Claritas 360 Subtotal Options

OVERVIEW

This document describes the various subtotal methods available for reporting and mapping in Claritas 360.

SUBTOTAL OVERVIEW

The below table defines the subtotal methods available in Claritas 360.

Click on a subtotal method name to go to the detailed description.

SUBTOTAL METHODS	
SUBTOTAL METHOD	**DEFINITION**
Analysis Area	Groups the records by the selected analysis areas.
Change in Value	Groups the records based on the number of unique values for the selected sort variable.
Equal Ranges	Groups areas (rows) based on the values of a specific variable. Each subtotal group will have an equal minimum/maximum range for the specified variable.
Equal Records	Uses basic division to group the number of areas (rows) equally. Each subtotal group will have an equal number of areas.
n-Tile	Distributes the total number of households in an area into equal groups that are approximately equal, such as fourths or fifths.
Target Group	Uses target groups to group the records.

SUBTOTAL: ANALYSIS AREA

Analysis Area Overview

When a component geography is selected as the level of detail, the component geography records (rows) will be grouped by the selected analysis areas.

identify
deliver
optimize

SUBTOTAL: CHANGE IN VALUE

Change in Value Overview

When creating reports where the detailed rows contain location level information, the results may be subtotaled based on the number of unique values for the selected sort variable.

SUBTOTAL: EQUAL RANGES

Equal Ranges Overview

The equal ranges subtotal method uses basic division to group the number of areas (rows) equally using the ranges of a specific column of data.

Equal Ranges Subtotal Calculations

After you sort a report table using any count or calculation column, the total range of the values in the column is calculated:

- The smallest value of the column is subtracted from the largest value to find the range.
- The range is divided by the number of values to determine the average increment.
- The number of subtotals you select divides the range equally into sections.

The subtotals display different types of information based on the sort method used.

Equal Ranges Sort Options

The groups show different rankings of data based on the column used to sort the results:

- Equal Range Subtotals Based on Index (fixed ranking)

  Use this method to separate portions (third, fourth, fifth) of the total analysis area using a fixed index range. For example, if your indexes range from 50 (low) to 250 (high), and you use four subtotals (200 ÷ 4 = 50), the overall analysis area is divided into four fixed groups based on their indexes (50-100, 101-150, 151-200, 201-250). The number of areas in each subtotal can vary significantly depending on the span between high and low indexes. The method is useful in showing areas with specific tendencies or purchasing habits (areas with a 200% higher chance of owning a swimming pool, etc.).

- Equal Range Subtotals Based on Counts (equal division)

  Use this method to group portions (third, fourth, fifth) of the total analysis area based on population counts. If your population counts range from 100,000 to 200,000, and you use four subtotals (100,000 ÷ 4 = 25,000), the analysis area is divided into four groups based on the population count (100,000-125,000, etc.). The number of areas in each group can vary significantly depending on the populations in the areas. The method is used to expose population counts in order to estimate overall usage potential, media reach requirements, etc.

- Equal Range Subtotals Based on Percentages (percentage ranking)

  Use this method to group portions (third, fourth, fifth) of the total analysis area based on a percentage calculation, such as penetration. If your percentage ranges from 10% to 90%, and you use four subtotals (80 ÷ 4 = 20), the analysis area is divided into four groups that fall within each percentage range (10-30%, 31-50%, 51-70%, 71-90%). Because the subtotals are divided by each area's percentage, the number of areas in each subtotal group can vary significantly. The method is used to divide areas into groups by rank: those with a higher percentage of concentration, penetration, etc.

SUBTOTAL: EQUAL RECORDS

Equal Records Overview

The equal records subtotal method uses basic division to group the number of areas (rows) numerically. Use the subtotal method to divide your analysis areas into an equal number of rows, sorted by any column.

Equal Records Subtotal Calculations

After you generate a table, the total number of areas is calculated.

The total number of areas (rows) is divided by the number of subtotals you select.

Equal Range Sort Options

The groups show different rankings of data based on the way you sort the results:

- Equal Records Subtotals Based on Area Name or Code (equal counts)

  Divide the total analysis area into more workable groups for task assignment, media analysis, market projections, etc. For example, you can divide a number of states into small groups simply by alphabetical order. Note that the total number of households in each group may vary significantly, depending on the areas you select (ZIP Code, state, etc.).

- Equal Records Subtotals Based on Index (equal counts)

  Sort the report by a specific index before subtotaling to divide the total analysis area into equal groups ranked by higher usage potential or concentration. The total number of households in each group may vary significantly, depending on the areas you select (ZIP Code, state, etc.).

- Equal Records Subtotals Based on Counts (equal counts)

  Sort the report by a specific base count before subtotaling to divide the total analysis area into equal groups ranked by the value in the column. The total number of households in each group may vary significantly, depending on the areas you select (ZIP Code, state, etc.).

- Equal Records Subtotals Based on Percentages (equal counts)

  Sort the report by a percentage column before subtotaling to divide the total analysis area into equal groups ranked by the calculated value (penetration, etc.). The total number of households in each group may vary significantly, depending on the areas you select (ZIP Code, state, etc.).

SUBTOTAL: N-TILE

n-Tile Overview

The n-Tile subtotal method is based on the desired number of divisions to display (tercile, quartile, quintile, etc., where n is the number of divisions). Currently, up to 16 different divisions can be selected.

The n-Tile method simply distributes the total number of households in an area into groups that are approximately equal, such as fourths or fifths. Dividing data in equal portions ranks the analysis areas by marketing potential, in groups showing the strongest to weakest.

In mapping, displaying the percentage of households provides a more accurate illustration of concentration than other subtotal methods.

n-Tile Subtotal Calculations

n-Tile subtotal calculations break the overall report area into sections containing equal numbers of records, based on their data. For example, if you are trying to locate targets in 30 or 40 different ZIP Codes containing a large number of households, it is very helpful to use subtotals to divide the total area into distinct groups of ZIP Codes with similar ranges of concentration.

Subtotals start with the total number of households in all areas, sorted by an index, total count or percentage.

For example, breaking an analysis area into five parts (quintiles) ranked by percentage composition of a specific trait (target, demographic profile, consumption pattern, etc.) would expose five distinct divisions, ranked by concentration or propensity.

EXAMPLE N-TILE SUBTOTAL			
AREAS	HOUSEHOLDS	N-TILE	DESCRIPTION
40	100,000	5 Total	In this report, 40 analysis areas are used. They include 100,000 households. The report is sorted by % comp (of target households in the area). The report shows which analysis areas have the highest composition of households, when the total number of households is divided in fifths.

EXAMPLE N-TILE SUBTOTAL			
AREAS	**HOUSEHOLDS**	**N-TILE**	**DESCRIPTION**
4	20,100	First Quintile	When the report is sorted to rank the analysis areas by households, the highest composition of households is included in 4 ZIP Codes. These four ZIP Codes have a relatively high population (households with an aggregate value of 20,100). The four areas also contain the highest overall concentration.
9	19,990	Second Quintile	The next highest division of approximately one-fifth of the households is found in nine ZIP Codes, containing a total of 19,990 households with relatively high concentration. The number of households may not be consistent among the ZIP Code areas. Depending on the total base counts in each area, one or two areas may have low populations and may contain relatively few households although their overall concentration is high.
2	20,400	Third Quintile	In the next division, two highly populated areas contain 20,400 households show moderate composition percentages. Together, the two ZIP Codes comprise a little more than one-fifth of all total households, indicating large base counts with average concentration.
20	19,840	Fourth Quintile	The next division includes a large number of ZIP Codes, indicating a sparser population (fewer households per ZIP Code). Depending on the objectives, this group might not be included as a target because of low household counts and low concentration.
15	19,670	Fifth Quintile	The lowest division also includes a relatively large number of ZIP Codes, indicating low base counts and low concentration.

n-Tile Sort Options

The groups show different rankings of data based on the column used for the subtotal:

- n-Tile Subtotals Based on Index (groups with high propensity)

  Use this method to rank portions (third, fourth, fifth) of the total analysis area that have the highest index. When the data items are sorted by a descending index, the households are divided in roughly equal portions ranked from highest to lowest using the closest available Index ranges. For example, if you divide an analysis area of 100,000 households into five parts, the top 20,000 households may have indexes from 200-280, the second 20,000 households may have indexes from 140-199, etc. The total household counts in each subtotal group vary slightly based on the calculated index ranges. However, the areas in the upper groups are most likely to have a specific demographic, consumption or profile.

- n-Tile Subtotals Based on Counts (groups of high populations)

  Use this method to group portions (third, fourth, fifth) of the total analysis area by the largest numbers of households. When the data items are sorted by descending counts, the areas are divided in roughly equal portions based on overall count. For example, if you divide an analysis area of 100,000 households into five parts, the areas with the highest number of households are grouped together until the count reaches 20,000. The number of areas in each group may be uneven, especially if one or two areas have a heavy population of households compared to other areas. For example, if the total analysis area is measured statewide, the upper "Urban" portions are filled quickly by ZIP Codes or areas in a large city.

- n-Tile Subtotals Based on Percentages (groups of concentration)

  Use this method to group portions (third, fourth, fifth) of the total analysis area based on the areas with high percentages of concentration, penetration, etc. When the data items are sorted by descending percentages, the areas are divided in roughly equal portions ranked from highest to lowest based on percentage. The range of percentages may vary significantly in each subtotal group. For example, if you divide an analysis area of 30,000 households into three parts, the first group of 10,000 may show the highest concentrations shown by a wide range of percentage points, while the values for second group may all fall within a few percentage points.

SUBTOTAL: TARGET GROUP

Target Group Overview

When creating reports where the detailed rows contain segment level information, the results can be subtotaled based on syndicated target groups, custom target groups, or demographic groups (education, employment, etc.).