



July 2, 2010

MEMORANDUM:

**Indicators to Evaluate the Opportunity Impacts
of Federally Supported Housing and Urban Development Projects**

Introduction

This memorandum recommends and discusses indicators to be used in evaluating geographic access to opportunity, including available sources of relevant data. We propose that these indicators be integrated into Department rules regarding the duty to affirmatively further fair housing.¹

Opportunity is the idea that everyone deserves a fair chance to achieve his or her full potential. Ideally, all people in the United States should have equal access to opportunity—which includes personal and economic security and healthy living conditions—without regard to where they live. In practice, however, our neighborhoods are the primary environments in which we access key opportunity structures such as high-performing schools, sustainable employment, safe neighborhoods, and health care, and those structures are too often unequal across neighborhoods and communities.² Conversely, place-based investments in greater and more equal opportunity can have lasting, intergenerational impacts on the life outcomes and prosperity of individuals, communities, and whole regions.

Under the Fair Housing Act,³ the Department of Housing and Urban Development (“HUD”) has a duty to “administer the programs and activities relating to housing and urban development in a manner affirmatively to further the policies of [the Fair Housing Act].”⁴ The “affirmatively further fair housing” (“AFFH”) obligation requires HUD to do something “more than simply refrain from discriminating . . . or from purposely aiding discrimination by others.”⁵ Instead, HUD has an affirmative obligation to “provide, within constitutional limitations, for fair housing

¹ The opportunity indicators described herein are intended to deepen and clarify, not supplant, the existing site and neighborhood standards set forth in the Department of Housing and Urban Development’s (“HUD’s”) existing regulations. 24 C.F.R. § 983.6 (2010).

² See, e.g., JASON REECE ET AL., KIRWAN INSTITUTE FOR THE STUDY OF RACE AND ETHNICITY, THE OHIO STATE UNIVERSITY, THE GEOGRAPHY OF OPPORTUNITY: BUILDING COMMUNITIES OF OPPORTUNITY IN MASSACHUSETTS 7 (2009), available at <http://kirwaninstitute.org/research/projects/massneighbopp/MA-opportunity-mapping-resource-site/index.php>.

³ Title VIII of the Civil Rights Act of 1968, 42 U.S.C. §§ 3601 et seq. (2006).

⁴ 42 U.S.C. § 3608(e)(5) (2010).

⁵ N.A.A.C.P. v. Sec’y of Hous. and Urban Dev., 817 F.2d 149, 155 (1st Cir. 1987).

throughout the United States”;⁶ to “remove the walls of discrimination which enclose minority groups”;⁷ and to foster “truly integrated and balanced living patterns.”⁸ In other words, the Fair Housing Act requires HUD proactively to promote non-discrimination, residential integration, and equal access to the benefits of housing—that is, to opportunity as it relates to geography.

To achieve greater and more equal opportunity for all people in the United States, and as an addendum to our suggested reforms of HUD’s AFFH regulations,⁹ this memorandum sets forth the specific indicators of opportunity that we believe should be used to evaluate proposed and ongoing housing and urban development projects and activities. Our recommendations are based on a large body of social science research, legal precedent, and consultation with national experts. The indicators of opportunity that we have identified, and that we explore in further detail in this memorandum, are:

- Access to high-quality education (measured by the percentage of students eligible for free lunch, math and reading test scores, and high school completion rates).
- Concentration of poverty within a neighborhood (measured by the Federal Poverty Level (“FPL”) and considering the measure of income adequacy within a neighborhood).
- Racial segregation within a census tract or neighborhood (measured by variation from the proportion of the non-white population regionally).
- Environmental quality within a particular neighborhood (measured by the Toxic Release Inventory and the National-Scale Air Toxics Assessment).
- Access to health care (measured by data on health disparities from the Agency for Healthcare Research and Quality, and correlated to neighborhoods through their mapping software).
- Access to sustainable jobs (measured by data from the Census Zip Business Patterns and the Bureau of Labor Statistics).
- Crime rates (measured, to the extent possible, by data from the FBI’s Uniform Crime Reports and statistics provided by local police departments).

In this memorandum, we also discuss transportation-related indicators as subsets of both our environmental quality and our access to sustainable jobs indices.

Although this memorandum discusses each of the enumerated factors in a separate section, in practice, it is unwise to view any of the factors in isolation.¹⁰ Thus, to evaluate a housing or urban development project’s impact on opportunity within a given region, the evaluating body

⁶ 42 U.S.C. § 3601 (2010).

⁷ *Evans v. Lynn*, 537 F.2d 571, 577 (1975) (citing 114 Cong. Rec. 9563 (statement of Rep. Celler)).

⁸ *Trafficante v. Metro. Life Ins. Co.*, 409 U.S. 205, 211 (1972) (citing 114 Cong. Rec. 3422 (statement of Sen. Mondale)).

⁹ The Opportunity Agenda’s recommended reforms to HUD’s AFFH regulations are available at http://opportunityagenda.org/files/field_file/ReformingHUD'sRegulationstoAffirmativelyFurtherFairHousing.pdf.

¹⁰ For example, a number of studies have linked racial segregation to an increased likelihood of perpetrating and being victimized by violence and crime; voluminous literature has examined the “spatial mismatch” between predominantly African-American, older urban neighborhoods, and the employment opportunities in the suburbs and exurbs; and residents of poor, segregated neighborhoods experience poorer health outcomes because of increased exposure to the toxic substances that are disproportionately sited in their communities. See REECE ET AL., *supra* note 2, at 8.

should measure the project's effects in light of the aforementioned criteria and favor projects with the greatest opportunity yield, based on the totality of the circumstances.

If funding is contemplated in a metropolitan area in which the neighborhood markers of low-opportunity noted in this memorandum are met (*e.g.*, a 20% concentration of poverty within a neighborhood, calculated based on the percentage of people within the neighborhood living at 150% of the FPL; a school system scoring more than two standard deviations away from the national averages in math and reading test scores, percentage of students eligible for subsidized meals, or high school completion rates; or a finding of 60% racial segregation within a neighborhood, calculated based on the racial dissimilarity index), these existing markers of low-opportunity should flag for the funding agency that all projects within its jurisdiction warrant closer scrutiny of the project's ability to increase opportunity within the region. Conversely, there should be a presumption against federally assisted activities that increase the concentration of low-income people, racial, or ethnic populations in low-opportunity neighborhoods.

In the second assessment, the proposed project and any alternative suggested projects for which the funding could be allocated should be weighed against each other, based on the opportunity indicators presented in this memorandum.

Because these indicators are organized beginning with the factors with the strongest correlations to expanded opportunity (*i.e.*, education, concentration of poverty, and racial segregation) and ending with the factors that are shown to correlate, but not as strongly, to opportunity (*i.e.*, access to jobs and crime rates), these factors should be weighted accordingly in the evaluation calculus.

By necessity, the evaluation task requires some flexibility and adaptation to practical circumstances (*e.g.*, a project concerning senior citizens may warrant placing greater weight on a community's access to health care, rather than on its impact on the community's access to education). In any evaluation, however, the evaluating body should be required to have a justification available of its calculus, in writing, based on legitimate, nondiscriminatory reasons.

The data necessary to measure the impact of federal funds on opportunity in housing and community development projects is, for the most part, already available nationwide at smaller levels of geography (generally by census tract, zip code, or political jurisdiction). Most of the data we suggest assumes the use of census tracts to approximate neighborhoods within a metropolitan area. However, government entities should consider any local data that is available if such data provides a more accurate method of defining neighborhoods.

Methodology

In addition to The Opportunity Agenda's ongoing research regarding the status of opportunity in the United States generally,¹¹ we identified opportunity indicators specific to the context of housing and neighborhood development by a review of the dominant literature in these areas and discussions with leading experts and researchers in the field. In addition, our memorandum gives significant weight to the findings of a report produced by the *What Works Collaborative*,¹² entitled, "Building Environmentally Sustainable Communities: A Framework for Inclusivity,"¹³ which we found to be particularly insightful and salient on the question of opportunity indicators in the context of neighborhood development.

Opportunity Indicators

1. Education

Access to quality education is one of the strongest predictors of opportunity in the United States. As Chief Justice Earl Warren stated in *Brown v. Board of Education*, "it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms."¹⁴

The duty to affirmatively further fair housing has always been intimately tied to the obligation to ensure equal access to educational opportunities. For example, the Fair Housing Act creates presumptions against locating housing projects in segregated neighborhoods,¹⁵ and an explicit part of that analysis is a consideration of the racial composition of local schools.¹⁶ Furthermore, a number of housing experts have detailed the reciprocal relationship between fair housing policies and school integration (which has well-documented effects on the quality of education for students).¹⁷ Educational quality should thus be a high priority indicator of access to opportunity stemming from housing and urban development decision-making.

¹¹ See, e.g., THE OPPORTUNITY AGENDA, THE STATE OF OPPORTUNITY IN AMERICA: EXECUTIVE SUMMARY (2006) (evaluating the state of opportunity in the United States based on indicators related to: mobility, equality, voice, redemption, community, and security), available at http://opportunityagenda.org/state_opportunity_report_2006 [hereinafter STATE OF OPPORTUNITY EXECUTIVE SUMMARY]; see also THE OPPORTUNITY AGENDA, THE STATE OF OPPORTUNITY IN AMERICA, 2010 (2010) (updating the data in the 2006 report), available at <http://opportunityagenda.org/stateofopportunity>.

¹² The *What Works Collaborative* consists of researchers from the Brookings Institution's Metropolitan Policy Program, Harvard University's Joint Center for Housing Studies, New York University's Furman Center for Real Estate and Urban Policy, and the Urban Institute's Center for Metropolitan Housing and Communities, as well as other experts from practice, policy, and academia.

¹³ VICKI BEEN ET AL., BUILDING ENVIRONMENTALLY SUSTAINABLE COMMUNITIES: A FRAMEWORK FOR INCLUSIVITY (2010), available at <http://www.urban.org/UploadedPDF/412088-environmentally-sustainable-communities.pdf>.

¹⁴ *Brown v. Board of Education*, 347 U.S. 483, 493 (1954).

¹⁵ See, e.g., *Shannon v. HUD*, 436 F.2d 809 (3d Cir. 1970).

¹⁶ *Id.* at 822.

¹⁷ See, e.g., Brief for 553 Social Scientists as Amici Curiae Supporting Respondents, *Parents Involved in Community Schools v. Seattle School Dist. No. 1*, 551 U.S. 701 (2007)) (documented the effects of school integration on educational quality); Brief for Housing Scholars and Research & Advocacy Organizations as Amici Curiae Supporting Respondents 7, *Parents Involved in Community Schools v. Seattle School Dist. No. 1*, 551 U.S. 701 (2007), available at <http://prrac.org/pdf/HousingScholarsBrief.pdf> ("First, school segregation is practically inseparable from the many causes of housing segregation . . . residential segregation persists and is not simply the

Our research indicates that the most consistent measurements of educational opportunity at the neighborhood level are:

- Student poverty concentration (measured by the percentage of students eligible for free and reduced-price lunch);
- Aggregate student test scores (*e.g.*, the percentage of students passing standardized reading and math tests); and
- High school completion rates.

Student Poverty

The socioeconomic make-up of a school's student body is the greatest external predictor of student success and achievement.¹⁸ One illustrative study analyzing data provided by the U.S. Department of Education's School-Level Achievement Database found that a predominantly middle-class school is twenty-two times more likely to be consistently high performing than a high-poverty school.¹⁹ Conversely, research by The Century Foundation found that, on average, low-income students attending middle-class schools perform higher than middle-class students attending low-income schools.²⁰

The percentage of students in a public school receiving subsidized meals has been used by experts as a reliable proxy for student poverty.²¹ At the national level, this data is available from the National Center for Education Statistics Common Core of Data ("CCD").²² At the state level, it is typically available directly from each state's Department of Education. This data may also be found on School Data Direct,²³ a web-based source of school and district data, with searching, comparison, and downloading features.

product of private free choice. Rather, the historical and contemporary practices of state and private actors, such as racial steering and mortgage lending discrimination, directly contribute to the persistent segregation of America's neighborhoods. When a school district acquiesces to segregated residential patterns in drawing school attendance zones and setting student assignment policies it is in a very real sense affirmatively *choosing* segregation. *Second*, extensive social science research demonstrates that school integration programs support housing integration in both the short and long term. Parents are less likely to move when integration programs help to ensure racially integrated schools, and students who attend racially integrated schools are more likely to live in integrated neighborhoods as adults").

¹⁸ KIRWAN INSTITUTE FOR THE STUDY OF RACE AND ETHNICITY, K-12 DIVERSITY: STRATEGIES FOR DIVERSE & SUCCESSFUL SCHOOLS 4 (2007) (citing RICHARD D. KAHLENBERG, INTEGRATION BY INCOME, 193 AM. SCH. BD. J. 4, 51-52 (2006)).

¹⁹ *Id.* (citing HARRIS, D.N., EDUCATIONAL POLICY RESEARCH UNIT, ARIZONA STATE, ENDING THE BLAME GAME ON EDUCATIONAL INEQUALITY: A STUDY OF 'HIGH FLYING' SCHOOLS AND NCLB UNIVERSITY (2006), available at <http://www.eric.ed.gov/PDFS/ED508527.pdf>).

²⁰ *Id.* (citing Richard D. Kahlenberg, The Century Foundation, Can Separate Be Equal? (2004), available at <http://www.tcf.org/list.asp?type=PB&pubid=468>).

²¹ See, e.g., THE COALITION FOR A LIVABLE FUTURE, THE REGIONAL EQUITY ATLAS: METROPOLITAN PORTLAND'S GEOGRAPHY OF OPPORTUNITY 45 (2007).

²² See, e.g., National Center for Education Statistics, CCD 1999/2000 and 2002/03, <http://nces.ed.gov/ccd>.

²³ School Data Direct, www.schooldatadirect.org (although School Data Direct is in the process of completing infrastructure upgrades, it is "targeting the middle of 2010 for a relaunch" of the website).

Student Test Scores

Research has indicated that differences in educational attainment and standardized test scores account for most of the differences in subsequent hourly wages.²⁴ According to ongoing research by the Kirwan Institute, a neighborhood's average test scores have been shown to highly correlate with opportunity outcomes.²⁵ Reading and numerical skills, in particular, must be taken into account because the differences in scores on reading and math tests account for much of the subsequent differences in earnings and employment probabilities.²⁶

This data can be found on School Data Direct,²⁷ as well as the National Center for Education Statistics CCD.²⁸

High School Completion Rates

High school completion rates are an important opportunity indicator and, conversely, high dropout rates are linked to significant barriers to opportunity. With a more educationally demanding economy, the effects of dropping out are more negative than they have ever been, especially for people of color.²⁹ Additionally, women who have not finished high school are much more likely than others to be on welfare, while men who have not finished high school are much more likely to be incarcerated at some point in their lives.³⁰ Dropout rates at the school level have shown a strong correlation with opportunity outcomes in some metropolitan areas.³¹

National completion rates may be derived from National Center for Education Statistics data by calculating the number of students in a graduating class divided by the number of students in grade 9 three and a half years earlier, the same formula may be used at the school level to determine dropout rates,³² based on data found on School Data Direct. At the state level, completion rates are typically available from the state's Department of Education.³³

Pragmatic Considerations

²⁴ NATIONAL RESEARCH COUNCIL, GOVERNANCE AND OPPORTUNITY IN METROPOLITAN AMERICA 67 (1999).

²⁵ See Kirwan Institute for the Study of Race and Ethnicity (unpublished report, on file with The Opportunity Agenda).

²⁶ NATIONAL RESEARCH COUNCIL, *supra* note 24, at 67.

²⁷ See School Data Direct, *supra* note 23.

²⁸ See, e.g., National Center for Education Statistics, U.S. Department of Education, Institute of Education Sciences, Mathematics: The Nation's Report Card (home), <http://nces.ed.gov/nationsreportcard/mathematics/> (last visited June 15, 2010).

²⁹ See Linda Darling-Hammond, *Educational Quality and Equality: What it Will Take to Leave No Child Behind*, in ALL THINGS BEING EQUAL: INSTIGATING OPPORTUNITY IN AN INEQUITABLE TIME 49 (Brian D. Smedley & Alan Jenkins eds., 2007).

³⁰ *Id.* at 50.

³¹ See Kirwan Institute for the Study of Race and Ethnicity, *supra* note 25.

³² See Linda Darling-Hammond, *supra* note 29, at 49.

³³ See, e.g., Oregon Department of Education, District Adequate Yearly Progress (AYP) Report (2008-2009), available at <http://www.ode.state.or.us/data/reportcard/reports.aspx>.

Because the education data on School Data Direct is available at the school level, and any funding-allocation decisions for housing projects are typically made on a jurisdiction-wide or metropolitan-wide basis, we support the methodology used by the *What Works Collaborative*, in matching school level data to census tracts. In a report entitled, “Building Environmentally Sustainable Communities: A Framework for Inclusivity,” the *What Works Collaborative* states:

In order to match census tracts to schools, we draw Voronoi polygons separating elementary schools, creating what are in effect model catchment areas. We then measure the intersections of each census tract with those Voronoi polygons by land area to estimate the educational opportunity offered in each census tract. In cases in which multiple polygons overlap with a census tract, we weight those multiple values by the percentage of the census tract covered by each polygon. By doing so, we are able to calculate the average public elementary school opportunity that a resident of this census tract faces, using free and reduced-price lunch data and 4th grade math and reading test score data. We choose 4th grade data because it is universally available under No Child Left Behind.³⁴

Specific Educational Considerations for Individuals with Disabilities

Expanding opportunity for all, particularly through housing and urban development projects, necessarily requires specific consideration of the needs of people with disabilities. Congress recognized the need for this special focus and enacted the Individuals with Disabilities Education Act (“IDEA”), in part, to improve educational results for children with disabilities, and to ensure equality of opportunity, full participation in society, independent living, and economic self-sufficiency.³⁵

One way that the IDEA measures equal access to education is through the ability of disabled students to access the general education curriculum in the mainstream classroom to the maximum extent possible.³⁶

In implementing HUD’s AFFH regulations, school systems that best support equal access to education for disabled and nondisabled students should typically be favored for project funding. Access to equal education for people with disabilities may be measured by how much time disabled students spend in the mainstream classroom and the graduation/dropout rates.³⁷ Monitoring the graduation rates of children with disabilities will help determine the necessary transition services that will promote successful post-school employment or educational

³⁴ VICKI BEEN ET AL., *supra* note 13, at 48.

³⁵ Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108-446, § 601, 118 Stat. 2647, 2649 (2004).

³⁶ Individuals with Disabilities Education Improvement Act § 601.

³⁷ See, e.g., Stacey Gordon, *Making Sense of the Inclusion Debate under IDEA*, 2006 BYU EDUC. & L.J. 189, 224 (2006).

opportunities, which is an important measure of accountability for individuals with disabilities.³⁸ Indicators such as transportation and concentration of poverty for individuals with disabilities are often embedded within the issue of access to educational equity.

Note, however, that there are a number of special challenges and limitations to data collection for individuals with disabilities.³⁹ Consistent, reliable data is difficult to find, especially regarding the achievement of students with disabilities, the nature of their parents' involvement, and their adult employment rates.⁴⁰ One reason for this lack of information is that the diversity of students with disabilities makes it difficult to reach general conclusions about their access to opportunity.⁴¹ Recent efforts to gather data from large-scale assessments have been relatively unsuccessful because the scores for students with disabilities are not reported as a subgroup, making the average score results unreliable.⁴² Self-reported data of graduation rates, employment, and earnings of individuals with disabilities on census and other surveys is often unreliable due to confusion over the categories of disability provided, or reluctance to disclose the extent of a disability.⁴³ Finally, most federal data for children with disabilities comes from data collected by each state; however, there is no uniform state-by-state data collection system, so the information varies based on quality, accuracy, and consistency.⁴⁴ While the Department of Education's Office of Special Education Programs has been working to produce more consistent data going forward, as of now there is still a lack of reliable data pertaining to individuals with disabilities.⁴⁵ We recommend coordination between HUD and the Education Department regarding the fair housing implications of this data.

2. Concentrations of Poverty⁴⁶

³⁸ *Id.*

³⁹ AMERICAN YOUTH POLICY FORUM & CENTER ON EDUCATION POLICY, THE GOOD NEWS AND THE WORK AHEAD 10-11 (2002), available at http://www.aypf.org/publications/special_ed.pdf.

⁴⁰ *Id.* at 10.

⁴¹ *Id.*

⁴² *Id.* at 11.

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ Government entities should not use poverty levels *alone* to determine the opportunity impact of a proposed or ongoing housing or urban development program. There is evidence that HUD's focus on poverty level alone as its metric of opportunity in the Moving to Opportunity ("MTO") experiment led to reconcentrations of voucher holders in outer-ring city and older suburban neighborhoods that were below the poverty threshold, but otherwise not high opportunity. BEEN ET AL., *supra* note 34, at 53; XAVIER DE SOUZA BRIGGS ET AL., MOVING TO OPPORTUNITY: THE STORY OF AN AMERICAN EXPERIMENT TO FIGHT GHETTO POVERTY 93, at 65 (2010) ("[B]asic compromises were made, in the outline of [the MTO] social experiment, that limited its reach in important ways: defining the fuzzy concept of an 'opportunity' neighborhood, for example, as a census tract with a low poverty rate rather than something more direct, such as an area with high-performing schools, job growth, or other traits").

The concentration of poverty is defined as the percentage of all persons at or below the federal poverty line living in a geographically-defined neighborhood.⁴⁷ The effects on individuals of living in neighborhoods of high poverty concentration are overwhelmingly adverse.⁴⁸ Moving to low-poverty neighborhoods may improve the life chances of particularly young inhabitants through several distinct mechanisms: because of higher levels of neighborhood social organization that reduce the threats of violence and disorder; stronger institutional resources, such as higher quality schools, youth programs, and health services; more positive peer-group influences; and more effective parenting, due to parents living in safer, less stressful neighborhoods and enjoying better mental health or parents' becoming employed.⁴⁹

Historically, discriminatory housing policies have been strongly associated with the creation of high-poverty neighborhoods.⁵⁰ Fair housing policies, therefore, must make affirmative efforts to dismantle concentrations of poverty at the neighborhood level.

Measuring Concentrations of Poverty

High-poverty neighborhoods are measured according to census data and are often defined as census tracts with poverty rates of 40 percent or higher.⁵¹ However, because that definition of concentration of poverty captures only the most extreme areas of poverty concentration within the United States, and does not convey the many adverse impacts on opportunity that living in an otherwise poor neighborhood might have on an individual, a more useful standard in the context of resource allocation decisions may be to define a geographical area as having a "high concentration of poverty" if $\geq 20\%$ of its residents report income at 150% or less of the federal poverty level ("FPL").⁵² Medium concentrations of poverty can be defined as 10%-19% of the residents reporting income at 150% of FPL, and low concentration of poverty neighborhoods should be defined as $< 10\%$ of the residents reporting income at 150% or less of the FPL.⁵³

Other measures, such as the Neighborhood Sorting Index, may be used to analyze broader economic disparities.⁵⁴ Because home values have been found to be highly correlative to greater

⁴⁷ PAUL A. JARGOWSKY, ASSOCIATE PROFESSOR OF POLITICAL ECONOMY, UNIVERSITY OF TEXAS AT DALLAS, SPRAWL, CONCENTRATION OF POVERTY, AND URBAN INEQUALITY 6 (2001), available at <http://urbanpolicy.berkeley.edu/pdf/census2000/jargowsky.pdf>.

⁴⁸ See, e.g., NATIONAL RESEARCH COUNCIL, *supra* note 24, at 54.

⁴⁹ See BRIGGS ET AL., *supra* note 46, at 93 (internal citations omitted).

⁵⁰ See JARGOWSKY, *supra* note 47, at 7 ("Poverty is concentrated in the United States for a number of different reasons. Historically, the single most important factor was racial residential segregation").

⁵¹ See *id.*, at 6.

⁵² See, e.g., JOAN M. PATTERSON ET AL., ASSOCIATIONS OF SMOKING PREVALENCE WITH INDIVIDUAL AND AREA LEVEL SOCIAL COHESION 58 J. EPIDEMIOL. COMM. HEALTH 692, 693 (2004), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732846/pdf/v058p00692.pdf>.

⁵³ In the many areas in which a local tax base funds government services, the tax base capacity, as determined by income level, of a particular neighborhood or community may bear a strong correlation to structures of opportunity. However, in many states, local property taxes have a lesser impact on funding local services than statewide taxes. Also, different structures of local government make this factor's importance vary widely from state to state. Thus, the tax base capacity of a particular neighborhood may not be the strongest, or most easily quantifiable, indicator of opportunity within a particular geographic area. BEEN ET AL., *supra* note 34, at 53.

⁵⁴ See BEEN ET AL., *supra* note 34, at 64.

opportunity outcomes, this indicator may also be a useful benchmark for determining neighborhood poverty.⁵⁵ Data on home values, or housing cost, may be obtained from census data as well.

Additional Poverty Considerations

Income Adequacy. In addition to the federal poverty level, governmental evaluating entities should consider using definitions of “income adequacy” to determine what constitutes a high-opportunity neighborhood under the aforementioned rubrics. Income adequacy statistics take into account resources as compared to the market prices of basic necessities, as faced by the average consumer. For example, a measurement of income adequacy currently being developed by Wider Opportunities for Women: (1) places emphasis on the expenses a family must cover to make ends meet and not under-consume or consume inferior goods that affect health or safety; (2) takes into account pragmatic necessities including health care, transportation, and child and elder care; (3) uses market prices wherever possible; and (4) includes asset development savings targets for emergency savings and retirement, and possibly for education and homeownership.⁵⁶

3. Racial Segregation

Research has long established that racial segregation adversely affects outcomes for minority groups, contributes to unequal opportunities and disparities, and robs residents of all races of the benefits of diverse social networks.⁵⁷ One study of 204 metropolitan areas, for example, determined that a one standard deviation reduction in segregation (13 percent) would eliminate one-third of the gap between whites and blacks in most opportunity-related outcomes, where success was measured by high school graduation rates, jobs, earnings, and single-parent status.⁵⁸

Additionally, racial segregation (*i.e.*, the concentration of racial minorities) is a significant predictor of the share of subprime loans a neighborhood receives, even after controlling for the percentage of minorities within the metropolitan area as a whole, credit score, median home value, poverty, and education.⁵⁹ By contrast, neither poverty nor unemployment is a statistically significant predictor of the percent of subprime loans.⁶⁰ A 10% increase in black segregation, on average, is associated with a 1.4% increase in high-cost lending; and a 10% increase in Hispanic segregation, on average, is associated with a 0.6% increase in high-cost lending.⁶¹ Thus, in

⁵⁵ See KIRWAN INSTITUTE FOR THE STUDY OF RACE AND ETHNICITY, ongoing research (on file with author).

⁵⁶ JOAN A. KURIANSKY & SHAWN MCMAHON, WIDER OPPORTUNITIES FOR WOMEN, A BETTER POVERTY MEASURE IS A STEP FORWARD, BUT ECONOMIC SECURITY IS THE TRUE GOAL (2010), <http://www.spotlightonpoverty.org/ExclusiveCommentary.aspx?id=31f44863-b4c8-4c28-8e25-a8ffc6c070d>.

⁵⁷ See, e.g., NATIONAL RESEARCH COUNCIL, *supra* note 24, at 57-58.

⁵⁸ See *id.* at 58; see also *id.* at 70.

⁵⁹ GREGORY D. SQUIRES ET AL., SEGREGATION AND THE SUBPRIME LENDING CRISIS 1, 4 (2009), available at http://www.epi.org/publications/entry/segregation_and_the_subprime_lending_crisis/.

⁶⁰ *Id.* at 4.

⁶¹ *Id.* at 4-5.

addition to the statutory mandate to avoid perpetuating or exacerbating segregation,⁶² research shows that residential integration is an important geographic indicator of opportunity.

Measuring Racial Segregation

To track changes in racial segregation in metropolitan areas, government bodies allocating federal funding should rely on the racial dissimilarity index⁶³—the most widely used measure to capture the unevenness of a population’s distribution within a region.⁶⁴ Because racial dissimilarity indices are derived from census data, they are readily accessible to all regional government bodies allocating federal funds.

The racial dissimilarity index indicates how unevenly two mutually exclusive groups (*e.g.*, blacks and whites, or Latinos and whites) are distributed within a geographic area. It can be thought of as the percentage of either group that would have to move in order to achieve racial representation in each of the area’s census tracts, proportionate to the composition of the two groups in the broader region.

For example, if Latinos make up 20% of the population within a metro Core Base Statistical Area (“CBSA”), the Latino/white dissimilarity index tells us the percentage of Latinos or whites that would have to move in order to achieve the 20% level in all of the metro CBSA’s census tracts. Thus, a 65 score on the Latino/white dissimilarity index means that 65% of Latinos or whites would have to move in order to achieve a representative distribution of Latinos and whites throughout the region. The higher the dissimilarity index, the more the region is racially segregated. Dissimilarity values of 60 or above are considered very high, while values of forty to fifty reflect moderate residential segregation.⁶⁵ An evaluating agency can discern trends of particularly notable increases or decreases in residential segregation by examining changes in residential segregation within a decade. Changes in dissimilarity values exceeding ten points within a decade are considered significant in this context.⁶⁶

⁶² The AFFH duty requires government actors to “remove the walls of discrimination which enclose minority groups,” *Evans v. Lynn*, 537 F.2d 571, 577 (1975) (citing 114 Cong. Rec. 9563 (statement of Rep. Celler)), and to foster “truly integrated and balanced living patterns.” *Trafficante v. Metro. Life Ins. Co.*, 409 U.S. 205, 211 (1972) (citing 114 Cong. Rec. 3422 (statement of Sen. Mondale)).

⁶³ BEEN ET AL., *supra* note 34, at 64; *see also* RUCKER C. JOHNSON, LONG-RUN IMPACTS OF SCHOOL DESEGREGATION AND SCHOOL QUALITY ON ADULT HEALTH 28 (2009), *available at* <http://www.aeaweb.org/aea/conference/program/retrieve.php?pdfid=541> (using the racial dissimilarity index to measure racial segregation); ANTHONY DOWNS, NEW VISIONS FOR METROPOLITAN AMERICA 25 (Brookings Institution Press 1994) (similarly using the racial dissimilarity index to measure racial segregation).

⁶⁴ *But see* Bruce Murphy, *Study Explodes Myth of Area’s ‘Hypersegregation’: Researchers at UWM Rethink Racial Arithmetic of Major American Cities* JSONLINE, Jan. 11, 2003, <http://mumford.albany.edu/census/2003newspdf/jsonlineSeries/011103murphy.pdf> (presenting critiques of the racial dissimilarity index to measure of racial segregation).

⁶⁵ JOHN LOGAN ET AL., LEWIS MUMFORD CTR., UNIV. AT ALBANY, ETHNIC DIVERSITY GROWS, NEIGHBORHOOD INTEGRATION LAGS BEHIND 2 (2001), *available at* <http://mumford1.dyndns.org/cen2000/WholePop/WPreport/MumfordReport.pdf>.

⁶⁶ *Id.*

4. *Environmental Quality*

Research demonstrates that, even after controlling for income, land use, and other variables typically used to explain disparate patterns of exposure, people of color and low-income communities bear a disproportionate share of the nation's environmental and health hazards.⁶⁷ Such disparities include: land use and facility siting; transport of hazardous and radioactive materials; public access to environmental services, planning, and decision-making; health assessments and community impacts; air quality and health risks; childhood lead poisoning; childhood asthma; pesticide poisoning; and occupational accidents and illnesses.⁶⁸ These disparities thus disproportionately affect the life chances and opportunities of communities of color. According to research conducted by the United Church of Christ Justice & Witness Ministries, African Americans, Hispanics/Latinos, and Asian Americans/Pacific Islanders alike are disproportionately burdened by hazardous wastes in the U.S.⁶⁹

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,⁷⁰ requires federal officials and those receiving federal financial assistance to incorporate into their respective cost-benefit analyses of federal projects a meaningful consideration of potential disproportionate adverse environmental and health impacts on minority and low-income populations. Embedded in this requirement is a set of considerations that need to be addressed by housing analysts as they evaluate the impact on fair housing of any proposed or ongoing housing projects.

Measuring Environmental Quality

Consistent with the suggestions of the *What Works Collaborative*,⁷¹ we recommend employing the following two measures of air and environmental quality: (1) the Toxic Release Inventory ("TRI"), a database that contains detailed information about the total amount of toxic waste released from industrial facilities; and (2) the National-Scale Air Toxics Assessment ("NATA"),

⁶⁷ See, e.g., MANUEL PASTOR, JR., RACHEL MORELLO-FROSCH, & JAMES SADD, THE CENTER FOR JUSTICE, TOLERANCE & COMMUNITY, UNIV. OF CAL. SANTA CRUZ, STILL TOXIC AFTER ALL THESE YEARS...AIR QUALITY AND ENVIRONMENTAL JUSTICE IN THE BAY AREA (2007), available at http://cjtc.ucsc.edu/docs/bay_final.pdf; JOINT CENTER FOR POLITICAL AND ECONOMIC STUDIES, BREATHING EASIER: COMMUNITY-BASED STRATEGIES TO PREVENT ASTHMA 2 (2004), <http://www.jointcenter.org/publications1/publication-PDFs/PolicyLink-PDFs/PolicyLink-Asthma.pdf>.

⁶⁸ ROBERT D. BULLARD & GLENN S. JOHNSON, *Just Transportation*, in JUST TRANSPORTATION 10 (Robert D. Bullard & Glenn S. Johnson eds., 1997).

⁶⁹ See ROBERT D. BULLARD ET AL., TOXIC WASTES AND RACE AT TWENTY: 1987-2007 xii (2007), available at <http://www.ejrc.cau.edu/TWART%20Final.pdf> (finding also that people of color comprise a majority in neighborhoods with commercial hazardous waste facilities, and much larger (more than two-thirds) majorities can be found in neighborhoods in which commercial hazardous waste facilities are clustered close together).

⁷⁰ Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 11, 1994), available at <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>.

⁷¹ See BEEN ET AL., *supra* note 34, at 51-52.

which provides a modeled risk assessment at the tract level from exposure to 180 of the 187 CAA toxics based on TRI emissions, as well as nonpoint sources.⁷²

The *What Works Collaborative* explains the method by which the TRI data may be matched to census tracts as follows:

[W]e used the approach adopted by Powell of creating a buffer of two miles around the address of a TRI emissions source. TRI has the advantage of including air, water, and land emissions. However, it ignores differences in the media into which emissions occur. For example, emissions into a river will disperse differently than those out of a smokestack. Still, it is difficult to construct a universal system of modeling emissions and a buffer is a decent first approximation.⁷³

Additional Considerations

To simultaneously further the goals of neighborhood inclusivity and environmental sustainability, the *What Works Collaborative* suggests evaluating the walkability and transit accessibility of a particular neighborhood (*i.e.* focusing on how the neighborhood infrastructure allows households to avoid driving), in conjunction with other opportunity indicators.⁷⁴ To determine the walkability/transit accessibility of a neighborhood, the *What Works Collaborative* recommends considering: (1) the percentage of commuters commuting to work by walking or by public transit, derived from U.S. census data; and (2) the daily vehicle miles traveled per capita, derived from the Federal Highway Administration's National Household Travel Survey.⁷⁵ Due to the disproportionate effect that environmental degradation has on disadvantaged populations, we support the analysis set forth by the *What Works Collaborative*. Thus, to the extent practicable, walkability and transit accessibility should be factored into a consideration of the impact on opportunity of housing or community development projects.

Although low-income communities and communities of color suffer from disproportionate rates of asthma, asthma data is difficult to consistently quantify. Some jurisdictions track hospitalizations, while others rely upon clinical admissions and results differ significantly based on which approach is taken. Data is further complicated by potential differences across metro areas in access to health care. Finally, because asthma incidence data are gathered at the health care facility, the addresses recorded are often incorrect. Accordingly, although we view asthma rates as an informative indicator of environmental opportunity, the available data sources limit its use on a uniform basis.

⁷² Nonpoint source pollution is pollution "of or pertaining to a source . . . that is not readily and specifically identifiable, as water runoff." THE RANDOM HOUSE DICTIONARY (2010), *available at* <http://dictionary.reference.com/browse/nonpoint>; *see also* United States Environmental Protection Agency, What is Nonpoint Source (NPS) Pollution? Questions and Answers, <http://www.epa.gov/owow/NPS/qa.html> (last visited June 28, 2010).

⁷³ *See* BEEN ET AL., *supra* note 34, at 51-52.

⁷⁴ *See generally* BEEN ET AL., *supra* note 34 (citing REECE ET AL., *supra* note 2, at 56).

⁷⁵ *Id.* at 19.

5. Medically Underserved Communities

Access to health care is an important determinant of one's life chances. Minorities, however, are more likely to receive care in emergency rooms and lower-quality healthcare facilities.⁷⁶ These racial disparities exist even controlling for insurance status and income.⁷⁷ Thus, fair housing efforts must take into account the effect that housing and urban development projects have on increasing or decreasing the ability of community residents to access quality health care.

Measuring Medically Underserved Communities

National data on healthcare disparities is collected by the Agency for Healthcare Research and Quality ("AHRQ"), a division of the U.S. Department of Health and Human Services.⁷⁸ The AHRQ has developed mapping software that can be used with administrative data on individual hospital admissions to assess the number and cost of "preventable admissions" at the state or county level.⁷⁹

To ensure that housing and urban development projects maximize community access to *adequate*, and not merely equal or proportionate (but inadequate) healthcare within a region, funding agencies should also refer to data provided by the Department of Health and Human Services' Health Resources and Services Administration ("HRSA") on Medically Underserved Areas and Populations.⁸⁰ This data shows which areas within a region are medically underserved based on both the availability of primary care physicians and the health needs of communities—specifically, infant mortality rates in communities, as well as income and age of residents.⁸¹

6. Access to Jobs

⁷⁶ Brian D. Smedley, *Why Health-Care Equity Is Essential to Opportunity—and How to Get There*, in ALL THINGS BEING EQUAL: INSTIGATING OPPORTUNITY IN AN INEQUITABLE TIME 137 (Brian D. Smedley & Alan Jenkins eds., 2007).

⁷⁷ See INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES, UNEQUAL TREATMENT: CONFRONTING RACIAL AND ETHNIC DISPARITIES IN HEALTH CARE 5, 38 (2003).

⁷⁸ See, e.g., U.S. DEP'T OF HEALTH & HUMAN SERVICES, NATIONAL HEALTHCARE DISPARITIES REPORT (2009), available at <http://www.ahrq.gov/qual/nhdr09/nhdr09.pdf>.

⁷⁹ See AHRQ Quality Indicators Software Download (2007), <http://www.qualityindicators.ahrq.gov/mappingtool.htm> (note that "[t]he tool is being redesigned and will be available in a future version of the MONAHRQ tool currently under development").

⁸⁰ See U.S. Department of Health and Human Services, Health Resources and Service Administration, Shortage Designation: Medically Underserved Areas & Populations, at <http://bhpr.hrsa.gov/shortage/muaguide.htm> (last visited July 2, 2010); see also THE OPPORTUNITY AGENDA, DANGEROUS & UNLAWFUL: WHY OUR HEALTH CARE SYSTEM IS FAILING NEW YORK AND HOW TO FIX IT 25 (2007), available at http://opportunityagenda.org/files/field_file/Full%20Dangerous%20and%20Unlawful%20Report.pdf.

⁸¹ See U.S. Department of Health and Human Services, *supra* note 80.

Spatial access to skill-appropriate jobs has been used by a number of researchers as an indicator of access to opportunity.⁸² Due to shifts in labor demand from less-educated to more-educated portions of the workforce, well-paid, less-skilled jobs (*i.e.*, in the manufacturing and other sectors) have significantly diminished, resulting in a skills mismatch that disadvantages less-skilled workers.⁸³ Job growth in the central city has been in sectors that require higher skills, meaning that central-city jobs are no longer *functionally* accessible to less-educated city residents who might reside in the central-city (due to factors including racial segregation and poverty concentration), even if the jobs are *physically* accessible.⁸⁴

Moreover, the physical distance from job-rich areas is exacerbated by the lack of automobile transportation.⁸⁵ For example, one estimate found that inner-city residents with cars had access to fifty-nine times as many jobs as their neighbors without cars.⁸⁶ Another recent study found that residential relocation and car ownership are the key factors in predicting the likelihood that welfare recipients will become employed.⁸⁷ Transit-oriented development can link low-income residents with job centers.⁸⁸ Because poor people are the least likely to have access to an automobile, transit-oriented development has been considered an approach to overcome barriers to opportunity faced by people in high-poverty residential areas.⁸⁹⁹⁰

Measuring Access to Jobs

⁸² Note, however, that low-poverty neighborhoods should not be used as a proxy for new job creation and net job growth, because closer proximity to low-poverty neighborhoods does not necessarily correlate with increased job opportunities. BRIGGS ET AL., *supra* note 46, at 221-22 (“At least in terms of the proxy measures of new job creation and net job growth, moving to low-poverty neighborhoods . . . did not necessarily reduce the spatial mismatch between residences and job locations. And single parents without reliable, high-quality, low-cost, institutionally provided childcare had to line up support, housing, and work locations—and commutes among them—in complicated ways that the one-dimensional version of spatial mismatch, with jobs sprawling toward the promising suburbs, simply does not capture”).

⁸³ NATIONAL RESEARCH COUNCIL, *supra* note 24, at 68.

⁸⁴ *Id.*

⁸⁵ Philip Tegeler, *Connecting Families to Opportunity: The Next Generation of Housing Mobility Policy*, in ALL THINGS BEING EQUAL: INSTIGATING OPPORTUNITY IN AN INEQUITABLE TIME 86 (Brian D. Smedley & Alan Jenkins eds., 2007).

⁸⁶ *Id.*

⁸⁷ *Id.* at 87.

⁸⁸ Myron Orfield, *Land Use and Housing Policies to Reduce Concentrated Poverty and Racial Segregation*, 33 FORDHAM URB. L.J. 877, 905 (2006).

⁸⁹ *See id.*

⁹⁰ For an analysis of the potential synergies and conflicts between neighborhood walkability and environmental sustainability on the one hand, and access to jobs and transit-oriented development on the other, *see generally* BEEN ET AL., *supra* note 34, at 9-10 (“Efforts to promote environmentally sustainable development sometimes may compete with efforts to promote inclusivity (*e.g.*, by ensuring that all groups have access to neighborhoods offering sound educational and employment opportunities, safety and neighborhood quality). Although the potential for conflict between environmental sustainability and inclusion is serious, these goals can also be compatible In fact, one can argue that neither environmental sustainability nor inclusion can be fully achieved in the absence of the other. The challenge lies in finding strategies that respect and advance both goals rather than myopically pursue one at the expense of the other. [This report offers] some examples of how specific policies might present synergies or conflicts between inclusivity and environmental sustainability.”).

To concretely evaluate the access to skill-appropriate jobs that a housing or urban development project will create, in accordance with analysis undertaken by the *What Works Collaborative*, government entities allocating federal funds for housing and urban development projects should consider:

- *The absolute number of jobs requiring an associate's level degree or below within a five-mile radius.*
- *The pattern of recent job growth within the area, to measure the total number of jobs as well as job trends.*
- *The ratio of total jobs requiring an associate's degree or below within a five-mile radius⁹¹ to the total number of households earning under \$50,000 per year within a five-mile radius, to control for likely competition for jobs.*

This data can be obtained from the Census Zip Business Patterns, and may be filtered to focus on only those jobs requiring an associate's degree education or below (those jobs most likely to be accessible to people served by HUD's programs) by using Bureau of Labor Statistics ("BLS") data showing the training required for each position.⁹²

7. Crime and Security

Security from violent crime is an important opportunity indicator, particularly for women and girls.⁹³ In the Moving to Opportunity ("MTO") experiment, for example, girls whose families successfully moved to lower poverty communities experienced a substantial reduction in the negative mental health effects of "omnipresent and constant harassment; pervasive domestic violence; and a high risk of sexual assault," and also experienced less "pressure to become sexually active at increasingly younger ages."⁹⁴ This diminished "female fear," was linked to a reduction in the risks of pregnancy, sexually transmitted diseases, and dropping out of school to care for children.⁹⁵

However, in analyzing the effects of the MTO experiment on the psychological health of women and girls, evaluators of the experiment used *low-poverty* neighborhoods as a proxy for the prevalence of violent crime, instead of relying on actual crime rates.⁹⁶ Thus, the MTO's conclusions regarding the effects of the "female fear" present analytical difficulties. We recommend, instead, direct reliance on available crime statistics.

The use of crime rates as an indicator of opportunity is difficult, but not impossible, to quantify at local levels. The most commonly used measure of crime is the FBI's Uniform Crime Report,

⁹¹ The *What Works Collaborative* and the Kirwan Institute both use the five-mile radius measurement to define how far workers should be expected to travel and, thus, as an indicator of "relatively accessible jobs." BEEN ET AL., *supra* note 34, at 49; REECE ET AL., *supra* note 2, at 55.

⁹² BEEN ET AL., *supra* note 34, at 50.

⁹³ See, e.g., THE OPPORTUNITY AGENDA, STATE OF OPPORTUNITY EXECUTIVE SUMMARY, *supra* note 11, at 22-23; BRIGGS ET AL., *supra* note 46, at 94.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ See generally BRIGGS ET AL., *supra* note 46.

which tracks both the violent crime rate and property crime rate.⁹⁷ While the Uniform Crime Report data is national in scope, it is consistently available only at the political jurisdiction level and not at smaller levels, such as zip codes or census tracts.⁹⁸ In metropolitan areas with many small local governments, this shortcoming is not all that significant. In these cases, data supplied by the Uniform Crime Report should be relied upon by regional funding agencies in considering the proximity to crime of housing or urban development projects to be funded, and the resulting opportunity impact on the project's residents or inhabitants. In some metropolitan areas, the failure of the Uniform Crime Report to differentiate between different parts of a political jurisdiction may produce data with limited relevance. However, many police departments do break out their Uniform Crime Report statistics at the tract, precinct, or zip code level.⁹⁹ In such cases, those police department statistics on crime rates should be consulted in evaluating the opportunity impact of proposed and ongoing housing and urban development projects and activities. However, even the police departments that break out their Uniform Crime Report data at smaller geographic levels do not use a universal methodology.¹⁰⁰

Conclusion

To best fulfill the duty to affirmatively further fair housing, governmental entities should balance the opportunity indicators discussed above, based on the totality of the circumstances, but weighted with greater priority to the initial indicators discussed.

The way in which indicators are used will necessarily depend in part on the program or activity in question. An important distinction exists, for example, between the siting of affordable housing—which should generally avoid low-opportunity neighborhoods—and neighborhood resources and improvements—which may be used to increase opportunities in otherwise low-opportunity communities.

The Opportunity Agenda welcomes the chance to discuss these recommendations further, in the context of revised AFFH rules and other agency decisionmaking.

Appendix A: Opportunity Indicators

Indicator	Measurement
Access to high-quality education	➤ The percentage of students eligible for free lunch, math and reading test scores, and

⁹⁷ BEEN ET AL., *supra* note 34, at 48 (citing Federal Bureau of Investigations, Uniform Crime reports, <http://www.fbi.gov/ucr/ucr.htm#cius>) (“Note that information gathered under the Uniform Crime Reporting Program is published annually in *Crime in the United States*. The UCR track ‘offense information on murder and nonnegligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson’”). In the coming years, jurisdictions may be able to increasingly rely on data provided by the FBI’s National Incident Based Reporting System. See Federal Bureau of Investigation, National Incident-Based Reporting System, <http://www.fbi.gov/ucr/faqs.htm> (last visited on June 28, 2010).

⁹⁸ *Id.* at 49.

⁹⁹ BEEN ET AL., *supra* note 34, at 49.

¹⁰⁰ *Id.*

	high school dropout rates
Concentration of poverty within a neighborhood	➤ Federal Poverty Level (FPL) and measure of income adequacy within a neighborhood
Racial segregation within a census tract or neighborhood	➤ Variation from the proportion of the non-white population regionally
Environmental quality within a neighborhood	➤ Toxic Release Inventory and National-Scale Air Toxics Assessment
Access to healthcare	➤ Data on health disparities from the Agency for Healthcare Research and Quality, correlated to neighborhoods through their mapping software
Access to sustainable jobs	➤ Data from the Census Zip Business Patterns and the Bureau of Labor Statistics
Crime rates	➤ Data from the FBI's Uniform Crime Reports and statistics from local police departments