Executive Summary

June 2014

Wake County Community Assessment Model

Wake County staff relies heavily on the use of socio-economic and demographic data to make daily decisions to serve County residents. To better gauge the welfare of Wake County residents, it is important to understand what is occurring at a scale closest to the neighborhood level in which the County's resources are being applied. The main source for these data is the United States Census Bureau's American Community Survey (ACS – most current 5 year average estimates) at the Block Group level geography.

The purpose of this project is to collect, assemble and analyze the socio-economic and demographic data provided by the US Census Bureau. Analysis of these data will provide an illustrative backdrop that can be compared to other Wake County data.

Many of the Block Group variables can be combined to develop a "Community Assessment" Index as a measure of Community Health and Well-Being among County residents. This analysis will be primarily used to support Wake County Human Services initiatives but will also aide in supporting multiple Wake County agencies.

The **Nelson A. Rockefeller Institute of Government-Urban & Metropolitan Studies**[1] describes a technique used to assess **"Urban Hardship"**.   The trend analysis draws from six factors: Unemployment, Dependency, Education, Income Level, Crowded Housing, and Poverty. These factors were compared against national standards collected from a 40-year period providing a long-term analysis of multiple metropolitan areas. The factors were weighted and scored to create a "Hardship Index" signifying a set of challenging economic conditions.

Research such as this can be used in a greater context as shown in the **"Health Atlas for the City of Los Angeles"**[2]. In combination with its **"Hardship Index"** the Los Angeles County Public Health Department used additional variables in several subject areas including Environmental, Land Use and Health to measure a "Community's Health" and identify areas burdened with the most adverse conditions.

The initial phase of the **Wake County Community Assessment Model** requires the collection of updated US Census Bureau ACS data by Block Group. Based on the previous research of the "Hardship Indexes" and specifically related categories as defined by the Human Services INFORM committee's Key Indicators, we have selected five variables to integrate into an index to identify and measure local communities' socio-economic conditions.

The **Wake County Community Assessment Index** contains the following socio-economic and demographic variables:

- Unemployment: Defined as the county population age 16 and over who are unemployed in the civilian labor force;

- Age Dependency: The population under the age of 18 and over the age of 64 combined;

- Low Educational Attainment: The population of ages 25 and over who have less than a high school diploma;

- Housing Vacancy: The total number of vacant or un-occupied housing units in a block group;

- Below Poverty Level: The population living below the Federal poverty threshold in Wake County

Percentages were calculated for each hardship factor by block group. The tabular information was then sorted from highest to lowest percent value and given a score. The score was based on the total number of block groups, 1-455. Once each hardship factor was sorted and scored, the scores of each factor were added up to produce a total score. The total scores were then sorted and ranked.

Assessment of these indexes through the use of US Census Bureau data provides a context for system improvement by addressing three questions: "**What, Where** and **Who**"

The question of "**What**" describes the socio-economic conditions as conveyed by the US Census Bureau survey findings. This may include poverty, vacancy rate, median household income, or employment status for example.

"Where" defines the location. The closest approximation of neighborhood level data surveys occur at the Block Group level. It is the smallest geographical unit for which the Census Bureau publishes estimates for these 5 (five) variables. This also allows for aggregation of data up to a larger reporting area (i.e., census tracts, cities and towns, zip codes, human service zones).

The "**Who**" represents the people affected by the conditions in certain locations. Demographics in this instance become a secondary interaction with the "Community
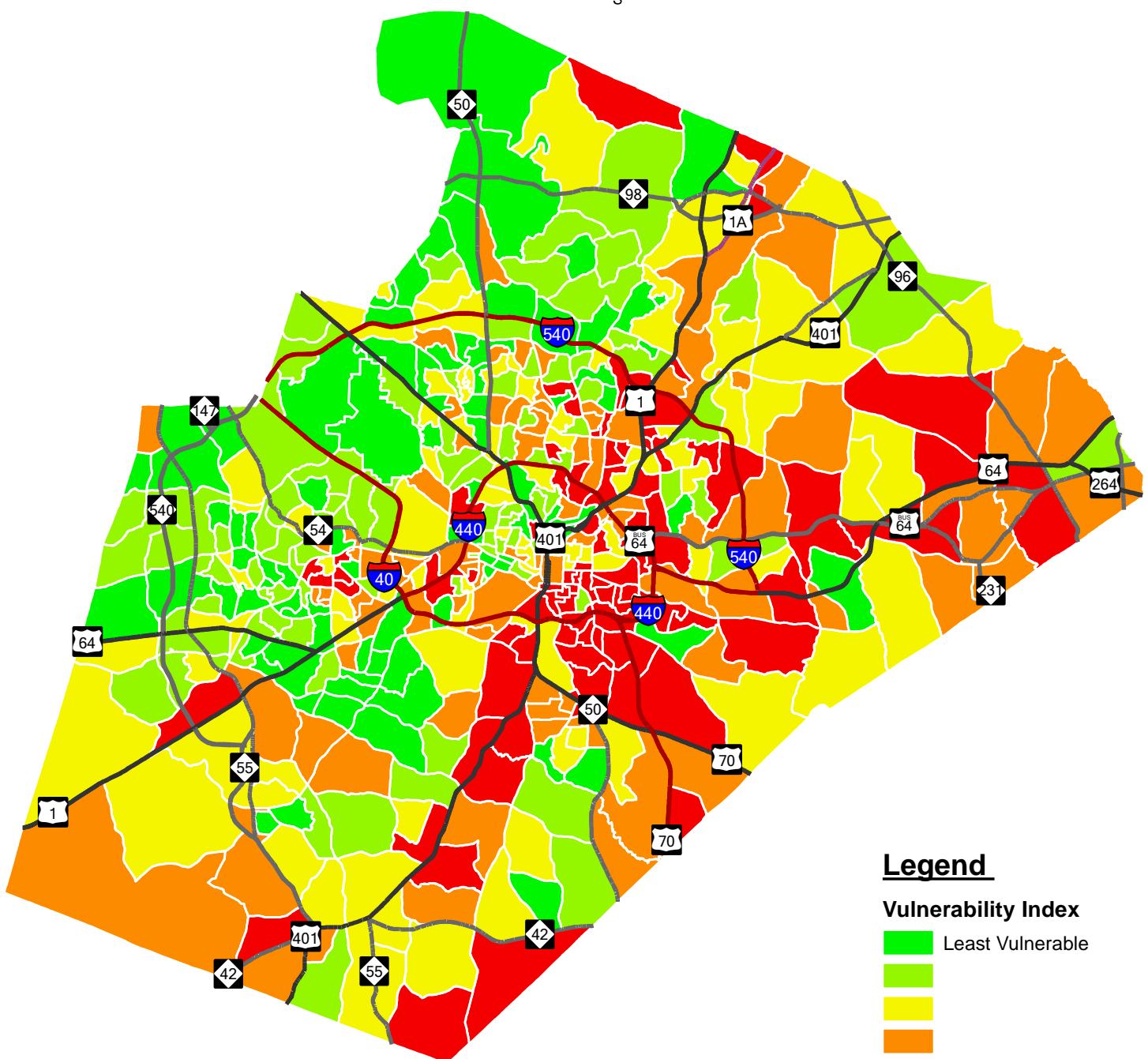
Assessment" data. Answering "**Who"** is affected can be done at several stages after the initial model is derived. In combination with the US Census Block Groups, data specific to Wake County can also be applied to determine potential gaps in service. These data may be overlaid or cross referenced with the Community Assessment results along with local client data collected by the county departments or county partners. This methodology provides efficiency, transparency, and integrity to programs throughout the County and demonstrates good stewardship to County residents.

1. The Nelson A. Rockefeller Institute of Government-Urban & Metropolitan Studies
    http://www.rockinst.org/pdf/cities_and_neighborhoods/2004-08-an_update_on_urban_hardship.pdf
2. Los Angeles County PLACE Program (Policies for Livable, Active Communities and Environments)
    http://planning.lacity.org/cwd/framwk/healthwellness/text/healthatlas.pdf
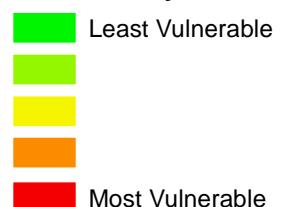
prepared by Bill Shroyer

Community Assessment
by Block Group
ACS 2009-2013
Wake County

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W ✦ E
S

Legend

Vulnerability Index

🟩 Least Vulnerable

🟥 Most Vulnerable

Map displays block group ranking of five variables selected from Census block group estimates 2009-2013 American Community Survey 5 year average for Wake County.

The ACS Characteristics used were:

1) % of persons living below the federal poverty rate
2) % of unemployed civilians age 16 and over in the labor force
3) % of youth under age 18 + % of adults age 65 and over
4) % of vacant housing units
5) % of adults ages 25-64 who did not earn a high school diploma or equivalent (GED)

WAKE
COUNTY
NORTH CAROLINA