claritas

CLARITAS 360 CALCULATIONS GUIDE

June 2018

TABLE OF CONTENTS

INTRODUCTION

This guide contains definitions, formulas, and examples of the calculations most commonly used in Claritas products.

For ease of use, the calculations are organized in chronologically functional categories. Before you can analyze who your customers are, you need to understand where they're located. The "Who Lives Where?" chapter contains calculations that help you understand which segments predominate your analysis area and how your analysis area compares to national norms. Calculations in the "Who Are Your Customers?" chapter help you understand who your customers are. The next chapter–"What Are They Like and How Can I Reach Them?"–contains calculations that help you understand the nature of your customers. The last chapter–"Where Can I Find Them?"–contains calculations related to locating the geographic areas where your customers reside.

If you are a new user, you should begin with the "Who Lives Where?" chapter to gain an understanding of the basic calculations, which are used in many of the more complex calculations.

A glossary of terms is also included in the back of this guide.

WHO LIVES HERE?

Calculations in this chapter help you understand which segments predominate in an analysis area and how that compares to national norms.

Segment Distribution

The Segment Distribution report shows the distribution of segments in a specified analysis area compared to those in a specified base analysis area. The results of this analysis help determine which segments you should be pinpointing within your chosen comparison analysis area.

Segment Distribution Formulas

This analysis uses the following formulas:

- Percent composition of base households and comparison analysis area households

$$\frac{\text{Segment Code}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Percent penetration of comparison analysis area households

$$\frac{\text{Comparison Analysis Area}}{\text{Base Analysis Area}} \times 100 = \text{Percent Penetration}$$

- Index of segment distributions in comparison analysis area

$$\frac{\text{\% Penetration of Segment}}{\text{\% Penetration of Total}} \times 100 = \text{Index}$$

OR

$$\frac{\text{\% Composition of Behavior}}{\text{\% Composition of Base}} \times 100 = \text{Index}$$

Segment Distribution Sample Report

The following sample report shows segment distributions for all households in the Washington, DC DMA compared to segment distributions for households in Alexandria, Virginia ZIP Codes:

Sorted by: Index, Descending
Break: None (0)

Base Market → Washington et al, DC-MD (DMA by ZIP)

Local Market → Alexandria, VA ZIPs

Segments		Washington et al, DC-MD (DMA by ZIP)		Alexandria, VA ZIPs			
Code	Variable Title	Count	% Comp	Count	% Comp	% Pen	Index
31	Urban Achievers	49,580	2.16	12,295	9.23	24.80	427
29	American Dreams	43,110	1.88	7,780	5.84	18.05	311
30	Suburban Sprawl	23,922	1.04	4,124	3.10	17.24	297
46	Old Glories	8,470	0.37	1,448	1.09	17.10	295
52	Suburban Pioneers	7,008	0.31	1,170	0.88	16.70	288
07	Money & Brains	66,338	2.89	10,972	8.24	16.54	285
16	Bohemian Mix	82,396	[A] 3.59	13,356	[B] 10.03	[C] 16.21	[D] 279
21	Gray Power	15,952	0.70	2,126	1.60	13.33	230
04	Young Digerati	70,948	3.09	9,154	6.87	12.90	222
44	New Beginnings	28,046	1.22	3,534	2.65	12.60	217
08	Executive Suites	63,810	2.78	7,763	5.83	12.17	210
22	Young Influentials	41,661	1.82	4,948	3.72	11.88	205
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
05	Country Squires	91,215	3.98	0	0.00	0.00	0
	Total	2,294,067	100.00	133,167	100.00	5.80	100

Segment Distribution sample report

A. % Comp (Base Market) - The number of Bohemian Mix households in the Washington, DC DMA (82,396) represents more than one-thirtieth (3.59%) of all segments' households (2,294,067) in the Washington, DC DMA.

$$\frac{82,396}{2,294,067} \times 100 = 3.59$$

B. % Comp (Local Market) - The number of Bohemian Mix households in Alexandria, Virginia (13,356) represents approximately one-tenth (10.03%) of all segments' households (133,167) in Alexandria, Virginia.

$$\frac{13,356}{82,396} \times 100 = 16.21$$

C. % Pen - The number of Bohemian Mix households in Alexandria, Virginia (13,356) represents just over one-sixth (16.21%) of the Bohemian Mix households (82,396) in the entire Washington, DC DMA.

$$\frac{13,356}{133,167} \times 100 = 10.03$$

D. Index - Bohemian Mix households are 179% more highly concentrated (279) in Alexandria, Virginia than in the Washington, DC DMA as a whole. In other words, Bohemian Mix households are 1.79 times more concentrated than other segment households.

$$\frac{16.21}{5.8} \times 100 = 279 \quad \text{OR} \quad \frac{10.03}{3.59} \times 100 = 279$$

Segment Concentration

The Segment Concentration report shows the household distribution of selected segments in an analysis area compared to total households in the analysis area. The results of this analysis help determine which geounits you should be pinpointing within your chosen comparison analysis area.

Segment Concentration Formulas

This analysis uses the following formulas:

- Percent composition of total base households and selected segments' households

$$\frac{\text{Geounit Base HH Count}}{\text{Total Selected Segments' HH Geounit Count}} \times 100 = \text{Percent Composition}$$

- Percent penetration of selected segment households

$$\frac{\text{Selected Segments' HH Geounit Count}}{\text{Base HH Geounit Count}} \times 100 = \text{Percent Penetration}$$

- Index of selected segment households in a geounit of the selected analysis area

$$\frac{\text{\% Penetration of Selected Segments in Geounit}}{\text{\% Penetration of Selected Segments in Total Analysis Area}} \times 100 = \text{Index}$$

OR

$$\frac{\text{\% Composition of Selected Segments in Geounit}}{\text{\% Composition of Base HHs in Geounit}} \times 100 = \text{Index}$$

Segment Concentration Sample Report

The following sample report shows all segments' households in Alexandria, Virginia ZIP Codes compared to households in Segments 03, 04, 07, 08, and 16:

Alexandria, VA (County by ZIP)
Selected Segments: 03, 04, 07, 08, 16
Sorted by: Index, Descending
Break: None (0)

Base Households → Base

'Segment Market' Households → Selected Segments

Alexandria, VA (County by ZIP)		Base		Selected Segments			
Code	Name	HH Count	% Comp	Count	% Comp	% Pen	Index
22301	Alexandria	4,806	3.61	4,229	7.89	87.99	219
22314	Alexandria	13,843	[A] 10.40	11,551	[B] 21.55	[C] 83.44	[D] 207
22315	Alexandria	11,958	8.98	7,733	14.43	64.67	161
22302	Alexandria	9,431	7.08	4,672	8.72	49.54	123
22310	Alexandria	10,107	7.59	4,750	8.86	47.00	117
22311	Alexandria	7,326	5.50	3,127	5.83	42.68	106
22304	Alexandria	21,624	16.24	8,503	15.87	39.32	98
22305	Alexandria	6,517	4.89	2,352	4.39	36.09	90
22312	Alexandria	10,185	7.65	3,056	5.70	30.00	75
22307	Alexandria	4,842	3.64	1,015	1.89	20.96	52
22308	Alexandria	4,732	3.55	758	1.41	16.02	40
22303	Alexandria	6,758	5.07	638	1.19	9.44	23
22306	Alexandria	10,159	7.63	785	1.46	7.73	19
22309	Alexandria	10,879	8.17	424	0.79	3.90	10
	Total	133,167	100.00	53,593	100.00	40.24	100

Segment Concentration sample report

A. % Comp (Base Segments) - All segment households in ZIP Code 22314 (13,843) represent about onetenth (10.40) of all Alexandria, Virginia households (133,167).

$$\frac{13,356}{133,167} \times 100 = 10.03$$

B. % Comp (Selected Segments) - The number of selected segment households in ZIP Code 22314 (11,551) represents more than one-fifth (21.55) of all selected segment households in Alexandria, Virginia (53,593).

$$\frac{11,551}{53,593} \times 100 = 21.55$$

C. % Pen - The number of selected segment households in ZIP Code 22314 (11,551) represents more than four-fifths (83.44) of the households in ZIP Code 22314 (13,843).

$$\frac{11,551}{13,843} \times 100 = 83.44$$

D. Index - Selected segment households are 107% more highly penetrated (207) in ZIP Code 22314 than in other Alexandria, Virginia ZIP Codes.

$$\frac{83.44}{40.24} \times 100 = 207 \quad \text{OR} \quad \frac{21.55}{10.04} \times 100 = 207$$

Consumer Concentration

The Consumer Concentration report uses geographically summarized data, known as geosummaries, to show the extent to which one or more specified demographic variables penetrate their relevant base in a chosen analysis area.

Geosummary data consists of a unique variable count for each detail-level geography within a study area. The different types of geosummary data are:

- Demographics -These include such variables as Population by Race or HH Income $50K$75K.
- Consumer Demand -These encompass Claritas Consumer Buying Power variables (estimated demand for products and services), Retail Market Power (supply and demand estimates), Claritas Insurance CLOUT (estimated product users), and Claritas Financial CLOUT (estimated product users).
- Customer Data -These are your actual customer counts for your analysis areas of interest, which you create by importing the files that contain your customer count data.

Consumer Concentration Formulas

This analysis uses the following formulas:

- Percent composition (of base geosummary and analysis geosummary)

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Percent penetration of behavioral characteristic or characteristics for each geounit

$$\frac{\text{Behavior Count}}{\text{Base Count}} \times 100 = \text{Percent Penetration}$$

- Index (of one or more analysis geosummaries)

$$\frac{\text{\% Composition of Behavior}}{\text{\% Composition of Base}} \times 100 = \text{Index}$$

Consumer Concentration Sample Report

The following sample report shows the current-year population by Italian ancestry and the current-year population by German ancestry for the District of Columbia (DC) by ZIP Code:

District of Columbia (State by ZIP)
Sorted By: Index, Descending
Break: None (0)

Base Geosummary | First Analysis Geosummary | Second Analysis Geosummary

District of Columbia (State by ZIP)		CY Pop for District of Columbia (State by ZIP)		CY Pop, Italian for District of Columbia (State by ZIP)				CY Pop, German for District of Columbia (State by ZIP)			
Code	Name	Count	% Comp	Count	% Comp	% Pen	Index	Count	% Comp	% Pen	Index
20007	Washington, DC	23,588	4.05	1,446	13.92	6.13	344	2,021	12.01	8.57	296
20036	Washington, DC	4,418	0.76	241	2.32	5.45	306	325	1.93	7.36	255
20008	Washington, DC	27,424	4.71	1,307	12.59	4.77	267	2,387	14.18	8.70	301
20016	Washington, DC	29,960	[A] 5.14	1,365	[B] 13.14	[C] 4.56	[D] 255	2,135	12.69	7.13	247
20037	Washington, DC	12,058	2.07	547	5.27	4.54	254	711	4.22	5.90	204
20064	Washington, DC	1,703	0.29	60	0.58	3.52	198	38	0.23	2.23	77
20015	Washington, DC	16,088	2.76	538	5.18	3.34	188	1,318	7.83	8.19	283
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
20020	Washington, DC	50,694	8.71	102	0.98	0.20	11	60	0.36	0.12	4
20019	Washington, DC	53,077	9.11	20	0.19	0.04	2	22	0.13	0.04	1
20057	Washington, DC	4,294	0.74	0	0.00	0.00	0	0	0.00	0.00	0
20059	Washington, DC	0	0.00	0	0.00	0.00	0	0	0.00	0.00	0
	Total	582,326	100.00	10,385	100.00	1.78	100	16,829	100.00	2.89	100

Consumer Concentration sample report

A. % Comp (Base Geosummary) - The current population in ZIP Code 20016 (29,960) represents about onetwentieth (5.14%) of the entire Washington, DC population (582,326).

$$\frac{29,960}{582,326} \times 100 = 5.14$$

B. % Comp (Analysis Geosummary) - The number of individuals of Italian descent in ZIP Code 20016 (1,365) represents more than one-tenth (13.14) of the current Italian population in all of Washington, DC (10,385).

$$\frac{1,365}{10,385} \times 100 = 13.14$$

C. % Pen - The number of individuals of Italian descent in ZIP Code 20016 (1,365) represents almost onetwentieth (4.56%) of the current population in ZIP Code 20016 (29,960).

$$\frac{1,365}{29,960} \times 100 = 4.56$$

D. Index - Individuals of Italian descent are 155% more likely (255) to live in ZIP Code 20016 than in the average Washington, DC ZIP Code.

$$\frac{4.56}{1.78} \times 100 = 255 \quad \text{OR} \quad \frac{13.14}{5.14} \times 100 = 255$$

WHO ARE THE CUSTOMERS?

Identifying the types of neighborhoods in which you find your existing customers is the way to predict the types of neighborhoods where you are likely to find customers in the future.

A standard profile report contains counts for a base, such as total adults, and counts for a product or behavior, such as downhill skiing. You choose one or two profiles that represent your product(s) or service(s) and analyze the segments, and therefore neighborhoods, in which your current and future customers reside.

Profile Comparison

The Profile Comparison report shows measures for two profiles at the individual segment level. This report helps you identify the cross-selling potential of the two profiles or determine which segments have a preference for one of the two profiles.

Profile Comparison Profiles

This analysis uses the following formulas:

- Percent composition (of base or behavior)
-

$$\frac{\text{Segment Code}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Users per 100 households (Users/100 HHs) (of behaviour

$$\frac{\text{Behavior Count}}{\text{Base Count}} \times 100 = \text{Users / 100 HHs}$$

- Index (of behavior)

$$\frac{\text{\% Penetration of Segment}}{\text{\% Penetration of Total}} \times 100 = \text{Index}$$

OR

$$\frac{\text{\% Composition of Behavior}}{\text{\% Composition of Base}} \times 100 = \text{Index}$$

Profile Comparison Sample Report

The following sample report illustrates total household counts, by Claritas PRIZM segment, for inline skating and downhill skiing:

Claritas
Profile Comparison Report

Projected to: United Stataes (Country by Country)
Sorted By: Index, Descending
Break: None (0)

		Base		Behavior				Base		Behavior			
Segments		Base		Go In-Line Skating, 1yr				Base		Go Downhill Skiing, 1yr			
Code	Variable Title	Count	% Comp	Count	% Comp	Users/ 100 HHs	Index	Count	% Comp	Count	% Comp	Users/ 100 HHs	Index
03	Movers & Shakers	1,807,572	1.61	305,597	5.04	16.91	313	1,807,572	1.61	270,919	4.07	14.99	253
19	Home Sweet Home	2,062,147	1.84	347,451	5.73	16.85	312	2,062,147	1.84	223,362	3.36	10.83	183
05	Winner's Circle	1,239,200	1.10	191,556	3.16	15.46	286	1,239,200	1.10	276,692	4.16	22.33	377
05	Country Squires	2,152,742	[A] 1.92	302,339	[B] 4.99	[C] 14.04	[D] 260	2,152,742	1.92	466,011	7.00	21.65	365
08	Executive Suites	1,021,522	0.91	135,471	2.23	13.26	246	1,021,522	0.91	135,471	2.04	13.26	224
02	Blue Blood Estates	1,094,703	0.98	143,274	2.36	13.09	242	1,094,703	0.98	205,956	3.10	18.81	317
24	Up-and-Comers	1,360,611	1.21	177,943	2.93	13.08	242	1,360,611	1.21	130,202	1.96	9.57	161
18	Kids & Cul-de-sacs	1,828,699	1.63	223,012	3.68	12.20	226	1,828,699	1.63	176,062	2.65	9.63	162
25	Country Casuals	1,807,787	1.61	208,978	3.45	11.56	214	1,807,787	1.61	256,817	3.86	14.21	240
11	God's Country	1,735,899	1.55	194,952	3.21	11.23	208	1,735,899	1.55	327,685	4.93	18.88	319
.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.	.
06	Old Glories	1,084,584	0.97	0	0.00	0.00	0	1,084,584	0.97	4,304	0.06	0.40	7
	Total	112,267,302	100.00	6,063,981	100.00	5.40	100	112,267,302	100.00	6,652,998	100.00	5.93	100

Profile Comparison sample report

A. Base % Comp - The number of households in the Country Squires segment represents close to one-fiftieth (1.92%) of the total households in the entire United States (112,267,302).

$$\frac{2,152,742}{112,267,302} \times 100 = 1.92$$

B. Behavior % Comp - The number of adults in the Country Squires segment that participate in skating (302,339) represents almost one-twentieth (4.99%) of the total adults that participate in skating in the entire United States (6,063,981).

$$\frac{302,339}{6,063,981} \times 100 = 4.99$$

C. Behavior Users/100 HHs - The number of adults (per 100 households) in the Country Squires segment that participate in skating represents one-seventh (14.04%) of the total Country Squires adults (2,152,742) in the entire United States, which is almost three times higher than the national average of 5.40% participation.

$$\frac{302,339}{2,152,742} \times 100 = 14.04$$

D. Behavior Index - Country Squires adults are more than two-and-a-half times as likely (260) to participate in skating than the average United States adult.

$$\frac{14.04}{5.40} \times 100 = 260 \quad \text{OR} \quad \frac{4.99}{1.92} \times 100 = 260$$

Profile Segment Consumption

The Profile Segment Consumption report lets you analyze a behavioral profile and its associated consumption value at the individual segment level. This analysis helps you identify segments to pinpoint based on the fact that although a segment's usage is low, its consumption rate may be quite high, making it a viable prospect.

Profile Segment Consumption Formulas

This analysis uses the following formulas:

- Percent composition (of base or behavior)

$$\frac{\text{Segment Code}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Users per 100 households (Users/100 HHs) (of behavior)

$$\frac{\text{Behavior Count}}{\text{Base Count}} \times 100 = \text{Users / 100 HHs}$$

- Index of behavior

$$\frac{\%\ \text{Penetration of Segment}}{\%\ \text{Penetration of Total}} \times 100 = \text{Index}$$

OR

$$\frac{\%\ \text{Composition of Behavior}}{\%\ \text{Composition of Base}} \times 100 = \text{Index}$$

- Index (of behavior's consumption measure)

$$\frac{\text{Average Consumption Measure of Segment}}{\text{Average Consumption Measure of Total}} \times 100 = \text{Consumption Rate Index}$$

- Percent Share (of total demand)

$$\frac{\text{Segment's Total Demand}}{\text{Total Demand of all Segments}} \times 100 = \text{Percent Share}$$

- Index (of total demand)

$$\frac{\left(\frac{\text{Segment's Total Demand}}{\text{Segment's Total Base HHs}}\right)}{\left(\frac{\text{Total Demand of all Segments}}{\text{Total Base HHs of all Segments}}\right)} \times 100 = \text{Index (of behavior's total demand)}$$

Profile Segment Consumption Sample Report

The following sample report illustrates consumption per Washington, DC DMA user household, by PRIZM® segment, for packages of English muffins eaten in a week:

Projected to Washington, DC DMA
Sorted by: Index, Descending
Break: None (0)

		Base		Behavior				Behavior's Consumption				
Segments		Base Count		Usage: Use English Muffins,1wk				Consumption: Number/1wk				
Code	Variable Title	Count	% Comp	Count	% Comp	Users/ 100 HHs	Index	Demand/ Users	Index	Total Demand	% Share	Index
14	New Empty Nests	24,500	1.07	8,061	1.68	32.90	157	2.94	118	23,684.84	1.99	186
49	American Classics	3,122	0.14	993	0.21	31.81	152	2.78	112	2,765.20	0.23	170
21	Gray Power	15,955	0.70	5,063	1.06	31.73	152	2.67	108	13,541.14	1.14	163
39	Domestic Duos	8,672	0.38	2,701	0.56	31.15	149	2.73	110	7,376.73	0.62	164
01	Upper Crust	102,816	4.49	31,332	[A] 6.55	[B] 30.47	[C] 146	2.29	[D] 92	71,879.05	[E] 6.04	[F] 134
26	The Cosmopolitans	23,749	1.04	7,074	1.48	29.79	142	2.37	95	16,752.57	1.41	136
09	Big Fish, Small Pond	54,248	2.37	16,102	3.36	29.68	142	1.90	76	30,526.48	2.57	108
28	Traditional Times	37,046	1.62	10,007	2.09	27.01	129	2.52	101	25,176.38	2.12	131
46	Old Glories	8,465	0.37	2,267	0.47	26.79	128	3.10	125	7,020.58	0.59	160
02	Blue Blood Estates	88,300	3.86	23,474	4.90	26.58	127	2.53	102	59,408.38	4.99	129
.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.
56	Crossroads Villagers	13,204	0.58	1,123	0.23	8.51	41	1.90	76	2,130.15	0.18	31
	Total	2,288,908	100.00	478,649	100.00	20.91	100	2.49	100	1,190,083.90	100.00	100

Profile Segment Consumption sample report

A. Behavior % Comp - The number of households in the Upper Crust segment that use English muffins (31,332) represents less than one-fifteenth (6.55%) of all households in the Washington, DC DMA that use English muffins (478,649).

$$\frac{31,332}{478,649} \times 100 = 6.55$$

B. Behavior Users/100 HHs - The number of households in the Upper Crust segment that use English muffins (31,332) represents close to one-third (30.47%) of the total Upper Crust households (102,816) in the entire Washington, DC DMA, which is somewhat higher than the Washington, DC DMA's average of 20.91% usage.

$$\frac{31,332}{102,816} \times 100 = 30.47$$

C. Behavior Index - Upper Crust households are 46% more likely (146) to use English muffins than the average Washington, DC household.

$$\frac{30.47}{20.91} \times 100 = 146 \quad \text{OR} \quad \frac{6.55}{4.49} \times 100 = 146$$

D. Consumption Index - With an average household consumption rate of 2.29 packages of English muffins per week (this is the Demand/Users, which is the geounit's Total Demand divided by the user count), Upper Crust households use English muffins at a slightly lower rate (92) than the average Washington, DC household rate of 2.49.

$$\frac{2.29}{2.49} \times 100 = 92$$

E. Consumption Behavior's % Share - The Upper Crust market share (71,879.05) represents more than onetwentieth (6.04%) of the total market share (1,190,083.90).

$$\frac{71,879.05}{1,190,083.90} \times 100 = 6.04$$

F. Total Demand Index - The total consumption demand per base household for Upper Crust households (0.70) compared to the total consumption demand per base household for the entire Washington, DC DMA (0.52) shows that the segment garners 34% more demand (index of 134) than the average Washington, DC DMA household (index of 100).

$$\frac{71,879.05}{102,816} = 0.70$$

$$\text{AND} \quad \frac{1,190,083.90}{2,288,908} = 0.52$$

$$\text{THEREFORE} \quad \frac{0.70}{0.52} \times 100 = 134$$

WHAT ARE THEY LIKE AND HOW CAN I REACH THEM?

After you have identified the segments in which your prospective customers reside, you can analyze the lifestyle tendencies of those segments' households to better understand their product and service preferences, their financial behavior, their favorite leisure activities, and their media preferences. You can then use this information to tailor marketing campaigns that will most successfully reach them.

Profile Ranking Index

The Profile Ranking Index report compares a specified collection of product, media, or demographic profiles against your product profile to determine which are used/occur at above-average and below-average rates in the segments that have the highest concentrations of users for your product. Each profile from the collection of profiles is ranked by comparing its index to the product profile. Each profile is also ranked by (ROC) rank order correlation, which is a measure of the similarity between the index ordering of all segments across two profiles. The ROC shows how high or low the usage frequency of each attribute profile correlates with your product profile. Results show which behaviors your customers are most likely to engage in, giving you a better understanding of how to gear your media and advertising strategies.

Profile Ranking Index Formulas

This analysis uses the following formulas:

- Users per 100 households (Users/100 HHs) for the total user population and for users of the comparison profile.

$$\frac{\text{Comparison Profile Count}}{\text{Total (U.S.) Comparison Profile Count}} \times 100 = \text{Users / 100 HHs}$$

- Comparison profile's count for attribute profile.

  For each segment in the chosen segmentation system, segment values are derived by multiplying the comparison profile's count by the attribute profile's users per 100 households and then adding all the segment values together.

Segment	Comparison Profile's Count x Attribute Profile's Users/100 HHs	Segment Value
1	Comparison Profile's Count × Attribute Profile's Users/100 HHs =	Segment 1's value
		+
2	Comparison Profile's Count × Attribute Profile's Users/100 HHs =	Segment 2's value
		+
3	Comparison Profile's Count × Attribute Profile's Users/100 HHs =	Segment 3's value
.	.	.
.	.	.
.	.	.
65	Comparison Profile's Count × Attribute Profile's Users/100 HHs =	Segment 65's value
		+
66	Comparison Profile's Count × Attribute Profile's Users/100 HHs =	Segment 66's value
		=
		Comparison Profile's Count for Attribute Profile

- Index of usage for each profile compared to the comparison profile.

$$\frac{\text{Users/100 HHs of behavior}}{\text{Users/100 HHs of base}} \times 100 = \text{Index}$$

- Rank Order Correlation (ROC) for each profile compared to the comparison profile.

  To calculate a Rank Order Correlation (ROC), Claritas uses the standard Spearman rank order correlation but factors in controls for zeroes and missing values. Missing segments are considered null and are given an average index value of 100. Segments with zero observations are considered true zeroes. Ranking numbers for segments with the same index value are averaged so that they are considered of equal rank. The strength and direction of a correlation is indicated by a value in the range 1.0 (perfect positive correlation) to -1.0 (perfect negative correlation). When two profiles are positively correlated, a direct relationship exists such that higher segment values on one profile are associated with higher segment values on the other profile. When profiles are perfectly matched in segment rank order, they have a perfect positive correlation, and an ROC coefficient of 1.0, which is the upper limit. When two profiles have a perfect inverse correlation, they have an ROC coefficient of -1.0, which is the lower limit. When two profiles have a coefficient of zero, they are not correlated.

  The following example illustrates these three correlations:

Perfect Positive Correlation ROC = 1.00				**Perfect Inverse Correlation ROC = -1.00**				**No Correlation ROC = 0.00**			
Drive car daily		**Own a car**		**Bus to work**		**Drive to work**		**Own snow shovel**		**Play baseball**	
Segment Rank	Index	Segment Rank	Index	Segment Rank	Index	Segment Rank	Index	Segment Rank	Index	Segment Rank	Index
1	140	1	120	1	117	40	65	1	133	16	113
2	136	2	118	2	114	39	76	2	132	34	75
3	127	3	109	3	105	38	89	3	122	21	98
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.
39	52	39	61	39	55	2	112	39	71	5	105
40	49	40	58	40	48	1	121	40	69	19	68

  When interpreting the strength of a correlation, a correlation of +.50 and above, or -.50 and below, is considered evidence of a strong correlation. Correlations between +.50 and +.30, and -.50 and -.30, indicate a moderate to weak relationship and should be treated with caution. Correlations between +.30 and -.30 indicate that there is no relationship between two profiles.

  The actual formula is calculated as follows:

  First, index values are calculated for the attribute and comparison profiles. For segments that are blank (that is, segments that do not contain any profile usage), values are changed to 100 (the average).

Comparison Profile			Profile 1		
Segment	Index	Rank	Segment	Index	Rank
1	200		1	300	
2	200		2	100	
3	100		3	200	
4	100		4	150	

Second, each profile is sorted by its index and then each segment is assigned a rank number. For segments with the same index, an average of the rank is taken.

Comparison Profile			Profile 1		
Segment	Index	Rank	Segment	Index	Rank
1	200	1.5	1	300	1
2	200	1.5	3	200	2
3	100	3.5	4	150	3
4	100	3.5	2	100	4

Third, each profile is sorted by its segment code, calculating the difference between the comparison profile's rank and each desired profile's rank, and then each difference's sum is squared. Finally, all the squared sums are added.

Comparison Profile			Profile 1			
Segment	Index	Rank	Segment	Index	Rank	Rank Diff.^{2}
1	200	1.5	1	300	1	$(1.5-1)^2 = 0.25$
2	200	1.5	2	100	4	$(1.5-4)^2 = 6.25$
3	100	3.5	3	200	2	$(3.5-2)^2 = 2.25$
4	100	3.5	4	150	3	$(3.5-3)^2 = 0.25$
					Total	= 9.00

- Fourth, the ROC is calculated.

$$1 - \left(\frac{(6 \times \text{Sum of squares of the rank differences})}{(\text{Number of segments} \times (\text{Number of segments}^2 - 1))} \right) = \text{ROC}$$

OR

$$1 - \left(\frac{(6 \times 9)}{(4 \times (16 - 1)} \right) = 1 - \left(\frac{54}{60} \right) = 0.10$$

Profile Ranking Index Sample Report

The following sample report correlates a propensity to engage in in-line skating with owning a mountain bike (one of the MRI Sports & Leisure attribute profiles):

				Attribute List: MRI Sports & Leisure Comparison Profile: Go In-Line Skating, 1yr (A) Projected to: Virginia (State by County) Sorted by: ROC, Descending			
MRI Sports & Leisure		Total Profile		Profile Ranking Index For: MRI Sports & Leisure			
List Order	- Lifestyler Attribute Title	- Count	-Users/100 HHs	- Count	-Users/100 HHs	- Index	- ROC
1320	Go In-Line Skating,1yr (A)	143,364	4.77	10,869	7.58	159	1.00
1382	Own Roller Blades/In-Line Skates (A)	430,276	14.33	30,788	21.48	150	0.89
1427	Rent/Buy Video at Blockbstr, 1mo (A)	938,281	31.24	60,232	42.01	134	0.88
1305	Go Bowling, 1yr (A)	674,039	22.44	43,262	30.18	134	0.88
1415	Rent DVD,1+/1mo (A)	1,805,672	60.13	112,712	78.62	131	0.88
1319	Go Ice Skating, 1yr (A)	144,503	4.81	9,829	6.86	142	0.87
1375	Own Mountain Bicycle (A)	881,611	[A] 29.36	[B] 57,895	[C] 40.38	[D] 138	[E] 0.87
1395	Play Basketball, 1yr (A)	553,588	18.43	35,665	24.88	135	0.86
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
1355	Go Walking for Exercise, 1yr (A)	1,805,671	60.13	97,030	67.68	113	0.51
1220	Buy Electric Trains, 1yr (A)	75,568	2.52	4,527	3.16	125	0.51
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
1445	Buy Collectbls by Mail/Phone, 1yr (A)	64,733	2.16	2,930	2.04	95	0.14
1280	Collect Stamps, 1yr (A)	167,789	5.59	7,765	5.42	97	0.13
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
1175	Buy 1950s Nostalgia Music, 1yr (A)	59,785	1.99	2,251	1.57	79	-0.19
1174	Belong to a Veterans Club (A)	213,189	7.10	7,500	5.23	74	-0.37

Profile Ranking Index sample report

A. Users/100 HHs - The number of users who own a mountain bike (881,611) within all segments represents close to one-third (29.36%) of the total MRI estimated users (3,003,157 from the Profile Comparison report).

$$\frac{881,611}{3,003,157} \times 100 = 29.36$$

B. Comparison Profile's Count for Attribute Profile - The total of all segment values derived by multiplying each segment's comparison profile count by its attribute profile users per 100 households (from the Profile Comparison report).

$$\underset{\text{(Seg. 1)}}{(2,482 \times 27.98)} + \underset{\text{(Seg. 2)}}{(6,543 \times 49.50)} + \ldots + \underset{\text{(Seg. 66)}}{(119 \times 7.78)} = 57,895$$

C. Users/100 HHs - The number of comparison profile users (mountain bike owners) who are also Total Profile users (57,895) represents more than one-third (40.38%) of all MRI estimated comparison profile users (143,364, from the Profile Comparison report).

$$\frac{57{,}895}{143{,}364} \times 100 = 40.38$$

D. Index - Households who engaged in in-line skating in the last 12 months are more than one-third more likely than the average household (index of 138) to own a mountain bike.

$$\frac{40.30}{29.36} \times 100 = 138$$

E. ROC - The profile for owning a mountain bike correlates very highly (0.87 ROC) with in-line skating and is of strong positive significance.

Target Segment Measures

The Target Segment Measures report shows the propensity of households, in target segments, to engage in all profile behaviors in a particular attribute pool. The results of this analysis help determine which behaviors to emphasize when developing marketing campaigns.

Target Segment Measures Formulas

This analysis uses the following formulas:

- Users per 100 households (Users/100 HHs) of each profile against all households or adults and users per 100 households of each profile for the target segments against all target segment households or adults.

$$\frac{\text{Total Profile Behavior Count}}{\text{Total Profile Base Count}} \times 100 = \text{Users / 100 HHs}$$

- Percent Total of the targeted segments that engage in the behavior. (This is the target's "share" of all people who perform the behavior.

$$\frac{\text{Behavior Target Count}}{\text{Total Profile BehaviorCount}} \times 100 = \text{Percent Total}$$

- Index of targeted segments' usage for each profile compared to households or adults in all segments.

$$\frac{\text{\% Penetration of Target}}{\text{\% Penetration of Total Profile}} \times 100 = \text{Index}$$

Target Segment Measures Sample Report

The following sample report shows likely profile usage in the sports and leisure attribute for households in the Upper Market Segments group:

Attribute List: MRI Sports & Leisure
Target Group: Standard Affluence Groups
Targets: Upper Market
Projected to: United States
Sorted by: Index, Descending

MRI Sports & Leisure		Total Profile		Upper Market ('01' '02' '03' '04')			
List Order	Lifestyler Attribute Title	Count	Users/ 100 HHs	Count	% Total	Users/ 100 HHs	Index
0000	MRI Household Count (H)	112,267,302		16,523,843	14.72		
2724	Belong to a Country Club (A)	4,393,764	3.91	1,700,044	38.69	10.29	263
2848	Go Downhill Skiing,1yr (A)	6,652,998	5.93	2,416,788	36.33	14.63	247
2861	Go Sailing,1yr (A)	2,616,609	2.33	947,367	36.21	5.73	246
2807	Buy Tennis Equipment,1yr (A)	3,757,763	3.35	1,354,681	36.05	8.20	245
2904	Own Downhill Skis/Boots (A)	9,883,594	8.80	3,496,416	35.38	21.16	240
2772	Buy Flowers by Internet,1yr (A)	6,554,429	5.84	2,317,434	35.36	14.02	240
.	.	.	.	.	.	.	.
2875	Go to Live Theater,1yr (A)	31,224,882	[A] 27.81	9,231,354	[B] 29.56	[C] 55.87	[D] 201
2752	Buy Collectibles by Internet,1yr (A)	3,528,816	3.14	1,038,813	29.44	6.29	200
2735	Buy Any Products by Internet Order,1yr (A)	63,447,670	56.51	18,632,873	29.37	112.76	200
2793	Buy Personal/Busi Self-Help Books,1yr (A)	14,282,598	12.72	4,160,925	29.13	25.18	198
2863	Go Scuba/Skin Diving/Snorkeling,1yr (A)	5,670,167	5.05	1,648,777	29.08	9.98	198
2914	Own Racquetball Equipment (A)	10,275,635	9.15	2,960,299	28.81	17.92	196
2965	Spend $100+ at Beauty Parlor,6mo (A)	33,497,271	29.84	9,649,727	28.81	58.40	196
2751	Buy Classical Music,1yr (A)	7,479,836	6.66	2,139,971	28.61	12.95	194
2882	Go to Museum,1yr (A)	31,088,082	27.69	8,886,283	28.58	53.78	194

Target Segment Measures sample report

F. Users/100 HHs of total behavior - The number of households that attended live theater in the past year (31,224,882) within all segments represents more than one-fourth (27.81%) of the total MRI households when projected to the entire United States (112,267,302, from the top of the report).

$$\frac{31,224,882}{112,267,302} \times 100 = 27.81$$

G. % Total of behavior within target - The number of households in the Upper Market segments (9,231,354) who attended live theater last year represents between one-fourth and one-third (29.56%) of all households who attended the theater last year throughout all PRIZM segments.

$$\frac{9,231,354}{31,224,882} \times 100 = 29.56$$

H. Users/100 HHs of behavior within target - The number of households in the Upper Market segments (9,231,354) who attended live theater last year represents more than half (55.87%) of all households in the targeted segments (16,523,843, from the top of the report).

$$\frac{9{,}231{,}354}{16{,}523{,}843} \times 100 = 55.87$$

I. Index of behavior within target - Households in Upper Market segments are 101% more likely to have gone to the theater last year than the "average" household in the United States.

$$\frac{55.87}{27.81} \times 100 = 201$$

Note: The 27.81 comes from the Total Profile's Users/100 HHs column.

When developing marketing strategies and campaigns, behaviors that involve cultural endeavors and a somewhat pampered lifestyle best characterize current and potential customers. These profiles, which include Spend $100+ at Beauty Parlor, 6mo (A) and Go to Museum, 1yr (A), all have both high indexes and high household counts.

WHERE CAN I FIND THEM?

Analyses in this chapter help you determine (1) how well a particular product/service is penetrated in your pinpointed geographies, (2) how deeply you have actually penetrated your pinpointed geographic area, and (3) how much of your geographic area's potential you have tapped.

Market Potential Index

The Market Potential Index (MPI) is an index that uses the segment composition of a geography to estimate customer potential based on the segment penetration rates of a chosen product, service, or lifestyle profile.

Market Potential Index Formulas

For each detail-level geography in an analysis, this index is derived by first calculating the estimated user household count for each segment and totaling them:

1. For simplicity in this example, assume that ZIP Code 12345 contains only the following two segments.

Segment 01 Household Count - 450 (45%)
Segment 02 Household Count - 550 (55%)
1,000 (100%)

2. Based on the comparison profile, in which 20% of Segment 01 uses the product and 10% of Segment 02 uses the product, the total number of households in ZIP Code 12345 that use the product is calculated as follows:

20% of the 450 HHs in Segment 01 use Product (90 HHs)
10% of the 550 HHs in Segment 02 use Product (55 HHs)
Total HHs in ZIP Code 12345 that use the Product = 145

3. Assuming that the total number of households using the product, in the ZIP Code, is 145, and there are 1,000 households, the percent penetration is calculated as follows:

$$\frac{\text{Estimated User Count}}{\text{Base Count}} \times 100 = \text{Percent Penetration}$$

OR

$$\frac{145}{1000} \times 100 = 14.5$$

4. The final MPI is calculated by dividing the percent penetration for households using the product in ZIP

Code 12345 (14.5%) by the profile's total percent penetration for all households in the United States (11.2%, from the profile's %Pen Total row on the Profile Comparison report), and multiplying the result by 100 as follows:

$$\frac{\text{Estimated User Count}}{\text{Base Count}} \Big/ \frac{\text{Profile Total Behavior Count}}{\text{Profile Total Base Count}} \times 100 = \text{MPI}$$

OR

$$\frac{14.5}{11.2} \times 100 = 129 \text{ (MPI)}$$

Market Potential Index Sample Report

The following sample report illustrates market potential for brokerage services in Lancaster County, Virginia:

		Lancaster County (County by ZIP) Sorted By: MPI, Descending Break: None (0)					
		Base		Behavior			
Lancaster County (County by ZIP)		Base		Market Potential For: Use Full Service Brokerage Firm,1yr (A)			
Code	Name	HH Count	% Comp	Estimated Users	% Comp	Users/ 100 HHs	MPI
22480	Irvington, VA	236	4.33	54	7.84	22.98	186
22578	White Stone, VA	1,315	24.14	244	35.29	18.56	150
22482	Kilmarnock, VA	908	16.67	137	19.73	15.03	121
22503	Lancaster, VA	2,027	37.21	179	25.87	8.83	71
22576	Weems, VA	961	17.64	78	11.27	8.11	65
	Total	[A] 5,447	100.00	[B] 692	100.00	[C] 12.70	[D] 102

Market Potential Index Sample Report

A. As shown in the Segment Distribution report below, Lancaster County, VA, is made up of 18 segments that collectively contain 5,447 households.

Segment 55	Household Count =	1,362	(25.00%)
Segment 28	Household Count =	1,143	(20.98%)
Segment 58	Household Count =	737	(13.53%)
Segment 38	Household Count =	612	(11.24%)
Segment 33	Household Count =	240	(4.41%)
Segment 09	Household Count =	260	(4.77%)
Segment 23	Household Count =	161	(2.96%)
Segment 48	Household Count =	184	(3.38%)
Segment 56	Household Count =	150	(2.75%)
Segment 64	Household Count =	108	(1.98%)
Segment 43	Household Count =	115	(2.11%)
Segment 51	Household Count =	76	(1.40%)
Segment 37	Household Count =	113	(2.07%)
Segment 45	Household Count =	64	(1.17%)
Segment 20	Household Count =	58	(1.06%)
Segment 25	Household Count =	34	(0.62%)
Segment 11	Household Count =	16	(0.29%)
Segment 05	Household Count =	14	(0.26%)
	Total Household Count =	5,447	(100%)

				Sorted By: Index, Descending Break: None (0)			
Segments		U.S. (Country by Country)		Lancaster County (County by ZIP)			
Code	Variable Title	Count	% Comp	Count	% Comp	% Pen	Index
55	Golden Ponds	1,770,346	1.58	1,362	25.00	0.08	1,586
28	Traditional Times	3,189,627	2.84	1,143	20.98	0.04	739
58	Back Country Folks	2,446,399	2.18	737	13.53	0.03	621
38	Simple Pleasures	2,584,759	2.30	612	11.24	0.02	488
33	Big Sky Families	2,014,484	1.79	240	4.41	0.01	246
09	Big Fish, Small Pond	2,539,806	2.26	260	4.77	0.01	211
23	Greenbelt Sports	1,612,141	1.44	161	2.96	0.01	206
48	Young & Rustic	2,249,481	2.00	184	3.38	0.01	169
56	Crossroads Villagers	2,358,347	2.10	150	2.75	0.01	131
64	Bedrock America	2,027,896	1.81	108	1.98	0.01	110
43	Heartlanders	2,247,835	2.00	115	2.11	0.01	105
51	Shotguns & Pickups	1,805,111	1.61	76	1.40	0.00	87
37	Mayberry-ville	2,794,581	2.49	113	2.07	0.00	83
45	Blue Highways	1,644,447	1.46	64	1.17	0.00	80
20	Fast-Track Families	1,950,575	1.74	58	1.06	0.00	61
25	Country Casuals	1,807,787	1.61	34	0.62	0.00	39
11	God's Country	1,735,899	1.55	16	0.29	0.00	19
05	Country Squires	2,152,742	1.92	14	0.26	0.00	13
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
02	Blue Blood Estates	1,094,703	0.98	0.00	0.00	0.00	0
01	Upper Crust	1,699,636	1.51	0.00	0.00	0.00	0
	Total	**112,267,302**	**100.00**	**[A] 5,447**	**100.00**	**0.00**	**100**

Segment Distribution sample report

B. Using the percent penetration by segment from the profile, multiplied by the number of households, the estimated total number of households in Lancaster County that use a full-service broker is 692.

2.34% of HHs in Segment 55 use Full Service Broker (32 HHs)
25.93% of HHs in Segment 28 use Full Service Broker (296 HHs)
3.96% of HHs in Segment 58 use Full Service Broker (29 HHs)
17.23% of HHs in Segment 38 use Full Service Broker (105 HHs)
15.65% of HHs in Segment 33 use Full Service Broker (38 HHs)
38.69% of HHs in Segment 09 use Full Service Broker (101 HHs)
10.80% of HHs in Segment 23 use Full Service Broker (17 HHs)
4.21% of HHs in Segment 48 use Full Service Broker (8 HHs)
4.42% of HHs in Segment 56 use Full Service Broker (7 HHs)
2.15% of HHs in Segment 64 use Full Service Broker (2 HHs)
8.63% of HHs in Segment 43 use Full Service Broker (10 HHs)
2.09% of HHs in Segment 51 use Full Service Broker (2 HHs)
13.76% of HHs in Segment 37 use Full Service Broker (16 HHs)
6.25% of HHs in Segment 45 use Full Service Broker (4 HHs)
18.59% of HHs in Segment 20 use Full Service Broker (11 HHs)
21.03% of HHs in Segment 25 use Full Service Broker (7 HHs)
27.12% of HHs in Segment 11 use Full Service Broker (4 HHs)
23.23% of HHs in Segment 05 use Full Service Broker (3 HHs)

Total User HHs in Lancaster County = 692

The percentage of households (percent penetration) for each segment is derived from the Profile Comparison table below.

Sorted By: Code, Ascending
Break: None (0)

Segments		Base		Use Full Service Brokerage,1yr (A)			
Code	Variable Title	Count	% Comp	Count	% Comp	Users/ 100 HHs	Index
01	Upper Crust	781	1.52	331	5.21	42.38	342
02	Blue Blood Estates	489	0.95	152	2.39	31.08	251
03	Movers & Shakers	834	1.63	123	1.94	14.75	119
04	Young Digerati	635	1.24	84	1.32	13.23	107
05	Country Squires	947	1.85	220	3.46	[B] 23.23	187
09	Big Fish, Small Pond	1,132	2.21	438	6.90	[B] 38.69	312
11	God's Country	837	1.63	227	3.57	[B] 27.12	219
20	Fast-Track Families	753	1.47	140	2.20	[B] 18.59	150
23	Greenbelt Sports	870	1.70	94	1.48	[B] 10.80	87
25	Country Casuals	718	1.40	151	2.38	[B] 21.03	170
28	Traditional Times	1,392	2.72	361	5.69	[B] 25.93	209
33	Big Sky Families	856	1.67	134	2.11	[B] 15.65	126
37	Mayberry-ville	1,177	2.30	162	2.55	[B] 13.76	111
38	Simple Pleasures	1,294	2.52	223	3.51	[B] 17.23	139
43	Heartlanders	1,020	1.99	88	1.39	[B] 8.63	70
45	Blue Highways	608	1.19	38	0.60	[B] 6.25	50
48	Young & Rustic	1,567	3.06	66	1.04	[B] 4.21	34
51	Shotguns & Pickups	813	1.59	17	0.27	[B] 2.09	17
55	Golden Ponds	898	1.75	21	0.33	[B] 2.34	19
56	Crossroads Villagers	905	1.77	40	0.63	[B] 4.42	36
58	Back Country Folks	1,213	2.37	48	0.76	[B] 3.96	32
64	Bedrock America	975	1.90	21	0.33	[B] 2.15	17
65	Big City Blues	609	1.19	8	0.13	1.31	11
66	Low-Rise Living	660	1.29	7	0.11	1.06	9
	Total	**51,249**	**100.00**	**6,350**	**100.00**	**12.39**	**100**

Profile Comparison sample report

C. The number of households using a full-service broker in Lancaster County (692) represents more than one-tenth (12.70%) of the total households (5,447) in the county.

$$\frac{692}{5,447} \times 100 = 12.70$$

D. The households in Lancaster County are 2% more likely (MPI of 102) to use a full-service broker than the average U.S. household (12.39%—from the Users/100 HHs Total row on the Profile Comparison report).

$$\frac{12.70}{12.39} \times 100 = 102 \text{ (MPI)}$$

Potential vs. Potential

The Potential vs. Potential report lets you analyze two profiles to help you rank and identify detail-level geographies within your analysis area for potential usage of the profile behaviors. The analysis is based on the concept that you can plot each geography's market potential index scores on a four-quadrant grid with each quadrant representing the likelihood of households in a geography to engage in both of the behaviors, as follows:

- Hi/Hi -The propensity to engage in the first profile's behavior is high (greater than 100) and the propensity to engage in the second profile's behavior is also high. Households or individuals in these detail-level geographies would be most likely of all your detail-level geographies to engage in both profiles' behaviors.
- Hi/Lo -The propensity to engage in the first profile's behavior is high but the propensity to engage in the second profile's behavior is low (less than 100). Although households or individuals in these detail-level geographies would be likely to engage in your first profile's behavior, they would be unlikely to engage in your second profile's behavior.
- Lo/Hi -The propensity to engage in the first profile's behavior is low but the propensity to engage in the second profile's behavior is high. Households or individuals in these detail-level geographies would be unlikely to engage in your first profile's behavior, they would be likely to engage in your second profile's behavior.
- Lo/Lo -The propensity to engage in the first profile's behavior is low and the propensity to engage in the second profile's behavior is also low. Households or individuals in these detail-level geographies would be the least likely of all to engage in either profiles' behaviors.

Potential vs. Potential Formulas

This analysis uses the following formulas:

- Percent composition (of base or behavior)

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Estimated Users (of behavior) (See "Market Potential Index Formulas")

- Users per 100 households (Users/100 HHs) (of behavior)

$$\frac{\text{Estimated Behavior Count}}{\text{Base Count}} \times 100 = \text{Users / 100 HHs}$$

- Market Potential Index (of behavior)

$$\frac{\text{Geounit's Users/100 HHs}}{\text{Profile's Total Users/100 HHs}} \times 100 = \text{Market Potential Index}$$

Potential vs. Potential Sample Report

The following sample report illustrates the total estimated adult counts, by Virginia county, for visiting any Busch Gardens theme park and for watching American Idol:

					Virginia Counties Sorted By: Strategy and then by MPI 1, Descending Break: Strategy (4)							
		Base			Behavior 1				Behavior 2			
Virginia Counties		Base		Strategy	PVP For: Visit Any Busch Gardens Park, 1yr (A)				PVP For: American Idol, 2-4 Times/mo (A)			
Code	Name	HH Count	% Comp	Strategy	Estimated Users	% Comp	Users/ 100 HHs	MPI 1	Estimated Users	% Comp	Users/ 100 HHs	MPI 2
51107	Loudoun County	104,327	3.45	Hi/Hi	7,548	6.24	7.23	200	45,152	4.30	43.28	132
51685	Manassas Park city	4,067	0.13	Hi/Hi	250	0.21	6.15	170	1,467	0.14	36.06	110
51610	Falls Church city	4,821	0.16	Hi/Hi	279	0.23	5.78	160	1,735	0.17	35.98	110
51153	Prince W. County	130,564	4.32	Hi/Hi	7,427	6.14	5.69	157	54,627	5.20	41.84	128
51683	Manassas city	11,885	0.39	Hi/Hi	666	0.55	5.61	155	4,699	0.45	39.54	121
51179	Stafford County	40,960	1.35	Hi/Hi	2,210	1.83	5.39	149	18,124	1.73	44.25	135
51059	Fairfax County	370,559	[A]12.25	Hi/Hi	[B] 19,517	[C] 16.14	[D] 5.27	[E]146	148,922	14.19	40.19	123
51177	Spotsylvania Co.	44,230	1.46	Hi/Hi	2,145	1.77	4.85	134	18,703	1.78	42.29	129
51199	York County	22,977	0.76	Hi/Hi	1,061	0.88	4.62	128	9,368	0.89	40.77	124
	Hi/Hi	1,409,670	46.61		70,330	58.15	4.99	138	552,214	52.61	39.17	119
51630	Fredrcksbrg city	10,050	0.33	Hi/Low	440	0.36	4.38	121	2,693	0.26	26.79	82
51650	Hampton city	53,775	1.78	Hi/Low	2,245	1.86	4.17	115	15,770	1.5	29.33	89
	Hi/Low	385,890	12.76		15,270	12.63	3.96	109	105,021	10.00	27.22	83
51057	Essex County	4,574	0.15	Low/Hi	110	0.09	2.41	67	1,591	0.15	34.78	106
51045	Craig County	2,193	0.07	Low/Hi	49	0.04	2.23	62	959	0.09	43.74	133
	Low/Hi	445,638	14.74		13,473	11.14	3.02	84	164,844	15.70	36.99	113
51111	Lunenburg County	5,201	0.17	Low/Low	114	0.09	2.19	61	1,292	0.12	24.83	76
51131	Northampton Co.	5,566	0.18	Low/Low	113	0.09	2.02	56	1,383	0.13	24.85	76
	Low/Low	782,991	25.89		21,864	18.08	2.79	77	127,647	21.69	29.07	89
	Total	3,024,189	100.00		120,937	100.00	4.00	111	1,049,725	100.00	34.71	106

Potential vs. Potential sample report

A. Base % Comp - The number of households in Fairfax County, VA represents almost one eighth (12.25%) of the total households in the state of Virginia.

$$\frac{370{,}559}{3{,}024{,}189} \times 100 = 12.25$$

B. Estimated Users - The number of adults who are estimated to have visited a Busch Gardens theme park in the past year is 19,517. (For Estimated Users sample calculations, see the second formula, and section B of the sample report, within "Market Potential Index Formulas")

C. Behavior's % Comp - The number of adults who are estimated to have visited a Busch Gardens theme park in the past year (19,517) represents almost one-sixth (16.14%) of the total adults in the entire United States who are estimated to have visited a Busch Gardens theme park in the past year.

$$\frac{19,517}{120,937} \times 100 = 16.14$$

D. Behavior's Users/100 HHs - The number of adults (per 100 households) in Fairfax County that are estimated to have visited a Busch Gardens theme park (19,517) represents a little more than one-twentieth (5.27%) of the total Fairfax County adults (370,559) in the entire United States, which is 1.5 times the national average.

$$\frac{19,517}{370,559} \times 100 = 5.27$$

E. Behavior's MPI - With a users-per-100-households rate of 5.27, households in Fairfax County are 46% more likely to have visited a Busch Gardens theme park (MPI of 146) than the average household (users per 100 households of 3.62 from the Profile Comparison report's total row).

$$\frac{5.27}{3.62} \times 100 = 146$$

The analysis shows that individuals in particular counties in northern Virginia rank high for visiting Busch Gardens and for watching American Idol. If you, as Busch Gardens, are interested in television advertising, you would obtain high coverage for reaching your prospects in northern Virginia. The geographies with the highest estimates for visiting Busch Gardens and watching American Idol—Loudoun County and Prince William County—would be productive analysis areas, but Fairfax County would be an even better use of resources because, while it ranks slightly lower for both profiles, its number of households (370,559) is nearly triple that of Prince William County (130,564).

Market Consumption

The Market Consumption report lets you analyze a behavioral profile and its associated consumption value by detail-level geography. This analysis helps you identify which geounits in your analysis area to focus on based on the consumption rate of its households in addition to its product usage and total number of households.

Market Consumption Formulas

This analysis uses the following formulas:

- Percent composition (of base or behavior)

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Users per 100 households (Users/100 HHs) (of behavior)

$$\frac{\text{Estimated Behavior Count}}{\text{Base Count}} \times 100 = \text{Users / 100 HHs}$$

- Market Potential Index (of behavior)

$$\frac{\text{Geounit's Users/100 HHs}}{\text{Profile's Total Users/100 HHs}} \times 100 = \text{Market Potential Index}$$

- Market Consumption Index (MCI)

$$\frac{\text{Geounit's Consumption Rate (Measure)}}{\text{Profile's Total Consumption Rate (Measure)}} \times 100 = \text{Market Consumption Index}$$

- Percent Share (of Total Demand)

$$\frac{\text{Geounit's Total Demand}}{\text{Analysis Area's Total Demand}} \times 100 = \text{Percent Share}$$

- Market Demand Index (MDI)

$$\frac{\left(\frac{\text{Geounit's Total Demand}}{\text{Geounit's Total Base HHs}}\right)}{\left(\frac{\text{Profile's Total Demand}}{\text{Profile's Total Base HHs}}\right)} \times 100 = \text{Market Demand Index}$$

Market Consumption Sample Report

The following sample report illustrates consumption by county in the Atlanta, GA DMA, for using microwave popcorn in the last 30 days:

Atlanta, GA (DMA By County
Sorted By: MPI, Descending
Break: Tercile (3)

Base → Behavior → Behavior's Consumption

Atlanta, GA (DMA By County)		Base		Market Potential For: Use Microwave Popcorn,1mo (H)				Consumption: Pkg/1mo				
Code	Name	HH Count	% Comp	Estimated Users	% Comp	Users/ 100 HHs	MPI	Demand/ Users	MCI	Total Demand	% Share	MDI
13231	Pike County, GA	5,806	0.27	2,003	0.32	34.51	126	4.41	104	8,833.82	0.33	131
13223	Paulding County, GA	39,264	1.84	13,479	2.14	34.33	125	4.37	103	58,874.85	2.23	129
13151	Henry County, GA	60,485	2.84	20,677	[A] 3.28	[B] 34.19	[C] 125	4.30	[D] 101	88,863.66	[E] 3.37	[F] 127
13117	Forsyth County, GA	49,706	2.33	16,740	2.66	33.68	123	4.21	99	70,490.43	2.67	122
13077	Coweta County, GA	39,161	1.84	13,082	2.08	33.41	122	4.28	101	56,000.31	2.12	123
13219	Oconee County, GA	10,320	0.48	3,437	0.55	33.30	122	4.29	101	14,742.69	0.56	123
13097	Douglas County, GA	41,099	1.93	13,554	2.15	32.98	120	4.28	101	58,007.20	2.20	122
13157	Jackson County, GA	19,072	0.89	6,280	1.00	32.93	120	4.43	105	27,808.31	1.05	126
13113	Fayette County, GA	36,626	1.72	12,059	1.91	32.93	120	4.28	101	51,565.62	1.96	121
13015	Bartow County, GA	32,304	1.52	10,634	1.69	32.92	120	4.36	103	46,327.25	1.76	124
13057	Cherokee County, GA	64,886	3.04	21,197	3.36	32.67	119	4.13	98	87,553.20	3.32	116
13247	Rockdale County, GA	27,470	1.29	8,964	1.42	32.63	119	4.30	101	38,537.59	1.46	121
13011	Banks County, GA	6,018	0.28	1,962	0.31	32.61	119	4.58	108	8,994.03	0.34	129
13013	Barrow County, GA	21,298	1.00	6,907	1.10	32.43	118	4.40	104	30,379.17	1.15	123
.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.	.	.	.
13059	Clarke County, GA	41,432	1.94	10,040	1.59	24.23	89	4.19	99	42,088.02	1.60	88
	Total	2,131,295	100.00	630,100	100.00	29.56	108	4.18	99	2,636,756.17	100	107

Market Consumption sample report

A. Behavior's % Comp - The number of households in Henry County that are estimated to have used microwave popcorn in the last month (20,677) represents about one-thirtieth (3.28%) of all households in the Atlanta DMA that are estimated to have used microwave popcorn last month (630,100).

$$\frac{20,677}{630,100} \times 100 = 3.28$$

B. Behavior's Users/100 HHs - The number of households in Henry County that are estimated to have used microwave popcorn (20,677) represents more than one-third (34.19%) of the total Henry County households (60,485) in the Atlanta DMA, which is higher than the entire Atlanta DMA penetration of 29.56%.

$$\frac{20,677}{60,485} \times 100 = 34.19$$

C. Behavior's MPI - With a users-per-100-households rate of 34.19, households in Henry County are 25% more likely to have used microwave popcorn (MPI of 125) than the average household (users per 100 households of 27.65 from the Profile Comparison report's total row).

$$\frac{34.19}{27.65} \times 100 = 125$$

D. Consumption Behavior's MCI - Henry County's consumption rate (4.30) (this is the Demand/Users, which is the geounit's Total Demand divided by the user count) shows that households in the county are only slightly more likely (MCI of 101) to consume at a higher rate than the profile's total consumption measure (non-projected total consumption rate from the Segment Consumption report).

$$\frac{4.30}{4.18} \times 100 = 101$$

E. Consumption Behavior's % Share - Henry County's total demand (88,863) represents one-thirtieth (3.37%) of the total demand of the Atlanta DMA (2,636,756).

$$\frac{88,863}{2,636,756} \times 100 = 3.37$$

F. Consumption Behavior's MDI - The consumption demand for Henry County households (1.47) compared to the consumption demand for the entire profile (1.16, from the Segment Consumption report) shows that the county garners more than 25% higher demand (MDI of 127) than the profile's average household.

$$\frac{88,863}{60,485} = 1.47$$

AND $\frac{131,506,755}{112,267,302} = 1.16$ (from Segment Consumption)

THEREFORE $\frac{1.47}{1.16} \times 100 = 127$

Actual Penetration

Actual Penetration compares geographic summary counts of a behavior to a base, typically the geographic concentration of the actual customer counts relative to the total households that reside there. The percentage of total households comprised of existing customers indicates how deeply the prospective analysis area has been penetrated.

Actual Penetration Formulas

This analysis uses the following formulas:

- Percent composition of base households in each geounit and percent composition of actual (i.e., behavioral or demographic characteristic) households in each geounit

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Percent penetration of behavioral characteristic for each geounit

$$\frac{\text{Behavior Count}}{\text{Base Count}} \times 100 = \text{Percent Penetration}$$

- Actual Penetration Index (API) for each geounit

$$\frac{\text{\% Penetration of Geounit Behavior}}{\text{\% Penetration of Total Analysis Area Behavior}} \times 100 = \text{API}$$

OR

$$\frac{\text{\% Composition of Geounit Behavior}}{\text{\% Composition of Geounit Base Households}} \times 100 = \text{API}$$

Actual Penetration Sample Report

The following sample report illustrates actual penetration for hypothetical cable subscribers in Arlington, VA:

		Arlington, County (County by ZIP) Sorted By: API, Descending Break: Tercile (3)					
		Base		Behavior			
Arlington County (County By ZIP)		All Segment Households		Cable Clients For Arlington County (County By ZIP)			
Code	Name	HH Count	% Comp	Count	% Comp	% Pen	API
22204	Arlington, VA	18,731	[A] 21.67	9,125	[B] 51.45	[C] 48.72	[D] 237
22201	Arlington, VA	14,695	17.00	3,150	17.76	21.44	104
22206	Arlington, VA	8,195	9.48	1,256	7.08	15.33	75
22213	Arlington, VA	929	1.07	120	0.68	12.92	63
22207	Arlington, VA	10,436	12.08	1,269	7.15	12.16	59
22209	Arlington, VA	6,765	7.83	785	4.43	11.60	57
22205	Arlington, VA	5,874	6.80	650	3.66	11.07	54
22202	Arlington, VA	11,180	12.94	1,092	6.16	9.77	48
22203	Arlington, VA	9,442	10.92	290	1.64	3.07	15
22211	FT Myer, VA	179	0.21	0	0.00	0.00	0
	Total	86,426	100.00	17,737	100.00	20.52	100

Actual Penetration sample report

A. Base Households % Comp - The number of households in ZIP Code 22204 represents more than one-fifth (21.67%) of the total households (86,426) in all of Arlington, Virginia.

$$\frac{18,731}{86,426} \times 100 = 21.67$$

B. Behavior % Comp - The number of cable subscribers in ZIP Code 22204 represents over half (51.45%) of all the cable subscribers in Arlington, Virginia.

$$\frac{9,125}{17,737} \times 100 = 51.45$$

C. Behavior % Pen - The number of cable subscribers in ZIP Code 22204 (9,125) represents almost half (48.72%) of the total households (18,731) in this ZIP Code.

$$\frac{9,125}{18,731} \times 100 = 48.72$$

D. API - Households in ZIP Code 22204 are 137% more highly penetrated (237) than households in other Arlington, Virginia ZIP Codes. In other words, cable subscribers are 1.37 times more concentrated in ZIP Code 22204 than in Arlington, Virginia overall.

$$\frac{48.72}{20.52} \times 100 = 237 \quad \text{OR} \quad \frac{51.45}{21.67} \times 100 = 237$$

Actual Consumption

Actual Consumption, like Actual Penetration, compares geographic summary counts of a behavior to a base, but it goes one step further to include behavior consumption measures.

Actual Consumption Formulas

This analysis uses the following formulas:

- Percent composition of base households in each geounit and percent composition of actual consumption (i.e., behavioral or demographic characteristic) households in each geounit

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

AND

$$\frac{\text{Geounit's Behavior Count}}{\text{Total Behavior Count}} \times 100 = \text{Percent Composition}$$

- How much higher or lower a particular geounit's average household consumption rate is (based on 100) than the average rate for the analysis area

$$\frac{\text{Geounit's Average HH Consumption Rate}}{\text{Analysis Area's Average HH Consumption Rate}} \times 100 = \text{Index}$$

- The percentage of market share that a particular geounit holds for a behavior's consumption in relation to all geounits in the specified analysis area

$$\frac{\text{Geounit's Consumption Value}}{\text{Total Consumption Value}} \times 100 = \text{Percent Share}$$

- A geounit's actual customer consumption performance (percent share) based on the base household count's percent composition

$$\frac{\text{Geounit's \% Share}}{\text{Geounit's Base \%Composition}} \times 100 = \text{ACI}$$

Actual Consumption Report Sample

The following sample report illustrates actual consumption for niche-market hypothetical natural soft drink users in Arlington, VA:

Arlington County (County By ZIP)
Sorted By: ACI, Descending
Break: Tercile (3)

Base | Behavior | Consumption Behavior

Arlington County (County By ZIP)		All Segment Households		Natural Soda for Arlington County (County by ZIP)		Natural Soda Consumption Data for Arlington County (County by ZIP)				
Code	Name	HH Count	% Comp	Count	% Comp	Demand/ Users	Index	Total Consumed	% Share	ACI
22211	Ft. Myer, VA	179	0.21	80	8.05	1.66	9	133	0.74	359
22204	Arlington, VA	18,731	[A] 21.67	365	[A] 36.72	25.00	[B] 139	9,125	[C] 51.06	[D] 236
22201	Arlington, VA	14,695	17.00	89	8.95	35.39	197	3,150	17.63	104
22206	Arlington, VA	8,195	9.48	112	11.27	11.21	62	1,256	7.03	74
22213	Arlington, VA	929	1.07	97	9.76	1.24	7	120	0.67	62
22207	Arlington, VA	10,436	12.08	34	3.42	37.32	208	1,269	7.10	59
22209	Arlington, VA	6,765	7.83	80	8.05	9.81	55	785	4.39	56
22205	Arlington, VA	5,874	6.80	20	2.01	32.50	181	650	3.64	54
22202	Arlington, VA	11,180	12.94	45	4.53	24.27	135	1,092	6.11	47
22203	Arlington, VA	9,442	10.92	72	7.24	4.03	22	290	1.62	15
	Total	86,426	100.00	994	100.00	17.98	100	17,870	100.00	100

Actual Consumption sample report

A. Base Households % Comp and Behavior Households % Comp - The number of households in ZIP Code 22204 represents more than one-fifth (21.67%) of the total households (86,426) in all of Arlington County, Virginia. Also, the number of user households in ZIP Code 22204 represents more than one-third (36.72%) of the total user households (994) in all of Arlington County, Virginia.

$$\frac{18{,}731}{86{,}426} \times 100 = 21.67 \quad \text{OR} \quad \frac{365}{944} \times 100 = 36.72$$

B. Index - User households in ZIP Code 22204 have an average consumption rate per household (25.00) that is 1.39 times higher (index of 139) than the average consumption rate per household (17.98) for the average Arlington ZIP Code.

$$\frac{25.00}{17.98} \times 100 = 139$$

C. Consumption % Share - The number of bottles of soda consumed by user households in ZIP Code 22204 (9,125) represents more than half (51.06%) of all the bottles of soda consumed by user households in Arlington County (17,870).

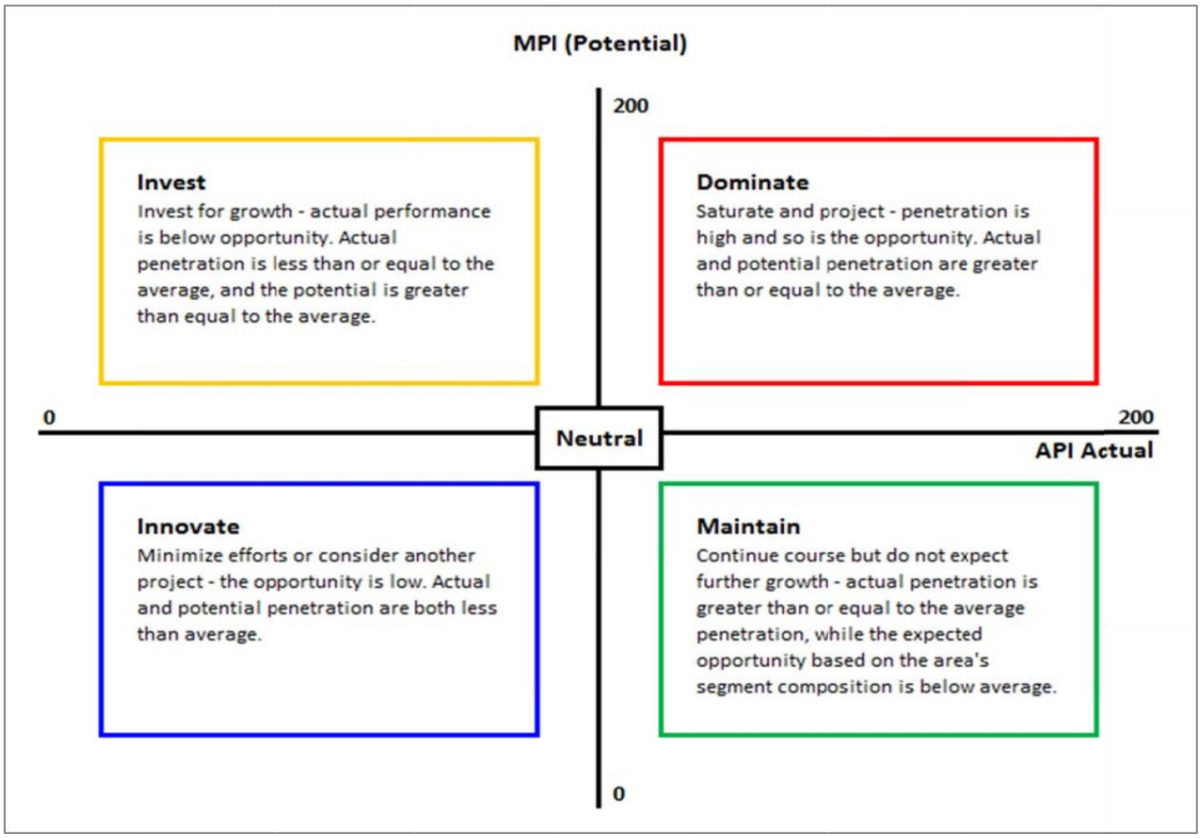
$$\frac{9,125}{17,870} \times 100 = 51.06$$

D. Actual Consumption Index (ACI) - The number of bottles of soda consumed by user households in ZIP Code 22204 is 136% higher (ACI of 236) than the average number of bottles consumed by the average ZIP Code in Arlington County.

$$\frac{51.06}{21.67} \times 100 = 236$$

Actual vs. Potential

Actual vs. Potential compares actual customer counts to market potential to help identify the amount of strategic opportunity by detail-level geographies in an analysis area. This analysis is based on the concept that the ratio of each geography's actual and market potential index can be plotted on a grid whose four quadrants each represent one of the following marketing strategies:



One of these strategies is recommended for each detail-level geography in the analysis area.

Note: When considering the action indicated by a particular geounit's strategy, it is advisable to also consider how well the geounit's percent potential aligns with its strategy. Some percent potential percentages suggest a different action. For example, a geounit that falls under the Dominate strategy but has a percent potential of 75% should be considered for additional investment.

Actual vs. Potential Formulas

This analysis uses the following formulas:

- Percent composition of each geounit in your comparison analysis area

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Percent potential of the behavioral characteristic into market potential count of estimated users for each geounit

$$\frac{\text{Actual Customers}}{\text{Estimated Customers}} \times 100 = \text{Percent Potential}$$

- Index of actual penetration for each geounit

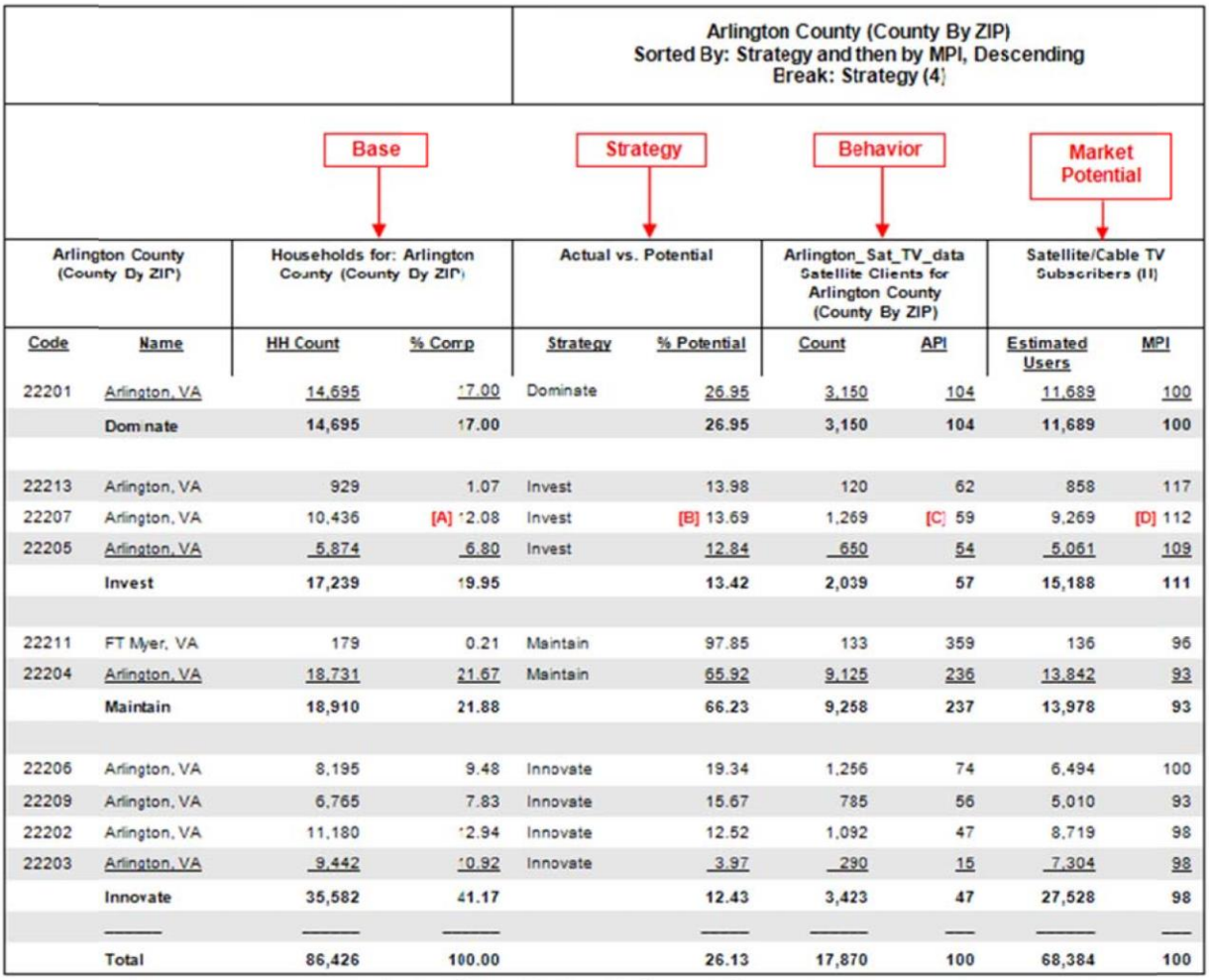
$$\frac{\text{Behavior Count}}{\text{Base Count}} \Big/ \frac{\text{Total Behavior Count}}{\text{Total Base Count}} \times 100 = \text{Index}$$

- Index of market potential for each geounit

$$\frac{\text{Estimated User Count}}{\text{Base Count}} \Big/ \frac{\text{Profile Total Behavior Count}}{\text{Profile Total Base Count}} \times 100 = \text{MPI}$$

Actual vs. Potential Report Sample

The following sample report illustrates marketing strategies for hypothetical satellite television clients (actual clients) in Arlington, VA, comparing these actual clients to households, by ZIP Code, who are estimated to subscribe to satellite television (potential clients):



Arlington County (County By ZIP)
Sorted By: Strategy and then by MPI, Descending
Break: Strategy (4)

Base | Strategy | Behavior | Market Potential

Arlington County (County By ZIP)		Households for: Arlington County (County By ZIP)		Actual vs. Potential		Arlington_Sat_TV_data Satellite Clients for Arlington County (County By ZIP)		Satellite/Cable TV Subscribers (II)	
Code	Name	HH Count	% Comp	Strategy	% Potential	Count	API	Estimated Users	MPI
22201	Arlington, VA	14,695	17.00	Dominate	26.95	3,150	104	11,689	100
	Dominate	**14,695**	**17.00**		**26.95**	**3,150**	**104**	**11,689**	**100**
22213	Arlington, VA	929	1.07	Invest	13.98	120	62	858	117
22207	Arlington, VA	10,436	[A] 12.08	Invest	[B] 13.69	1,269	[C] 59	9,269	[D] 112
22205	Arlington, VA	5,874	6.80	Invest	12.84	650	54	5,061	109
	Invest	**17,239**	**19.95**		**13.42**	**2,039**	**57**	**15,188**	**111**
22211	FT Myer, VA	179	0.21	Maintain	97.85	133	359	136	96
22204	Arlington, VA	18,731	21.67	Maintain	65.92	9,125	236	13,842	93
	Maintain	**18,910**	**21.88**		**66.23**	**9,258**	**237**	**13,978**	**93**
22206	Arlington, VA	8,195	9.48	Innovate	19.34	1,256	74	6,494	100
22209	Arlington, VA	6,765	7.83	Innovate	15.67	785	56	5,010	93
22202	Arlington, VA	11,180	12.94	Innovate	12.52	1,092	47	8,719	98
22203	Arlington, VA	9,442	10.92	Innovate	3.97	290	15	7,304	98
	Innovate	**35,582**	**41.17**		**12.43**	**3,423**	**47**	**27,528**	**98**
	Total	**86,426**	**100.00**		**26.13**	**17,870**	**100**	**68,384**	**100**

Actual vs. Potential sample report

A. Base % Comp - The number of households in ZIP Code 22207 (10,436) represents more than one-tenth (12.08%) of the total households (86,426) in all of Arlington, Virginia.

$$\frac{10,436}{86,426} \times 100 = 12.08$$

B. Behavior % Potential - The number of actual satellite TV subscribers in ZIP Code 22207 (1,269) captures more than one-tenth (13.69%) of the potential estimated user households (9,269) in ZIP Code 22207.

$$\frac{1,269}{9,269} \times 100 = 13.69$$

C. API - Households that subscribe to satellite TV are about half as concentrated in ZIP Code 22207 (index of 59) than they are in other Arlington, Virginia ZIP Codes.

$$\frac{1,269}{10,436} \times 100 = 12.16 \text{ (\% Pen from Actual Penetration)}$$

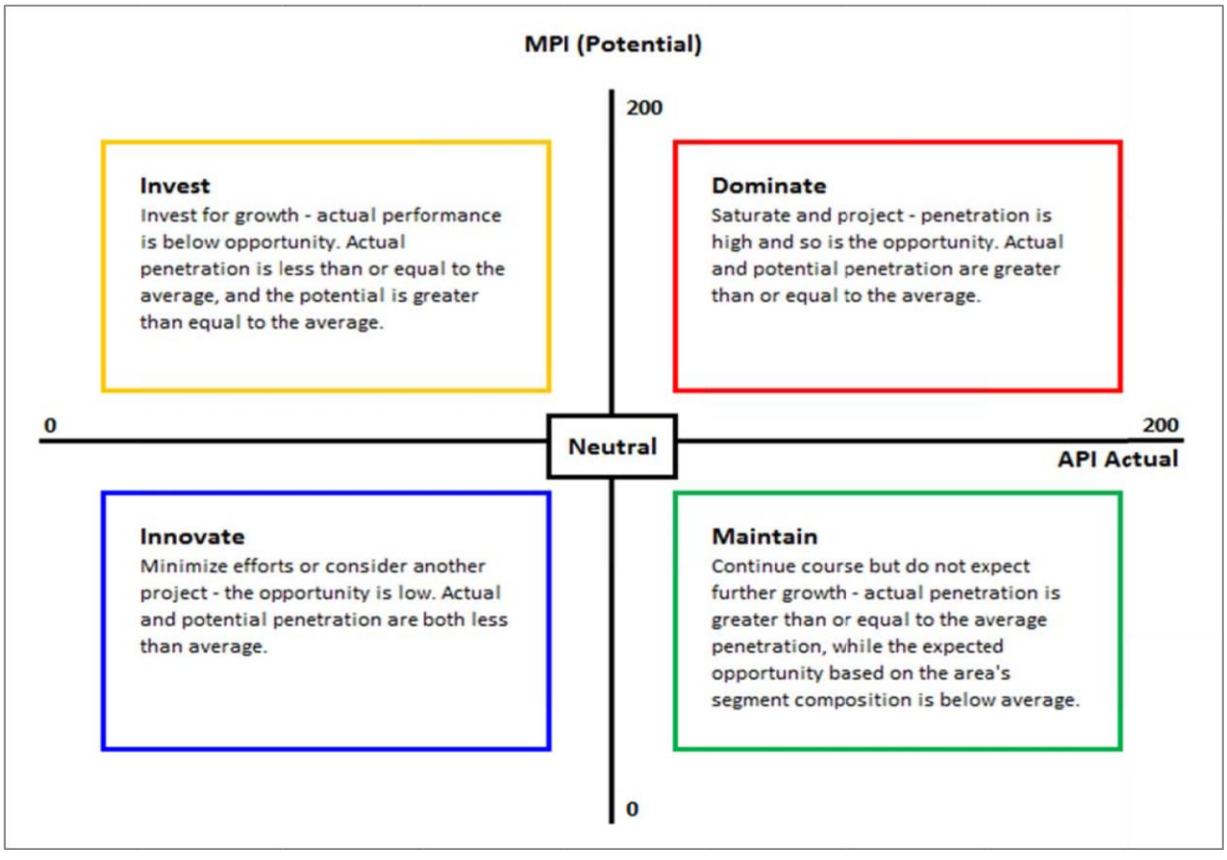
$$\text{AND} \quad \frac{17,870}{86,426} \times 100 = 20.68 \text{ (Total \% Pen)}$$

$$\text{THEREFORE} \quad \frac{12.16}{20.68} \times 100 = 59$$

D. MPI - Households in ZIP Code 22207 are 12% more likely (MPI of 112) to subscribe to satellite TV than households in other Arlington, Virginia ZIP Codes. (See "Market Potential Index".)

Actual vs. Potential Consumption

Actual vs. Potential Consumption compares actual customer consumption to market potential to help identify the amount of strategic opportunity by detail-level geographies in an analysis area. This analysis is based on the concept that the ratio of each geography's actual and market potential index can be plotted on a grid whose four quadrants each represent one of the following marketing strategies:



One of these strategies is recommended for each detail-level geography in the analysis area.

Note: When considering the action indicated by a particular geounit's strategy, it is advisable to also consider how well the geounit's percent potential aligns with its strategy. Some percent potential percentages suggest a different action. For example, a geounit that falls under the Dominate strategy but has a percent potential of 75% should be considered for additional investment.

Actual vs. Potential Consumption Formulas

This analysis uses the following formulas:

- Percent composition of each geounit in your comparison analysis area

$$\frac{\text{Geounit Count}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

- Percent potential of the behavioral characteristic into market potential count of estimated consumption for each geounit.

$$\frac{\text{Actual Customers}}{\text{Estimated Customers}} \times 100 = \text{Percent Potential}$$

- The percentage of market share that a particular geounit holds for a behavior's consumption in relation to all geounits in the specified analysis area or the percentage of potential market share that a particular geounit holds for a behavior's consumption in relation to all geounits in the specified analysis area

$$\frac{\text{Geounit's Consumption Value}}{\text{Total Consumption Value}} \times 100 = \text{Percent Share}$$

OR

$$\frac{\text{Geounit's Potential Consumption Value}}{\text{Total Potential Consumption Value}} \times 100 = \text{Percent Share}$$

- A geounit's actual customer consumption performance (percent share) based on the base household count's percent composition

$$\frac{\text{Geounit's \%Share}}{\text{Geounit's Base \% Composition}} \times 100 = \text{ACI}$$

- A geounit's MDI (from the Market Consumption report)

Actual vs. Potential Consumption Report Sample

The following sample report illustrates marketing strategies for niche-market hypothetical natural soft drink users in Arlington, VA, comparing these actual clients to households, by ZIP Code, who use soft drinks other than colas or those that are artificially flavored (potential clients):

Arlington County (County By ZIP)
Drink Other Reg. Carbntd Soft Drinks
Natural Soft Drink Product for Arlington County (County by ZIP)
Sorted By: Strategy
Break: Strategy (4)

Base → Strategy → Consumption Behavior → Potential Demand

Arlington County (County By ZIP)		Households for: Arlington County (County by ZIP)		Actual vs. Potential Consumption		Natural Soft Drink Product			Drink Other Reg. Carbntd Soft Drinks		
Code	Name	HH Count	% Comp	Strategy	% Potntl	Total Consumd	% Share	ACI	Total Demand	% Share	MDI
22211	Ft Myer, VA	179	0.21	Dominate	60.56	672	6.21	2,998	1,110	0.27	132
22202	Arlington, VA	11,180	12.94	Dominate	4.41	2,595	23.98	185	58,838	14.43	112
	Dominate	**11,359**	**13.14**		**5.45**	**3,267**	**30.19**	**230**	**59,948**	**14.70**	**113**
22204	Arlington, VA	18,731	[A] 21.67	Invest	[B] 2.11	2,027	[C] 18.73	[D] 80	96,089	[C] 23.57	[E] 109
22209	Arlington, VA	6,765	7.83	Invest	0.05	15	0.15	2	35,010	8.59	110
	Invest	**25,496**	**29.50**		**1.56**	**2,043**	**18.88**	**64**	**131,099**	**32.15**	**110**
22213	Arlington, VA	929	1.07	Maintain	19.58	663	6.13	570	3,386	0.83	78
22201	Arlington, VA	14,695	17.00	Maintain	4.68	3,150	28.11	171	67,301	16.51	98
22206	Arlington, VA	8,195	9.48	Maintain	3.27	1,265	11.61	122	38,365	9.41	100
	Maintain	**23,819**	**27.56**		**4.65**	**5,069**	**46.84**	**170**	**109,051**	**26.74**	**98**
22203	Arlington, VA	9,442	10.92	Innovate	0.66	290	2.68	25	44,202	10.84	100
22205	Arlington, VA	5,874	6.80	Innovate	0.65	152	1.40	21	23,384	5.73	85
22207	Arlington, VA	10,436	12.08	Innovate	0.00	0	0.00	0	40,072	9.83	82
	Innovate	**25,752**	**29.80**		**0.41**	**442**	**4.08**	**14**	**107,658**	**26.40**	**89**
	Total	**86,426**	**100.00**		**2.65**	**10,821**	**100.00**	**100**	**407,756**	**100.00**	**101**

Actual vs. Potential Consumption sample report

A. Base % Comp - The number of households in ZIP Code 22204 (18,731) represents more than one-fifth (21.67%) of the total households (86,426) in all of Arlington, Virginia.

$$\frac{18,731}{86,426} \times 100 = 21.67$$

B. Consumption % Potential -The number of natural soda consumed in ZIP Code 22204 (2,027) comprises a little more than one-fiftieth (2.11%) of the potential estimated consumption (96,089) in ZIP Code 22204.

$$\frac{2,027}{96,089} \times 100 = 2.11$$

C. Consumption % Share and Potential % Share -The number of bottles of soda consumed by user households in ZIP Code 22204 (2,027) represents close to onefifth (18.73%) of all the bottles consumed by user households in Arlington County (10,821). Also, the potential number of bottles of "other" soda expected to be consumed by user households in ZIP Code 22204 (96,089) represents close to onefourth (23.57%) of all the bottles potentially consumed by user households in Arlington County (407,756).

$$\frac{2,027}{10,821} \times 100 = 18.73 \quad \text{OR} \quad \frac{96,089}{407,756} \times 100 = 23.57$$

D. ACI -The number of bottles of soda consumed by user households in ZIP Code 22204 is 14% lower (ACI of 86) than the average number of bottles consumed by the average ZIP Code in Arlington County.

$$\frac{18.73}{21.67} \times 100 = 86$$

E. MDI -Households in ZIP Code 22204 have a consumption demand that is 9% higher (MDI of 109, from the Market Consumption report) when compared to all households in the Arlington, Virginia ZIP Codes. (See the "Market Demand Index" section.)

GLOSSARY OF TERMS

% Across

See % Pen, % Penetration.

Behavior (Count)

Distribution of counts of product buyers, users, or responders across all segments.

% Comp, % Composition

Measure indicating the percentage of a total that belongs to a subset of that total. Calculated by dividing the value for the subset (i.e., geounit or segment) by the value for the total (i.e., total analysis area or profile) and multiplying by 100. Also known as % Down.

Formula

$$\frac{\text{Geounit/Segment Code}}{\text{Total Count}} \times 100 = \text{Percent Composition}$$

% Pen, % Penetration

Measure indicating the percentage of a base (e.g., population) that engages in a certain behavior or characteristic. Calculated by dividing the count for the behavior by the count for the base and multiplying by 100. Also known as % Across.

Formula

$$\frac{\text{Behavior Count}}{\text{Base Count}} \times 100 = \text{Percent Penetration}$$

% Potential

A measure that indicates the percentage of client households based on the estimated consumption in the detail area. This is calculated by dividing the actual imported count for the behavior by the estimated user count and multiplying by 100.

Formula

$$\frac{\text{Actual Client Count}}{\text{Estimated Client Count}} \times 100 = \text{Percent Potential}$$

% Share

A measure that indicates the percentage of total demand that a particular segment or geography holds as a percent of total demand for all segments or geographies. **Formula**

$$\frac{\text{Segment/Geography Consumption Total Demand}}{\text{All Segments/Geographies Consumption Total Demand}} \times 100 = \text{Percent Share}$$

% Total

A measure that indicates the percentage that the selected segments (i.e., target) comprise for a given behavior in relation to all segments (i.e., total profile).

Formula

$$\frac{\text{Behavior Target Count}}{\text{Total Profile BehaviorCount}} \times 100 = \text{Percent Total}$$

Actual Consumption Index

See ACI.

Actual Penetration Index

See API.

Analysis Area

A geographic area in which one conducts business or plans to conduct business. These are typically partitioned by a component geography (e.g., Atlanta DMA by ZIP Code).

API

An indicator that depicts the extent to which you have penetrated a given area compared to the base area. The Actual Penetration Index is calculated by dividing the actual percent penetration for your area by the percent penetration for the base area and multiplying by 100.

Base (Count)

A variable or frequency whose values represent the “universe” against which another variable or frequency is compared. For example, the base for Population Age

18-24 is Population and the base for Household Income $100,000+ is Households. The base count is generally used to calculate penetration percentages and indices.

Consumption Profile

A frequency related to a product/service consumption rate for its associated behavior. For example, the behavioral profile, Imported Beer Last 6 Months, has the consumption profile, Glasses Per Week.

Count

Count retrieved from the database for a record, or a summary count calculated for a group of records.

Customer Households

Households that use a product. Customer counts typically originate from files that have been geocoded and segment appended, and then summarized to the geographic or segment level.

Demand Per Users

See Demand/Users.

Demand/Users

The average consumption rate of a product profile for user households in an entire analysis area.

Distribution

A set of counts typically within a geography (e.g., counts of households by segment within ZIP Code 22201).

Estimated Users

The number of households within a selected geography that are likely to either consume a particular product or service, or demonstrate a particular behavior.

Formula

For any given geography:

The sum of (Segment Households x Profile's % Pen Per Segment) = Estimates Users

$$E_{i=1}^{n} \left(\text{Segment Households}_{(i)} \times \text{Segment \% Pen}_{(i)} \right)$$

(where n = number of segments in the system.)

Frequency

A set of counts, typically by segment, for a specific behavior or base (for example, counts of households that read Business Week for all Claritas PRIZM segments).

Household

All persons who are current residents of a housing unit. (A housing unit is a house, apartment, mobile home, group of rooms, or single room occupied as separate living quarters.)

Index

Indicator of the extent to which a lifestyle, demographic characteristic, or propensity to use or buy a product is concentrated in a given analysis area or segment, compared to an average of 100. An index near 100 indicates an analysis area or segment that is no more or less likely to use your product than the United States average, while a high index indicates a high likelihood to use. In general, the higher the index is above 100, the better the analysis aera or segment is for your product. Also known as Index of Concentration.

Note: An unusually high or low index of concentration may indicate a small sample size. Check the counts for both the product and its base before proceeding, especially if you are working with a profile based on a local or regional area that does not include a fair representation of all segments.

Formula

$$\frac{\text{\% Penetration of Subset *}}{\text{\% Penetration of Total}} \times 100 = \text{Index}$$

OR

$$\frac{\text{\% Composition of Behavior}}{\text{\% Composition of Base}} \times 100 = \text{Index}$$

** (Note: the subset is typically a segment or a geounit.)*

Market Consumption Index

See MCI.

Market Demand Index

See MDI.

Market Potential Index

See MPI.

MCI

An index that indicates the consumption rate for a geounit compared to the overall rate for the associated behavioral profile.

Formula

$$\frac{\text{Geounit's Consumption Rate (Measure)}}{\text{Profile's Total Consumption Rate (Measure)}} \times 100 = \text{Market Consumption Index}$$

MDI

An index that indicates a geounit's total demand in relation to its total base households relative to the profile's total demand in relation to its total households.

Formula/Example

If analyzing ginger ale consumption by county in the Amarillo, Texas DMA, this index would be derived by first dividing the Total Demand for consumption in, for example, Cottle County, by the number of households, which yields the average consumption per base household:

$$\frac{\text{14,329 (Total glasses of ginger ale consumed by Cottle Co., last 6 months)}}{\text{778 (Total Cottle Co. households)}} = 18.42$$

The average number of glasses of ginger ale per household for the entire United States is then calculated. (The total values for this calculation can be obtained by generating a Segment Consumption report for the same profile being analyzed in the Market Consumption report.):

$$\frac{\text{757,955,854 (Total Consumption for entire profile)}}{\text{103,192,375 (Total base households)}} = 7.35$$

The average number of glasses consumed for Cottle County base households is divided by the average number for base households and then multiplied by 100 to derive the Market Demand Index:

$$\frac{18.42}{7.35} \times 100 = 251 \text{ (MDI)}$$

As such, households in Cottle County are consuming ginger ale at a rage that is 2.5 times the national average.

MPI

An index that indicates a geounit's market potential in relation to its total base households relative to the profiles's overall usage rate. This measure identifies the potential of a product in an analysis area if all segments behave according to their national norms, without taking into account such factors as product distribution, pricing, competition, climate, or brand awareness.

Essentially, this is the percent penetration of estimated users within a given geounit, compared to the total percent penetration observed in the comparison profile.

Formula

$$\frac{\text{Estimated Users Count}}{\text{Total Base Count}} \times 100 = \text{Geounit \% Pen}$$

$$\text{AND} \quad \frac{\text{Profile Users Count}}{\text{Total Base Count}} \times 100 = \text{Profile \% Pen}$$

$$\text{THEREFORE} \quad \frac{\text{Geounit's \% Pen}}{\text{Profile's \% Pen}} \times 100 = \text{Market Potential Index}$$

Percent Penetration

See % Pen, % Penetration.

Percent Composition

See % Comp, % Composition.

Percent Total

See % Total.

Profile

In a segmentation system, a collection of frequencies representing the distribution of a given behavior among all of the segments compared to the "base" distribution of the universe from which it was drawn. For example, the profile Own a Dog contains the count of dog owners in Segment 1, the count of dog owners in Segment 2, and so forth, compared to total adults in Segment 1, Segment 2, and all remaining segments in the segmentation system.

Rank Order Correlation

See ROC.

ROC

A measurement of the similarity between the index ordering of all segments across two profiles.

When two profiles are positively correlated, a direct relationship exists such that higher segment values on one profile are associated with higher segment values on the other profile. When profiles are perfectly matched in segment rank order, they have a perfect positive correlation, and an ROC coefficient of 1.0, which is the upper limit. When two profiles are completely opposite in segment rank order they are said to have a perfect negative correlation, and they have an ROC coefficient of -1.0, which is the lower limit. When two profiles have a coefficient of 0, they are said to be uncorrelated.

Note: The ROC calculation is almost identical to the standard Spearman rank order correlation, in which the strength and direction of a correlation is indicated by a value in the range 1.0 (perfect positive correlation) to -1.0 (perfect negative correlation), except that it is controlled for zero and missing values.

Segment

A unique element of a segmentation system, such as PRIZM® Segment 18, Kids & Cul-de-Sacs.

Note: Segments are sometimes referred to as clusters. Although the term "cluster" is usually used to refer to a segment only within PRIZM, the terms are used interchangeably.

Segmentation System

A system, such as PRIZM or Claritas P$YCLE, that can be used to segment an analysis area or a subset of consumers into manageable groups that can be pinpointed in a marketing campaign.

Target

A group of segments with similar demographics, lifestyles, and behavior toward a product or service. Segments within the target will typically be treated as one entity for marketing purposes.

Target Group

A set of targets considered to be strategically important for a marketing program. All segments must be assigned to a target and the group usually has at least one “low opportunity” target to collect all segments with low propensity to use the product/service and therefore will not be the focus of the campaign.

Users/100 HHs

A measure that indicates the percentage of adult/household behavior frequency that belongs to a subset of household base frequency. This is calculated by dividing the segment or analysis area count for the behavior by the segment or analysis area count for the base and multiplying by 100.

Formula

$$\frac{\text{Behavior Count}}{\text{Base Count}} \times 100 = \text{Users / 100 HHs}$$

Users Per 100 Households

See Users/100 HHs.

Variable

A data field in a database record that can be used to store counts, averages, or text strings (e.g., codes or names). For example, in the ZIP data set, the variable Households is used to store household counts for each ZIP Code in the database, the variable Median Household Income is used to store the median household income for each ZIP Code, and the variable Post Office Name is used to store each ZIP Code’s post office name.

Volumetric Profile

See Consumption between 9:00 a.m. and 8:00 p.m. (Monday through Friday, EST) at 800.866.6511.