Appendix: Calculation of Segregation Measures

**Definitions**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| wi | Number of Whites in a Census tract |  | ti | Total population of Whites and Blacks in a Census tract |  |
| bi | Number of Blacks in a Census tract |  | T | Total population of Whites and Blacks in a county |  |
|  | Total Whites in county |  | pi | Proportion of Blacks to total population in a Census tract |  |
| B | Total Blacks in county |  | P | Proportion of Blacks to total population in a county |  |

**Evenness**

Dissimilarity Index – the percentage of a group’s population that would have to change residence for each Census tract to have the same percentage

Entropy Index – the weighted average deviation of each areal unit from the county’s entropy or racial and ethnic diversity, which is greatest when each group is equally represented in the county

Where

and

**Exposure**

Local Spatial Segregation Index – lack of potential for interaction between blacks in a certain Census tract and whites

Isolation – the extent to which minority members are exposed only to one another

Correlation ratio – adjustment of the isolation index to control for asymmetry of the isolation index (I)