

Appendix 1. How the Claritas PRIZM Geodemographic Marketing Model is Created

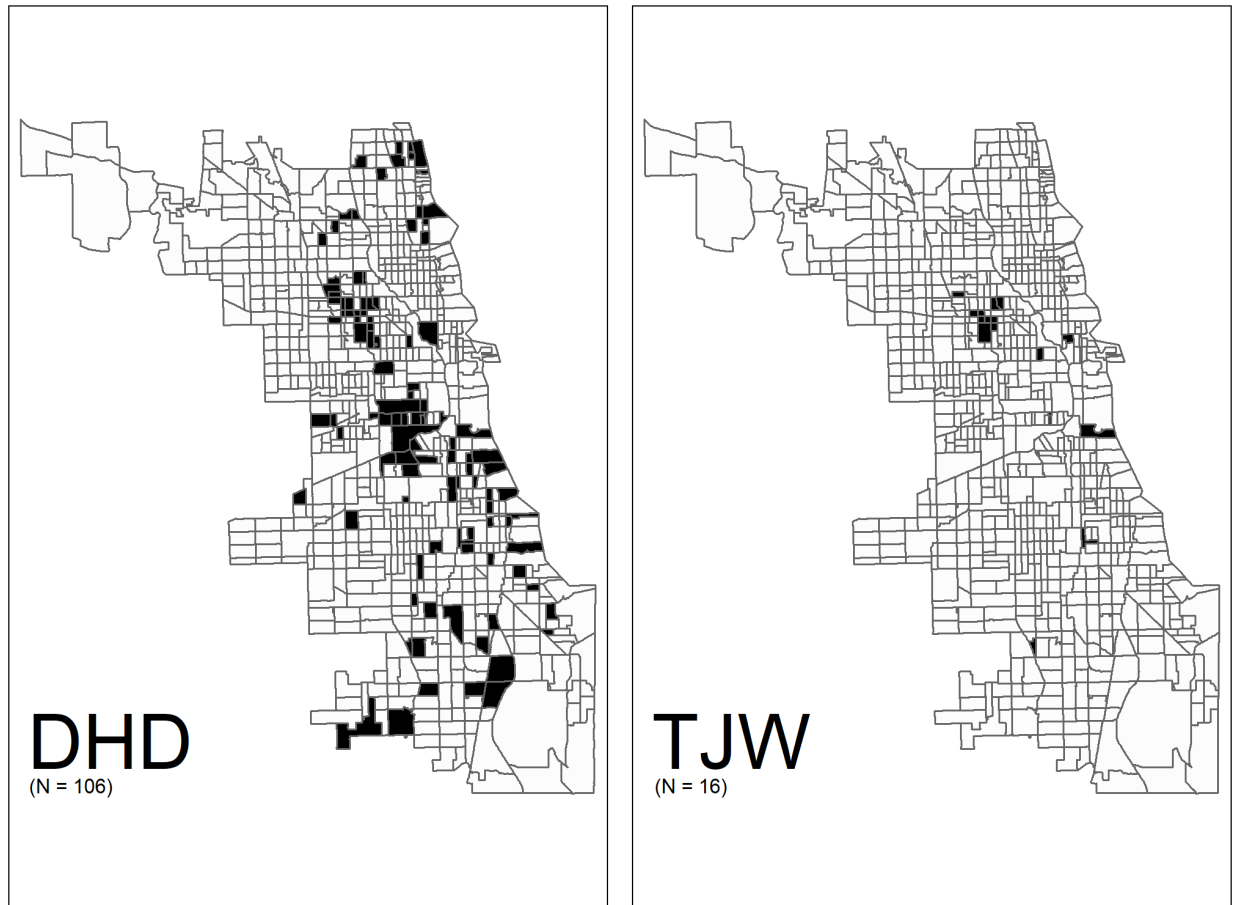
Claritas marshals an incredibly large number of data sources to create each Claritas PRIZM segment. Data include the U.S. Census; customer loyalty reward programs, which track purchasing habits; banking information; insurance information; telecommunications usage habits; and media habits, among other sources. More specifically, Claritas derives data from sources such as the Claritas Financial Track Survey, Nielsen Scarborough, Epsilon Data Management, LLC, Total Source Plus, Valassis Direct Mail, Inc., Infogroup, and TomTom North America, Inc. (Claritas 2018).

Once the data are compiled, Claritas uses Classification and Regression Trees (CARTs) to find cut points that separate different groups of households from one another. For example, among households that invest in at least one mutual fund, there are notable differences in asset levels between households whose total income is above \$50,000 and whose head of household is above the age of 45 (Claritas 2018). In CARTs, cut points are determined by breaks in the data that optimally reduce deviance in the overall model. Despite the unsupervised nature of this optimization technique, subjectivity plays a role in classification. If segments are too small to be practically meaningful, or if certain households are outliers in the model, then Claritas may lump them into existing segments (Burrows and Gane 2006). Similar forms of subjectivity affect geodemographic marketing data created by other companies as well (Singleton and Spielman 2014).

Importantly, many segments are founded upon whether a household is in an urban, suburban, or rural location. Urbanicity, however, is not determined using Census Bureau classifications. Rather, each Census block is placed into a grid-like structure in which population density is smoothed across blocks. Households in highly dense blocks are considered urban,

while moderately dense and less dense blocks are respectively suburban or rural. In between suburban and rural blocks is a distinction that Claritas calls “Second City,” or blocks that tend to be found in satellite cities of large metropolitan areas. Second City blocks are often more affluent than blocks in small towns and farming communities (Claritas 2018, p. 11). Because Claritas does not follow U.S. Census Bureau urban-rural classifications, even households that the Census Bureau would deem urban might be assigned to a more rural geodemographic lifestyle segment.

Appendix 2. Chicago Neighborhoods That Gentrified between 2010 and 2017



Neighborhoods colored black are considered gentrified. The first panel, ‘DHD,’ refers to neighborhoods considered gentrified using the Ding, Hwang, and Divringi (2016) operationalization of gentrification. The second panel, ‘TJW,’ refers to neighborhoods considered gentrified using the Timberlake and Johns-Wolfe (2017) operationalization of gentrification. ‘N’ refers to the number of gentrified neighborhoods according to each method.

Appendix 3. Demographic Summary Statistics of Chicago Neighborhoods by Gentrification Status, 2010 to 2017

	DHD			TJW		
	Not Gentrifiable	Not Gentrified	Gentrified	Not Gentrifiable	Not Gentrified	Gentrified
<i>Baseline in 2010</i>						
Median Household Income	\$76,650	\$35,421	\$37,404	\$78,634	\$41,814	\$39,831
Median Housing Unit Value	\$409,336	\$246,317	\$291,455	\$453,669	\$259,206	\$348,171
Median Housing Unit Rent	\$1,181	\$931	\$887	\$1,202	\$954	\$946
% >= College	47	16	23	61	16	24
% in Poverty	11	27	25	12	23	25
% > High School	69	41	48	80	42	44
% Professionals	26	15	18	33	14	15
Avg. Family Income	\$134,215	\$54,614	\$60,568	\$155,849	\$59,003	\$54,194
% White	55	11	19	62	16	22
% Black	16	57	44	16	48	28
% Latinx	21	27	30	12	31	46
% Asian	6	3	6	8	4	3
% Foreign-Born	19	18	21	16	20	20
<i>Change, 2010 to 2017</i>						
Median Household Income	\$1,390	\$1,475	\$5,722	\$5,057	-\$1,867	\$16,361
Median Housing Unit Value	-\$68,787	-\$82,806	-\$48,988	-\$64,147	-\$76,998	-\$42,884
Median Housing Unit Rent	\$80	-\$48	\$89	\$138	-\$33	\$173
% >= College	5	1	11	4	4	19
% in Poverty	1	1	-2	1	1	-7
% > High School	4	4	11	3	5	21
% Professionals	1	0	5	1	1	16
Avg. Family Income	\$6,245	\$644	\$9,791	\$7,839	\$1,678	\$33,291
% White	-2	0	4	-1	0	9
% Black	-1	-3	-4	-1	-3	-4
% Latinx	1	2	-2	0	2	-8
% Asian	1	0	1	1	0	3
% Foreign-Born	0	0	-1	0	-1	-5
# of Neighborhoods	352	348	106	261	529	16

Source: The 2010 5-Year American Community Survey (ACS) and the 2017 5-Year ACS. All values except for ‘# of Neighborhoods’ are means. Dollar amounts are inflated to 2017 values. ‘DHD’ and ‘TJW’ respectively refer to the Ding, Hwang, and Divringi (2016) and Timberlake and Johns-Wolfe (2017) operationalizations of gentrification.