New Orleans Opportunity Mapping –
An Analytical Tool to Aid Redevelopment

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Introduction
Opportunity mapping is a research tool used to understand the dynamics of “opportunity” within metropolitan areas. The purpose of opportunity mapping is to illustrate where opportunity rich communities exist (and assess who has access to these communities) and to understand what needs to be remedied in opportunity poor communities. With support from the Ford Foundation and with assistance from the Greater New Orleans Community Data Center, the Kirwan Institute for the Study of Race and Ethnicity is applying its expertise in opportunity mapping in the New Orleans region. The following report provides some early results from this analysis and describes the next steps in the development (and expansion) of this project.

The application of opportunity mapping in the New Orleans region can provide a crucial source of neighborhood level information to aide the monumental redevelopment efforts in post-Katrina New Orleans. Opportunity mapping can assist in connecting marginalized or displaced residents of the region to opportunity rich areas, and assist advocates in assuring new housing opportunities are provided in opportunity rich areas. Opportunity mapping also provides information to aid the reconstruction/rehabilitation of areas most severely impacted by Hurricane Katrina, identifying what opportunities were missing in these neighborhoods prior to Hurricane Katrina (e.g. employment opportunities or high quality educational opportunities). We hope this information can aid community leaders in remedying these deficiencies to assure reconstruction creates opportunity rich neighborhoods that are accessible to all people.

What is Opportunity Mapping?
An extensive body of research has established that neighborhood conditions and proximity to opportunities such as high performing education or sustainable employment have a critical
impact on quality of life and self advancement. The central premise of opportunity mapping is that residents of a metropolitan area are situated within an interconnected web of opportunities that shape their quality of life.¹ The location of housing is a powerful impediment to or asset for accessing these opportunities and as such housing policies should be oriented towards providing this access wherever it may exist. Opportunity mapping provide an analytical framework to measure opportunity comprehensively in metropolitan regions and determine who has access to opportunity rich areas. Opportunity mapping also provides a framework to assess what factors are limiting opportunity in a community and can assist in identifying what measures are needed to remedy these impediments to opportunity. Mapping opportunity in the region requires selecting variables that are indicative of high (or low) opportunity. In this context, high opportunity indicators would be the availability of sustainable employment, high performing schools, environmental health, access to high quality health care, adequate transportation, quality child care, safe neighborhoods, and institutions that facilitate civic and political engagement. These multiple indicators of opportunity are assessed in a comprehensive manner at the same geographic scale, thus enabling the production of a comprehensive “opportunity map” for the region.

**Why Apply Opportunity Mapping in New Orleans**

Hurricane Katrina and its subsequent flooding devastated the New Orleans region, destroying neighborhoods and displacing residents throughout the nation. Due to factors of both geography and negligent policies, lower income communities of color were disproportionately impacted by the storm’s aftermath.² Research by many academics, advocates and policy experts have illustrated that neighborhoods most impacted by the storm were highly segregated and isolated from many of the key opportunity structures crucial to quality of life and advancement.

As redevelopment and rehabilitation plans for areas impacted from Katrina and strategies to house those displaced by the storm are developed. Several critical questions need to be addressed:

1. Will strategies to provide immediate housing and shelter to those displaced by the storm, provide these housing options in opportunity rich areas, instead of re-concentrating the displaced in isolated or marginalized communities?

2. Will redevelopment and rehabilitation recreate the concentrated poverty, segregated opportunity poor neighborhoods that preceded Katrina? Or will redevelopment remedy the factors impeding access to opportunity in these neighborhoods, to create livable opportunity rich neighborhoods that are accessible to all?

3. Will redevelopment remedy the public health risks and environmental risks that disproportionately impact low income communities of color, in order to create environmentally sound and healthy/safe neighborhoods?

Opportunity mapping is unique in that is can provide information to policy makers, community leaders and community members that is comprehensive, visual and easy to understand. Opportunity mapping also provides a comprehensive way to view access to opportunity, looking

¹ john a. powell, Opportunity-Based Housing, 12-WTR J. AFFORDABLE HOUSING AND COMMUNITY DEV. L. 188.
² For more information regarding the impact of Katrina please see “New Orleans after the Strom: Lessons from the Past, a Plan for the Future.” Produced by the Brookings Institution, Metropolitan Policy Program. October 2005
at multiple indicators of community health simultaneously, painting a more inclusive picture of neighborhood conditions. Opportunity mapping provides an essential base of information to assist in answering these questions to aide redevelopment planning and empower community members with information to assure their communities are rehabilitated into safe, opportunity rich areas. Opportunity mapping can also be dynamic and continuously updated to reflect the changing conditions in the region. Also, the opportunity maps provide a base of information to attempt to project the potential impact of proposed policies in the region.

**Early Results: Neighborhoods Health & Economic Opportunity**

The attached maps provide some initial analysis of the distribution of opportunity in the region. The maps present the distribution of high and low opportunity census tracts in the region based on both neighborhood health indicators and economic opportunity indicators. The final map, illustrates this same information with an overlay of the September 10th extent of flooding. Please note that the indicators for these maps are presented in the following description of neighborhood, housing and economic opportunity indicators below, indicators that are not in italics have not been collected yet and were not used for this preliminary analysis.

**Interpreting the Results**

Three early conclusions can be from this preliminary analysis.

1. Like many regions in the nation, opportunity is spatially distributed throughout the region. High opportunity areas can be found in the City of New Orleans, but much of the City consists of very low opportunity neighborhoods. Conversely, many of the region’s high opportunity suburbs are found in the surrounding region.

2. Flooding damage impacted both high and low opportunity areas, but low opportunity areas were impacted more. In fact, most of the region’s lowest opportunity (very low opportunity neighborhoods) areas were directly impacted by flooding.

3. Generally, low opportunity areas based on neighborhood health & housing indicators, closely parallel the low opportunity areas identified by the economic opportunity indicators. Based on this early analysis, redevelopment in these areas would need to improve both housing and neighborhood health, but also expand economic opportunities to improve these low opportunity areas.

**Next Steps and Project Expansion**

The maps completed for this report are just a preliminary analysis of opportunity in the region. The next steps for this initiative will be to expand the number of opportunity indicators to more comprehensively capture the dimensions of opportunity in the region. Working in collaboration with local stakeholders we have identified an extensive set of indicators to complete the opportunity analysis in the region. These are included below:

**Cultural Institutions:**
- Proximity and accessibility of cultural institutions

**Education:**
- Educational attainment for the total population
- School poverty for neighborhood schools
- Test scores for neighborhood schools
• Teacher qualifications for neighborhood schools (or certified teachers)
• Graduation rate or similar indicator for neighborhood schools

**Environmental Health:**
• Proximity to toxic waste release sites
• Measures for post storm toxicity/mold
• Proximity to parks/open space

**Public Health:**
• Asthma rates (or proxy if local data is not available)
• Proximity to hospitals
• Per capita number of health professionals working in neighborhood
• Proximity to other health care facilities

**Economic Opportunity and Mobility:**
• Unemployment rates
• Population on public assistance
• Proximity to employment (job opportunities within 5 miles)
• Employment competition (ratio of jobs to labor force within 5 miles)
• Economic climate (change in number of jobs 1999 to 2004 within 5 miles)
• Economic climate (business creation from 1999 to 2004 within 5 miles)
• Mean commute time
• Employment diversity (# of well paying opportunities by skill level)
• Public transit access

**Infrastructure:**
• Elevation/flood risk
• Transit access

**Housing and Neighborhoods:**
• Property values
• Housing vacancy rates
• Housing cost burden
• Crime rates
• Poverty rates
• Population change 1990-2000
• Home ownership

The opportunity maps created by this extensive list of indicators will adequately reflect pre-Katrina conditions in New Orleans. Following the creation of these maps, the project will incorporate the impacts of Hurricane Katrina in regard to the distribution of opportunity in the region, by estimating the extent of flooding and storm damage by neighborhood. This revised opportunity maps will provide valuable information in assessing what the opportunity conditions were in the neighborhoods most impacted and in determining what conditions exist in neighborhoods not impacted by the storm. This information will also provide a base of information to understand where opportunities have been redistributed/or created during the reconstruction process. These revised opportunity maps will also create an analytical framework to estimate the potential impacts of redevelopment proposals and proposals to house displaced residents. Proposed redevelopment concepts can be evaluated in the following ways:

1. Will the proposal help create opportunity and provide neighborhood safety or stability in a previously opportunity poor community?
2. Will the proposal remedy the most pressing issues depressing opportunity in an opportunity poor community?
3. Will the proposal help connect marginalized and or displaced residents with opportunities in the region?

4. Will the proposal provide affordable housing opportunities in opportunity rich communities within the region?

This work can be disseminated in multiple ways: data can be provided to the Greater New Orleans Community Data Center to share with other analysts and with community members. The opportunity maps and other research related to the maps can be made available on-line. Eventually the data can be posted in an interactive mapping format, allowing others to look at the various aspects of the opportunity maps. Our goal with this research initiative is to provide valuable information that supports the development of opportunity rich communities that are accessible to all in the New Orleans region. In addition, we hope to provide easy to use information and analysis for community members, activists and policy makers to assist in the tremendous rebuilding and rehabilitation process in the region.
Opportunity mapping
New Orleans, LA

This map displays the distribution of economic and neighborhood health in the city and its vicinity.

Source: Census 2000; FEMA; Neighborhood Change Database | Date: 11.03.05
Opportunity mapping
New Orleans, LA

This map displays the distribution of economic and neighborhood health in the city and its vicinity.

Source: Census 2000; FEMA; Neighborhood Change Database | Date: 11.03.05
Opportunity mapping
New Orleans, LA

This map displays the spread of opportunity based on economic and neighborhood health in the city and its vicinity.

Source: Census 2000; FEMA; Neighborhood Change Database | Date: 11.03.05
Opportunity mapping
New Orleans Region, LA

This map displays the distribution of economic and neighborhood health in the region.

Source: Census 2000; FEMA; Neighborhood Change Database | Date: 11.03.05

Legend:
- Census Tracts
- Urban Areas
- Counties
- Water Feature
- Regional Health Quantile based categories
  - Very Low Opportunity
  - Low Opportunity
  - Moderate Opportunity
  - High Opportunity
  - Very High Opportunity

Miles

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