opportunity.

Essential opportunities needed to succeed, thrive and excel in our 21st-century society include high quality education, a healthy and safe environment, sustainable employment, political empowerment and outlets for wealth building. By assuring access to these critical opportunity structures the likelihood that people can meet their full development potential benefiting both the individual and society as a whole increases dramatically. Unfortunately, access to these critical building blocks of opportunity is not equal, or even possible, for many people. This isolation from opportunity is even more pronounced in low income communities, especially communities of color. Many low income communities are deprived of the essential elements needed to advance and succeed in our society.

Housing is more than just shelter; rather, it is a strategic intervention point into opportunity and advancement for marginalized populations. Due to the critical importance of affordable housing in providing access to opportunity, the King County opportunity mapping initiative analyzed the supply of subsidized housing in the County in relation to opportunity. The results suggest that the County’s subsidized housing supply is isolated from many high opportunity communities. Nearly 62% of the subsidized housing sites in the County were found in low opportunity communities.

Racialized isolation from neighborhoods of opportunity is highly evident in King County. Substantial racial segregation can be found in the County’s low opportunity communities for African Americans—fully 75% of the County’s African American population is isolated into low and very low opportunity communities.

How do we remedy this opportunity isolation? One model which has gained acceptance in recent years is the “Communities of Opportunity” model. The Communities of Opportunity model is a fair housing and community development framework that attempts to remedy these disparities while growing opportunity for all people in the region. The model is based on the premises that everyone should have fair access to the critical opportunity structures needed to succeed in life, and that affirmatively connecting people to opportunity creates positive, transformative change in communities. The Communities of Opportunity model advocates for a fair investment in all of a region’s people and
neighborhoods -- to improve the life outcomes of all citizens, and to improve the health of the entire region.

We must adopt strategies to open up access to the “levers” of opportunity for marginalized individuals, families, and communities. The Communities of Opportunity model has two goals: to bring opportunities to opportunity-deprived areas and to connect people to existing opportunities throughout the metropolitan region. To do this, the model emphasizes investments in people, places and linkages. We can build human capital through improved wealth-building, educational achievement, and social and political empowerment. We must 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. We must also encourage stronger links between people and between places, fostering mobility through high-quality public transportation services and region-wide housing mobility programs.
INTRODUCTION

What is “opportunity mapping”? Why map opportunity?

Opportunity mapping is a way to conceptualize and visualize the varying levels of access to the opportunities which exist throughout states and regions. Having high access to opportunity means having the ability to obtain a quality education, being able to have a safe and affordable place to live, having access to employment networks, living in a community that has access to fresh, healthy foods, and more. This pattern of racial segregation and isolation is apparent in King County. Opportunity mapping illustrates the fact that poverty statistics alone cannot capture the dynamics of living in high-opportunity or low-opportunity areas. Several different critical opportunity structures define neighborhoods, including school conditions, employment conditions, and housing conditions. In this report, the maps of opportunity in King County provide a more robust evaluation of the conditions in the region’s neighborhoods and how some residents are isolated spatially from opportunity.

Conceptualizing opportunity and analyzing it across the region is important for a few reasons. First, decades of social science research have demonstrated that neighborhood conditions and access to opportunity play a significant role in life outcomes. In view of this, understanding the opportunity landscape in King County is vital in order to improve the quality of life and outcomes of the region’s residents. Second, mapping of these factors has shown that opportunity has a geographic footprint and is “spatialized”-- opportunity is unevenly distributed throughout regions and therefore impacts different groups’ access to opportunity structures in different ways.

Finally, this research is an important step in building a fairer and more equitable King County because the geography of opportunity is highly racialized. That is, communities of color are often isolated in low opportunity communities. Once racial inequities are viewed with such clarity, the more difficult task begins—changing the status quo, intervening in the segregated and inequitable landscape. Opportunity mapping can help identify policy and research implications, such as:

- What are the best strategies to create opportunity and provide neighborhood safety or stability in an opportunity poor community? Are policies depressing opportunity in an opportunity poor community? What neighborhoods are at risk of becoming low opportunity communities?
- What policies can help connect marginalized people with opportunities in the region? Where is affordable housing needed in opportunity rich communities within the region?
- What are the neighborhood conditions for neighborhoods impacted by foreclosure?

Recognizing these factors and seeking to improve the landscape will not only have a positive impact in the areas of low opportunity, but will affect the entire region as marginalized communities of color gain access to the crucial levers of opportunity and are empowered to participate in and contribute to the County’s economy and society.
OVERVIEW

The maps in this analysis focus primarily on indicators of housing opportunity, analyzing locations of foreclosures, vouchers, and subsidized housing. Housing is a critical locus of opportunity in any region; in most regions, housing opportunity is still often highly segregated by race and income. In King County, this is also evident, reflected in the overarching result that people of color are disproportionately concentrated in opportunity-deprived communities which place them within a system of disadvantage that can ultimately impact life outcomes.

These patterns of racial and spatial isolation did not “just appear” but are the result of historic policies and practices—some of which were overtly racist. The policies that created much of the landscape we live in today, such as mortgage redlining or suburban infrastructure and highway investment, created an inequitable and segregated landscape. In turn, these policies, practices, and attitudes created uneven opportunities and burdens that are perpetuated today by the status quo. This is referred to as structural racialization. Opportunity mapping is a highly effective way to show that we are still living with the consequences of historical and legal racial segregation, despite the anti-discrimination laws that signaled an end to de jure segregation. Maps can also illuminate how although some policies may seem racially neutral on their face, they are often not neutral in effect.

Unfortunately, the lack of housing opportunity is often compounded by a lack of education and transportation opportunity, coalescing King County’s marginalized populations into communities deprived of opportunity. It is important to note despite the imprint of history, people and places can and do change. Maps provide a snapshot in time, but the geography of opportunity is constantly being built and dismantled. Demographics change, new policies are created to address inequities, economic recessions hit, and the list goes on. Even though history leaves its mark, we can make positive changes in communities by intervening in the patterns of disinvestment and marginalization to produce better access to opportunity for all.

ANALYSIS AND RESULTS: A SNAPSHOT OF OPPORTUNITY IN KING COUNTY

Indicators and method

The following presents the results of an opportunity mapping analysis for King County. The analysis used 22 indicators of opportunity, assessed separately in three different opportunity areas: economic opportunity and mobility, education opportunity, and housing and neighborhood opportunity. The comprehensive opportunity maps represent a combined score based on these three opportunity areas. For a more detailed discussion of the indicators, data sources, and methodology, please refer to the relevant appendices.
For each indicator, data was gathered and analyzed for King County at the census tract level. Geographic Information Systems analytic methods were employed to re-aggregate non-Census based data to the census tract level. Indicators were analyzed in each sector area and the comprehensive opportunity maps represent the composite of all sector maps (Map 1 and 2).

**Opportunity and Race**

Structural discrimination, segregation, and housing inequality often concentrate low-income people of color into areas where opportunities of all types are extremely limited. This neighborhood-based racial isolation often goes hand-in-hand with economic segregation. In 2000, nearly three-fourths of the people living in neighborhoods of concentrated poverty (where the poverty rate is 40% or more) were African-American or Latino. In the nation’s largest metropolitan areas, nearly 1 out of 10 African-Americans lived in neighborhoods of concentrated poverty, compared to only 1 out of 100 white Americans.

Maps 1A and 2A demonstrate the spatial isolation of non-white King County residents from high opportunity areas. For example, Figure 1 shows that 75% of African Americans, 61% of Native Americans/Alaskan Natives, 61% of Hispanics, and 56% of Asians live in communities of low or very low opportunity, compared to only about 37% of Whites. Conversely, only 13% of African Americans, 22% of Native American/Alaskan Natives, 24% of Hispanics, and 30% of Asians live in high and very high opportunity neighborhoods, compared to 42% of Whites.

---


Opportunity and Foreclosures

The impact of foreclosures on neighborhoods and cities is substantial. It is not only the individual homeowner that faces financial depletion—investors, neighbors, and cities all lose out. Investors lose their income streams, neighbors lose their equity as their property values go down, and cities lose their revenue stream from property taxes.3 Washington and its homeowners have been hit hard. A Center for Responsible Lending analysis reveals that, between 2009-2012 statewide, lost home equity wealth due to nearby foreclosures will reach $19.5 billion.4 In the US, lost wealth will amount to almost $2 trillion.5 Over 2 million homes in Washington are experiencing foreclosure-related decline.6 While foreclosures have far-reaching impacts and harm the health of the whole state, their impacts have been especially pronounced in communities of low-opportunity, where households of color are most concentrated (Maps 1B, 1C, 2B AND 2C). Figure 2 shows that over 65% of foreclosures are concentrated in low- and very low opportunity neighborhoods. Figure 3 shows that the lowest opportunity communities have a foreclosure rate of over 2%, which is double the rate for moderate opportunity neighborhoods, and over four times the rate in high opportunity communities.

---

5 Id.
6 Id.
Opportunity and Subsidized Housing

Housing is more than just shelter—it is a strategic intervention point into opportunity for marginalized populations. In this context, the location of subsidized housing is of extreme importance in providing opportunities for social and economic advancement for residents. Where you live influences access to jobs, quality of schools, and access to other social support services. Due to the critical importance of affordable housing in providing access to opportunity, we analyzed the current supply of subsidized housing in King County in relation to opportunity (Maps 1D and 2D). Our analysis revealed high concentrations of subsidized housing into low- and very low-opportunity neighborhoods—over 56% of subsidized housing projects, and over 61% of subsidized housing units, are in these neighborhoods (see Figure 4).
Opportunity and Housing Vouchers

We need to make opportunity in high-opportunity areas equally available to all King County residents. Housing mobility programs, such as the Housing Choice Voucher program, are intended to do just that. For example, research in 2003 on “Moving to Opportunity” (MTO), an experimental housing mobility program that moved poor families to lower-poverty neighborhoods in cities across the U.S. for five years in the 1990s, highlighted positive outcomes across a number of measures, including reductions in obesity, positive increases in mental health, and improved housing conditions, neighborhoods, and safety.\(^7\) Five years after MTO families moved across all five cities, researchers reported that neighborhood effects were strongest (statistically significant) for mental health outcomes, for both adults and teenagers, most likely due to the reduction in stress after families moved from neighborhoods where fear of violence was pervasive. For all youth, the direction of effects was positive for mental health and education.\(^8\)

Unfortunately, voucher use in King County has not resulted in the de-concentration of subsidized households into areas of higher opportunity for these households (Maps 1E and 2E). In fact, Figure 4 shows that over 73% of vouchers are located in the communities of lowest opportunity. Vouchers were supposed to be a “better” vehicle for moving residents out of neighborhoods of concentrated poverty,


but these figures show that voucher use is markedly more concentrated in the lowest opportunity neighborhoods than either public housing projects or units.

**Remedying Opportunity Isolation**

People of color in King County face obstacles to opportunity and social and economic enrichment along many fronts and in many forms. In the housing context, a significant access point to opportunity, this includes the concentration of subsidized and affordable housing and concentration of foreclosures. These obstacles effectively isolate these communities into opportunity-deprived neighborhoods, a fact which not only places these families and neighborhoods at a distinct disadvantage, but also the entire State.

The traditional model of local economic development has done little to offset the difficulties marginalized communities face as a result of this accumulation. Instead, traditional models revolve around a disorganized and fragmented strategy of removing tax burdens and creating business incentives in order to cut business costs, often described as a “cut and deregulate approach” or “supply-side” economic development, pursuing zero-sum strategies that retard the overall growth of regional economies. Local governments have committed billions of dollars to such approaches, using tax abatements, tax free zones (enterprise zones; urban renaissance zones) or other incentives to lure business investment. Despite this extensive commitment to supply side approach, little research has empirically proven these efforts produce long term economic growth.

Disparities—racial, social, and regional—represent collective societal waste and lost creative capacity. As the economist Richard Florida states in *Flight of the Creative Class*:

“Rising inequality is a deadweight drag on our economic competitiveness... The basic formula is simple: Those companies, regions and countries that reduce waste and effectively harness their

---

9 The following discussion draws heavily from john a. powell and Jason Reece, “Perspectives on Community Economic Development in a Global Economy” in Perspectives on Community Economic Development in a Global Economy. American Bar Association Forum on Affordable Housing and Community Development Law, 2009


http://www.cfed.org/ideas/2007/04/a_progressive_economic_develop.html


productive assets have a huge advantage in the Darwinian competition that powers creative capitalism.”

In *Reflections on Regionalism*, Bruce Katz of the Brookings Institute finds regional inequity to be the root of economic challenges facing our metropolitan regions today:

“Allowing richer parts of the region to externalize their social responsibility create resource starved, poorly functioning communities at the core. When one part becomes dysfunctional, the entire system is compromised. This is what is happening with the inner cities and their older suburbs – difficulties are negatively affecting entire regions.”

Increasing the economic viability of our communities, cities and regions will require “well-trained, creative, and flexible work forces.” To achieve this goal, communities must be willing to embrace a new approach to building community through holistic human development. Such an approach involves more than just keeping incomes above poverty, but requires a sustained commitment to aligning people with the opportunities and tools needed to excel and succeed in our society. Safe neighborhoods, healthy communities, preventative and affordable health care, sustainable employment, stable housing, outlets for democratic participation, and a high quality education are the critical building blocks to successful life outcomes, vibrant communities and a just society.

There are two primary strategies that can be pursued to increase the access to opportunity for King County’s marginalized populations: to bring opportunities to opportunity-deprived areas, and to connect people to existing opportunities throughout the metropolitan region. An opportunity-based model of community development meets the needs of marginalized residents through equitable development and investment; opening the pathways to opportunity can be achieved through three areas of focus: people, places, and linkages. Supporting people is achieved through investments in human capital so that everyone has the opportunity to reach their creative potential. This can be

---

advanced through wealth creation, educational attainment, sustained employment and political empowerment. Examples include affordable homeownership programs, leadership and job training, community organizing, and assisted housing. Investing in and empowering neighborhood capacity and institutions supports places. This includes equitable neighborhood redevelopment, support of neighborhood anchors, increasing employment opportunities for living-wage jobs, and equal provision of local services, including high-performing schools. Additionally, there must be a connection between people and places, or linkages. This concept revolves around the mobility and degree of access for people to high opportunity areas. Examples of this include fair share and inclusionary (or opportunity-based) housing (which affirmatively connects affordable housing to neighborhoods of opportunity), public transportation, and school integration. Without these linkages, support of people and places is less effective.

**Opportunity Community Advocacy:**
The Kirwan Institute’s opportunity communities program focuses on four primary activities to affirmatively connect people to opportunity: opportunity mapping, opportunity based fair housing, neighborhood revitalization and regional equity.

<table>
<thead>
<tr>
<th>Opportunity Mapping:</th>
<th>Opportunity Based Fair Housing:</th>
<th>Neighborhood Revitalization:</th>
<th>Equitable Regional Policy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The first step in applying the Communities of Opportunity framework is a critical one, and it is to use opportunity mapping to better understand and represent the dynamics of opportunity within a region. Mapping the geographic distribution of opportunity helps evaluate where these opportunity mismatches exist in a community.</td>
<td>Housing advocacy focuses on providing fair access to communities of opportunity through affordable housing development and fair housing policy. Sustainable affordable housing opportunities must be deliberately connected to high opportunity communities and be linked to support services.</td>
<td>Strategic investments are critical to support the resurgence of distressed low opportunity communities. Initiatives should promote a model of neighborhood revitalization, with the goal of improving neighborhoods while assuring the communities remain neighborhoods of choice that are accessible to all residents.</td>
<td>Equitable regionalism calls for proactive policymaking that gives all people access to neighborhood resources, connections to opportunity-rich areas throughout the region, and a voice in the future of their communities. Equitable regionalism affirms the need for every community to have a voice in the resource development and future of the region.</td>
</tr>
</tbody>
</table>

**CONCLUSION**

The above analysis of opportunity in King County has shown that opportunity is not evenly distributed throughout the region. In King County, this means that people of color are disproportionately concentrated in opportunity-deprived communities which place them within a system of disadvantage that can ultimately impact life outcomes. However, this geography of opportunity has the possibility to be changed. By adopting an opportunity-oriented model of development and empowerment, we can address the systemic and structural barriers that cumulatively work to deny opportunity and advancement to the marginalized. The model is not a welfare-oriented model of support, but focused on empowering communities by reorienting the levers and pathways of opportunity, in essence reorienting the structures that produce disadvantage and making them work for marginalized populations. By allowing a creative space for individuals and communities to achieve their potential, we can produce a healthier and more robust democratic society.
APPENDIX A

Opportunity Maps
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level.

Source: KCGIS, Washington State Report Card; Office of Superintendent of Public Instruction, National Center for Education Statistics, Census 2000, U.S. Census Bureau: County Business Patterns, King County Sheriff’s Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI.
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level.

Source: KCGIS, Washington State Report Card, Office of Superintendent of Public Instruction, National Center for Education Statistics, Census 2000, U.S. Census Bureau: County Business Patterns, King County Sheriff’s Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level. Non-White population is symbolized by dots, showing density per tract.

Source: KCGIS, Washington State Report Card, National Center for Education Statistics, Census 2000, U.S. Census Bureau: County Business Patterns, King County Sheriff's Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level. Non-White population is symbolized by dots, showing density per tract.

Map 2A: OPPORTUNITY & RACE
SEATTLE, WA

Source: KCGIS, Washington State Report Card, Office of Superintendent of Public Instruction, National Center for Education Statistics, Census 2000, U.S. Census Bureau: County Business Patterns, King County Sheriff’s Office, Seattle Police Department, Municipal Crime Statistics, King County Department of Assessments, HUD, EPA, ESRI
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level. The estimated number of foreclosures per tract is overlaid on the opportunity layer, showing impact density.

Source: KCGIS, Washington State Report Card, Office of Superintendent of Public Instruction, National Center for Education Statistics, Census 2000, U.S. Census Bureau, County Business Patterns, King County Sheriff’s Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI.
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level. The estimated number of foreclosures per tract is overlaid on the opportunity layer, showing impact density.

Source: KCGIS, Washington State Report Card Office, Superintendent of Public Instruction; National Center for Education Statistics, Census 2000; U.S. Census Bureau: County Business Patterns, King County Sheriff's Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI

Map 2B: OPPORTUNITY & FORECLOSURE

Access to Opportunity

Very Low
Low
Moderate
High
Very High

Parks
Roads

1 Dot = 5 Foreclosures (estimated)
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level. The estimated number of foreclosures per tract are symbolized by the graduated symbols, showing impact density.

Source: KCGIS, Washington State Report Card, Office of Superintendent of Public Instruction, National Center for Education Statistics, Census 2000, U.S. Census Bureau, County Business Patterns, King County Sheriff’s Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI.
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level. The estimated number of foreclosures per tract are symbolized by the graduated symbols, showing impact density.

Source: KCGIS, Washington State Report Card: Office of Superintendent of Public Instruction, National Center for Education Statistics, Census 2000, U.S. Census Bureau: County Business Patterns, King County Sheriff’s Office, Seattle Police Department, municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level, overlaid with subsidized housing locations (HUD Picture of Subsidized Housing 2008).

Source: KCGIS, Washington State Report Card: Office of Superintendent of Public Instruction, NCES, Census 2000, HUD Pic of Sub. Housing 2008, U.S. Census Bureau, County Business Patterns, King County Sheriff's Office, Seattle Police Department, Municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level, overlaid with subsidized housing locations (HUD Picture of Subsidized Housing 2008).

Source: KCGIS, Washington State Report Card: Office of Superintendent of Public Instruction, NCES, Census 2000, HUD Pic of Sub. Housing 2008, U.S. Census Bureau: County Business Patterns, King County Sheriff's Office, Seattle Police Department, Municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level, overlaid with number of Housing Vouchers reported (HUD Picture of Subsidized Housing 2008).

Source: KCGIS, Washington State Report Card: Office of Superintendent of Public Instruction, NCES, Census 2000, HUD Pic of Sub. Housing 2008, U.S. Census Bureau: County Business Patterns, King County Sheriff's Office, Seattle Police Department, Municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI.
This map displays the spatial distribution of opportunity in King County, based on education, economic/mobility, and housing/neighborhood indicators, at the census tract level, overlaid with number of Housing Vouchers reported (HUD Picture of Subsidized Housing 2008).

Source: KCGIS, Washington State Report Card: Office of Superintendent of Public Instruction, NCES, Census 2000, HUD Pic of Sub, Housing 2008, U.S. Census Bureau: County Business Patterns, King County Sheriff's Office, Seattle Police Department, Municipal crime statistics, King County Department of Assessments, HUD, EPA, ESRI
## APPENDIX B: KING COUNTY, WA INDICATORS DATA MATRIX

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>DESCRIPTION</th>
<th>SOURCE</th>
<th>WEBSITE</th>
<th>DATA YEAR</th>
<th>GEOGRAPHIC LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher to Student Ratio</td>
<td>Teacher to Student Ratio</td>
<td>National Center for Education Statistics (NCES)</td>
<td><a href="http://nces.ed.gov/">http://nces.ed.gov/</a></td>
<td>2006-2007</td>
<td>School Building</td>
</tr>
<tr>
<td>Economic Opportunity and Mobility</td>
<td>Proximity to employment</td>
<td>Number of jobs within 5 miles of census tract centroids</td>
<td>County Business Pattern</td>
<td><a href="http://www.census.gov/econ/cbp/index.html">http://www.census.gov/econ/cbp/index.html</a></td>
<td>2001, 2006</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------</td>
<td>-------------------------------------------------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>Percentage of workforce unemployed</td>
<td>Census 2000, SF 3</td>
<td><a href="http://www.census.gov/">http://www.census.gov/</a></td>
<td>2000</td>
<td>Census Tract</td>
</tr>
<tr>
<td>Mean Commute Time</td>
<td>Average work commute of census tract workers</td>
<td>Census 2000, SF 3</td>
<td><a href="http://www.census.gov/">http://www.census.gov/</a></td>
<td>2000</td>
<td>Census Tract</td>
</tr>
<tr>
<td>HOUSING AND NEIGHBORHOODS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Ownership Rate</td>
<td>Percentage of residence ownership by census tract</td>
<td>Census 2000, SF 3</td>
<td><a href="http://www.census.gov/">http://www.census.gov/</a></td>
<td>2000</td>
<td>Census Tract</td>
</tr>
<tr>
<td>Residential Vacancy Rate</td>
<td>Percentage of vacant houses by census tract</td>
<td>HUDUSER</td>
<td><a href="http://www.huduser.org/datasets/usps.html">http://www.huduser.org/datasets/usps.html</a></td>
<td>2009</td>
<td>Census Tract</td>
</tr>
<tr>
<td>Property appreciation</td>
<td>Percentage change in average home price from 2002-07</td>
<td>King County Department of Assessments</td>
<td><a href="http://info.kingcounty.gov/assessor/DataDownload/default.aspx">http://info.kingcounty.gov/assessor/DataDownload/default.aspx</a></td>
<td>2002-2007</td>
<td>Parcels</td>
</tr>
<tr>
<td>Foreclosures</td>
<td>Number of foreclosures by census tract</td>
<td>HUD User</td>
<td><a href="http://www.huduser.org/datasets/nsp.html">http://www.huduser.org/datasets/nsp.html</a></td>
<td>2007-2008</td>
<td>Census Tract</td>
</tr>
<tr>
<td>Neighborhood Poverty Rate</td>
<td>Percentage of people below poverty for whom the poverty level has been determined by census tracts</td>
<td>Census 2000, SF 3</td>
<td><a href="http://www.census.gov/">http://www.census.gov/</a></td>
<td>2000</td>
<td>Census Tract</td>
</tr>
<tr>
<td>Proximity to Toxic Waste Sites and Superfund Sites</td>
<td>Census tracts are ranked based on their distance from these facilities and the amount of toxic waste released</td>
<td>Environmental Protection Agency</td>
<td><a href="http://www.epa.gov/triexplorer/fedfacility.htm">http://www.epa.gov/triexplorer/fedfacility.htm</a></td>
<td>2007</td>
<td>Facility</td>
</tr>
<tr>
<td>Proximity to park and open spaces</td>
<td>Percentage of area in sq.mile in each census tract</td>
<td>ESRI Data</td>
<td></td>
<td>2008</td>
<td>Parks</td>
</tr>
</tbody>
</table>
APPENDIX C

Summary of Methods and Notes

The following presents the methodology and indicators for the King County, WA opportunity analysis.

Spatial distribution of opportunity and subsequent analysis was based on a number of indicators categorized under three sub areas of opportunity – Educational, Economic & Mobility, and Housing and Neighborhood quality. The comprehensive opportunity map represents the combined score based on these three sub-areas. This analysis utilized twenty three (23) indicators for which data was collected from public (e.g. Census, Dept. of Education, EPA) and private (e.g. ESRI) data sources. The analysis was conducted using Census Tracts as geographic representations of neighborhoods.

To map opportunity in the region, we use variables that are indicative of high and low opportunity. High opportunity indicators include high-performing schools, the availability of sustainable employment, stable neighborhoods and a safe environment. A central requirement of indicator selection is a clear connection between the indicator and opportunity. Opportunity is defined as environmental conditions or resources that are conducive to healthier, vibrant communities and are more likely to be conducive to helping residents in a community succeed. Indicators could either be impediments to opportunity (which are analyzed as negative neighborhood factors, e.g., high neighborhood poverty) or conduits to opportunity (which are analyzed as positive factors, e.g., an abundance of jobs).

These multiple indicators of opportunity are assessed at the same geographic scale, thus enabling the production of a comprehensive opportunity map for the region.

The following table presents the indicators utilized in the analysis.

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>ECONOMIC OPPORTUNITY AND MOBILITY</th>
<th>HOUSING AND NEIGHBORHOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Proficiency Scores</td>
<td>Proximity to employment</td>
<td>Crime Rates</td>
</tr>
<tr>
<td>Math Proficiency Scores</td>
<td>Job Change</td>
<td>Home Ownership Rate</td>
</tr>
<tr>
<td>Student Poverty or Economic Disadvantage</td>
<td>Business Creation</td>
<td>Residential Vacancy Rate</td>
</tr>
<tr>
<td>Teacher Qualifications</td>
<td>Percentage of Population on Public Assistance</td>
<td>Property appreciation</td>
</tr>
<tr>
<td>Teacher Qualifications</td>
<td>Unemployment Rate</td>
<td>Foreclosures</td>
</tr>
<tr>
<td>Teacher to Student Ratio</td>
<td>Mean Commute Time</td>
<td>Neighborhood Poverty Rate</td>
</tr>
<tr>
<td>Adult Educational Attainment</td>
<td></td>
<td>Proximity to Toxic Waste Sites and Superfund Sites</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proximity to park and open spaces</td>
</tr>
</tbody>
</table>
Calculating the Opportunity Index:

The various opportunity indicators were analyzed relative to the other census tracts within the region by standardizing through the use of “z scores.” A z score is a statistical measure that quantifies the distance (measured in standard deviations) a data point is from the mean of a data set. The use of z scores allows data for a census tract to be measured based on their relative distance from the data average for the entire region. The final “opportunity index” for each census tract is based on the average z score for all indicators by category. The corresponding level of opportunity (very low, low, moderate, high, very high) is determined by sorting all census tracts into quintiles based on their opportunity index scores. Thus, the census tracts identified as “very high” opportunity represent the top 20% of scores among census tracts. Conversely, census tracts identified as “very low” opportunity represent the lowest scoring 20% of census tracts.

Z scores are helpful in the interpretation of raw score performance, since they take into account both the mean of the distribution and the amount of variability (or the standard deviation). The z score indicates how far the raw score is from the mean, either above it or below in standard deviation units. A positive z score is always above the median (upper 50%). A negative z score is always below the median (lower 50%) and a z score of zero is always exactly on the median or equal to 50% of the cases. Thus, when trying to understand the overall comparative performance of different groups with respect to a certain variable, we can assess how a certain group (of individuals, tracts, etc.) is performing with respect to the median performance for the certain variable. No weighting was applied to the various indicators; all indicators were treated as equal in importance.
NORTHWEST JUSTICE PROJECT

NJP is a not-for-profit statewide law firm that provides free civil legal assistance and representation to low-income people and communities throughout Washington. Each year NJP handles approximately 18,000 cases benefiting more than 40,000 people in need of critical legal assistance in cases affecting basic human needs such as family safety and security, housing preservation, protection of income, access to health care, education and other basic needs.

KIRWAN INSTITUTE

A university-wide interdisciplinary research institute, the Kirwan Institute generates and supports innovative analyses of the dynamics that underlie racial marginality and undermine full and fair democratic practices in the United States and throughout the global community. Its work informs policies and practices to produce equitable change.