

FIRST ANNUAL MARKETRAK
SURVEY, p. 17

COMMENTARY, p. 39; NUTS & BOLTS, p. 41

THE HEARING JOURNAL

The Journal of Hearing Care and Technology

May 1990 Vo. 43 No. 5



BTE Hearing Instruments
Still a Force in the Hearing Aid Market

PLUS . . .

**Real-Ear Measurement
Of Acoustically Tuned
Earmolds**

**Using Personal
Computers for
Business Planning**

**1990 Buyer's Guide
To State-of-the-Art
BTE Instruments**

"In a time of turbulence and change, it is more true than ever that knowledge is power," John F. Kennedy once observed. If that is so—and we doubt anyone would argue the point—then the hearing field as a whole might justifiably be feeling relatively powerless at this point in history.

True, one might have to look for a while to find actual turbulence in the industry, and if hearing aid sales are the criterion, one might argue convincingly that not much is changing either, given another flat first quarter in 1990. However, this *is* a time of turbulence and change—not so much within the industry as *in the market we strive to penetrate*.

As outlined in last month's cover story ["Marketing to the Mature"], most of the conventional wisdoms of addressing the over-50 and even over-65 populations no longer apply—if they ever did. Older consumers as we think we have understood them have changed and continue to change dramatically. And as they do, so do their perceptions of and responses to the industries that direct sales messages at them.

It is in this area that the hearing industry currently thirsts for knowledge, which in turn will spell the power that translates into greater success in tapping the market of millions of persons who can benefit from its products—those who at this point are staying away in droves.

The answer is a better understanding of what those consumers in, and coming into, the years of hearing aid candidacy think: of hearing aids, of their manufacturers and dispensers, of the relative value of good hearing itself. What has been their experience in recognizing hearing loss and in consulting a professional about it? Have they actually looked into buying hearing aids—and if so, why have they not bought?

In the early 1980s, the Hearing Industries Association looked into those and other questions in a comprehensive study of hearing aid owners and hearing-impaired persons who do not own hearing instruments. The HIA's findings surprised many by refuting a few of the industry's conventional wisdoms: that most hearing-impaired people refuse to admit the problem; and that price, along with "cosmetics," are *primary* obstacles to hearing aid use. The study's findings also enabled the HIA to set a course of family-physician education in the late '80s by quantifying the importance of a "family doctor's" recommendation of amplification.

For many years, that HIA study served as the foundation of the industry's knowledge of hearing-impaired consumers' behavior *vis à vis* hearing help. It also stood virtually alone in that regard—the hearing industry being one that, unlike many others, has failed to study and know its consumer virtually inside out in this era of sophisticated market research.

In the meantime, sales of hearing instruments flattened and remain flat. And although there are early indications that the HIA's physician-education efforts are beginning to bear fruit, much more needs to be done to increase the industry's knowledge of both the obstacles and the opportunities that confront it.

The good news is two-fold: First, the HIA has this month undertaken a research project designed to update its knowledge of hearing-impaired nonowners' percep-

tions, attitudes, and behavior relative to the purchase of hearing aids. With preliminary results anticipated this fall, the project is expected to further refine the industry's directions and marketing messages as we enter the '90s. Second, one industry supplier—Knowles Electronics, Inc.—has launched what will be a twice-yearly pulse-taking of the hearing aid market and will report its results to the industry at large on a regular basis.

The inaugural report on the Knowles-commissioned survey, entitled *MarkeTrak*, appears on page 17 of this issue. Combined with further analytic work by Knowles, the results offer an indispensable look at our market, along with such thought-provoking elements as "hearing aid satisfaction" and "intent to purchase" indices and a map showing relative hearing aid sales opportunity.

The most provocative element of *MarkeTrak*, however, is the so-called "PRIZM" segmentation of the U.S. population into clusters ranked according to the hearing industry's relative opportunity. Not a Knowles creation, but rather a standardized market-research dissection of our population, the PRIZM-cluster system is at once fascinating and a bit frightening: in the surgical precision with which it distinguishes among socioeconomic groups in the U.S., and in the ease with which it boils those groups down to jaunty (and potentially offensive) two- or three-word descriptions—from "Shotguns and Pickups" and "Norma Rae-ville" to "Furs and Station Wagons" and "Black Enterprise."

Some might take issue with the *MarkeTrak* findings. Others might be put off by the cold, calculating look at our society that PRIZM clustering represents. But the fact is that that is how marketers in many if not most consumer-product industries are looking at all of us today. And the hearing industry—albeit largely a human-service field too—cannot afford to continue to market its products and services on intuition grounded in the wisdoms of the last few decades. Instead, we must increasingly turn to fact-based measures of what our market is thinking and doing.

And to any who believe that the "seat of our pants" is all the knowledge we need, we offer the following closing thoughts . . .

That which has always been accepted by everyone, everywhere, is almost certain to be false.

—Paul Valery

It is far safer to know too little than too much. People will condemn the one, though they will resent being called upon to exert themselves to follow the other.

—Samuel Butler

And to paraphrase philosopher Valery's observation about psychology, "The purpose of research is to give us a completely different idea of the things we know best."

Bill Mahon

WILLIAM J. MAHON
Editor & Publisher

Introducing MarkeTrak: A Consumer Tracking Survey of the Hearing Instrument Market

By SERGEI KOCHKIN

The first annual consumer-oriented tracking survey of the hearing instruments market (MarkeTrak) is introduced, with its results compared to those of the 1984 HIA market survey and with opportunities for the hearing industry identified.

It has been six years since the pioneering Hearing Industries Association (HIA) survey of the United States hearing-instruments market was published. As a result of that research, the industry has implemented marketing efforts designed to remove obstacles to greater acceptance of hearing instruments in the USA.

As participants in the industry-wide efforts to enhance acceptance of hearing instruments, we believed it would be useful to reflect on what has been accomplished since 1984 as well as to offer a vehicle for continued dialogue and feedback on the industry's market-expansion efforts.

Today the HIA is developing plans to resurvey the U.S. hearing-impaired population. The "tracking survey" described here is not meant to preempt that important HIA effort. Rather, it is designed to serve as a longitudinal instrument for identifying trends, very much like the Consumer Confidence Survey published by the Conference

Sergei Kochkin, PhD is Director of Strategic Planning and Market Development for Knowles Electronics, Inc. His main responsibility includes "developing and market-testing programs to impartially grow the market for hearing instruments." He welcomes the suggestions of individuals or organizations with respect to this objective. Correspondence: Knowles Electronics, Inc., 1151 Maplewood Drive, Itasca, IL 60143.

Board. As we embark on the market-expansion challenges for the 1990s, we might want to view the information provided in this survey as a "baseline" measure, with respect to which future survey results could provide ongoing audits of the impact of our collective efforts.

Among the issues we plan to track periodically are: (1) physician screening for hearing loss, (2) hearing-instrument "stigmatization," (3) the size of the hearing-impaired population, (4) satisfaction with hearing instruments, (5) binaural ownership, (6) future hearing-instrument purchase intent, (7) third-party payments, (8) perceived source of distribution, (9) factors influencing new first-time hearing-instrument owners, and (10) hearing-instrument market penetration by life stage and by market segment.

Other data are available as by-products of this planned research. Due to the objectives of the survey, we do not plan to publish this related information, but we will make the data available to interested participants in the hearing health industry. (Interested parties should contact the author for a complete list of available data.)

SURVEY METHOD

The MarkeTrak survey is mailed to 20,000 members of the National Family Opinion (NFO) mail panel twice each year: on the first of April and the first of October. The NFO panel consists of households that are balanced

to the latest U.S. census information with respect to market size, age of household, size of household, and income within each of the nine census regions, as well as by family-versus-nonfamily households, state, and the nation's top 25 metropolitan statistical areas. NFO is a well-known and respected market research firm, which also conducted the 1984 HIA survey of the hearing-impaired population.

Our tracking survey also was "cluster-coded" using the PRIZM system.* PRIZM is a market-segmentation system based on the principle that people with similar backgrounds, means, and consumer behavior "cluster" in neighborhoods suited to their chosen lifestyles. Used extensively for 15 years by marketers throughout the U.S., the PRIZM system is a product of the Claritas Corporation, which classifies over 250,000 U.S. neighborhoods into one of 40 PRIZM Clusters by using neighborhood demographic data and available consumer-purchase data. It provides strong evidence that "birds of a feather flock together."

RESULTS AND DISCUSSION

Tables 1, 2, and 3 present the results of our MarkeTrak surveys for Spring and Fall 1989—each of which featured a 66% return rate. Future updates will continue to show previous history, because the main purpose of the survey is to show trends. We will now discuss each section of the survey in order of appearance.

*For more information on the PRIZM system contact Mr. John DeReu, Claritas Corporation, 8600 W. Bryn Mawr, Suite 226S, Chicago, Illinois 60631, (312) 693-4200.

Table 1. MarkeTrak: General Indices.

	Spring 1989	Fall 1989
Hearing-impaired population		
Percent households with hearing difficulty	24.1%	23.6%
Hearing difficulty per 1000 households	278	264
Number hearing impaired (millions)	25.5	24.3
Hearing-instrument "Stigma Index"	100.0	99.7
Percent physicians who screen for hearing loss	16.0%	18.3%
Satisfaction with hearing instruments		
% Very satisfied	23.7%	22.6%
% Satisfied	34.0%	36.9%
% Neutral	23.1%	21.8%
% Dissatisfied	13.7%	12.7%
% Very dissatisfied	5.5%	6.0%
SATISFACTION INDICES (TOTAL)*	100.0	100.1
Monaural	95.9	97.8
Binaural	106.1	104.7
Binaural ownership—total population	38.8%	35.6%
Purchases this period	50.3%	53.4%
Purchases this period—first-time owners	46.2%	43.7%
Hearing-instrument purchase indices		
Purchases within last 6 months	100.0	87.2
Purchase intent next 6 months	100.0	85.3
Third-party payment this period	20.0%	24.2%
Hearing-instrument distribution this period		
Hearing aid store/dispenser	30.2%	32.1%
Clinic	5.4%	6.7%
Hospital	1.4%	2.8%
Audiologist's office	42.9%	27.6%
Ear doctor's office	12.2%	13.7%
Family doctor's office	0.0%	2.6%
Veterans Administration	3.2%	1.1%
Mail-order	0.4%	4.9%
Other source	4.3%	8.5%

*"Stigma" and "Satisfaction" Indices' baseline equals 100, with future index scores to be compared to same.

Table 1b. Image of hearing-instrument wearer. On 5-point scale, 5 equals most positive perception; 1 equals least positive.

Attribute	Means			F Statistic
	Hearing Instrument Households (N=1, 128)	Non-Hearing Instrument Households (N=3, 675)	Non-impaired Households (N=15, 775)	
Competent	4.48	4.31	4.24	44.2*
Attractive	4.14	3.88	3.87	39.0**
Intelligent	4.47	4.25	4.19	57.5**
Youthful	3.13	2.95	2.94	12.4**
Not-Disabled	4.16	3.92	3.89	31.2**

Note: Results above are from combined Spring and Fall surveys.
 *All comparisons significantly different p<0.0001.
 **Hearing-instrument households significantly different from impaired/non-owners and non-impaired households p<0.0001.

Hearing-Impaired Population

The 1984 HIA survey estimated the number of hearing-impaired adults in the U.S. at 16.4 million. The National Center for Health Statistics (NCHS) estimated 21.8 million hearing-impaired persons for the year 1988 and more recently, the National Institute on Deafness and Other Communication Disorders estimated that there are 28 million Americans with some degree of hearing loss.

In this tracking survey, we captured information on up to four hearing-impaired people per household, including children, by asking the head of the household, "Which people in your household have a hearing difficulty in one or both ears without a hearing aid?"

As shown in Table 1, nearly one in four households reported having at least one individual with a hearing difficulty. We estimate the number of individuals with a hearing difficulty at between 24.3 and 25.5 million.

Image of Hearing-Instrument Wearer

In the 1984 market survey, little was surveyed concerning the possible "stigmatization" associated with the wearing of a hearing instrument. In the tracking survey, we presented respondents with five bipolar adjectives on a 1-to-5 scale (higher scores mean more positive attitudes) and asked them to rate the typical hearing-instrument wearer. Table 1b shows the mean scores for three groups: hearing-instrument households (N=1, 128), impaired/

non-hearing-instrument households (N=3, 675), and non-impaired households (N=15, 775). The data presented in Table 1b suggest that people who wear hearing instruments are perceived to be less competent, less attractive, less intelligent, less youthful, and more disabled—by both non-impaired households and impaired/non-hearing-instrument households.

Are the differences between hearing-instrument households and impaired/non-hearing-instrument households indicative of individuals who have accepted their hearing loss versus individuals who have not? As long as hearing-impaired individuals hold more negative attitudes toward hearing-instrument wearers (and thus toward themselves), it seems logical that

Table 2. MarkeTrak: New Hearing-instrument Owners.

	Spring 1989	Fall 1989
As a percent of total purchases this period	46.7%	56.1%
Average age	66.9	66.9
Average household income (000)	25.1	34.7
Factors influencing new first-time owners		
Hearing loss got worse	75.0%	74.4%
Hearing-loss literature	12.3%	7.8%
Better Hearing Institute (BHI)	2.9%	1.5%
Advertisement—Magazine	4.7%	3.9%
Advertisement—Newspaper	2.7%	2.8%
Advertisement—Television	4.4%	6.1%
Article in paper/magazine	4.5%	2.8%
Ear doctor	30.3%	28.2%
Family doctor	22.4%	15.9%
Audiologist	28.5%	27.0%
Hearing aid dispenser	16.6%	15.8%
Retirement	3.3%	3.7%
Spouse	29.5%	27.6%
Relative or children	31.7%	30.1%
Friends	13.6%	10.8%
Boss or coworker	2.4%	2.9%
Current industry celebrities (aided recall)	2.2%	4.8%

Table 3. MarkeTrak: Hearing-instrument Penetration.

	Spring 1989	Fall 1989
Hearing-instrument penetration (total)	25.7%	22.5%
By lifestage		
Roomates	18.4%	13.4%
Singles—Young	15.4%	16.9%
—Middle	19.9%	20.8%
—Older	45.1%	44.5%
Couples—Young	19.4%	14.0%
—Working Older	27.2%	21.5%
—Retired	38.7%	33.5%
Parents—Young	8.3%	12.4%
—Middle	12.5%	11.3%
—Older	21.1%	18.8%
By age group		
Children	13.2%	17.9%
18–34 yrs	7.7%	6.3%
35–44 yrs	7.7%	5.6%
45–54 yrs	10.8%	7.7%
55–64 yrs	22.4%	16.1%
65–74 yrs	33.1%	33.7%
75–84 yrs	45.5%	43.8%
85+ yrs	53.3%	57.0%
By household income		
Less than \$10K	29.1%	26.5%
\$10–\$19K	28.4%	25.5%
\$20–\$29K	28.7%	25.3%
\$30–\$39K	21.4%	20.5%
\$40–\$49K	21.9%	18.1%
\$50–\$59K	19.3%	18.0%
\$60K+	22.1%	18.3%
By educational level		
Elementary degree	31.3%	32.4%
High school (some)	29.1%	25.7%
High school degree	25.3%	19.7%
College (some)	21.0%	17.3%
College degree	20.7%	20.4%
College (post graduate)	24.9%	18.2%

there is a lower probability that they will actually adopt a hearing instrument. The psychosocial dynamics of hearing-instrument acceptance represent a fruitful area for further research.

As part of the tracking survey (Table 1), the author has developed a "hearing-instrument stigma index," which is an equally weighted composite of the five image adjectives. The *higher* the stigma-index score, the more *positive* the attitude toward hearing instrument wearers. The Spring 1989 index of 100 will serve as the baseline against which future scores will be compared (e.g., Fall 1989 index of 99.7).

Physician Screening

Based on the 1984 HIA survey, the hearing-instrument industry, in a concerted effort, is conducting programs to educate physicians on the importance of hearing screening and of their referral of hearing-impaired individuals for help. Among our survey respondents who received a physical exam between Quarter 4, 1988 and Quarter 1, 1989, 16% reported that their doctor screened them for hearing loss. In the most recent survey period, 18.3% reported their doctor screened for hearing loss during their last physical.

There is no comparable measure in the 1984 HIA market survey, and it certainly is too soon to tell if the increase in reported hearing screenings by physicians is indicative of an upward trend. But because HIA advertisements to physicians began appearing in family-practice publications in the first quarter of 1989, we can view these survey results as baseline measures of physician involvement in hearing loss (other physician measures appear later).

Satisfaction With Hearing Instruments

The majority of respondents (58%) report overall satisfaction with their hearing instruments, while nearly 20% say they are dissatisfied with them. Table 1 also shows a "consumer satisfaction index" with initial baseline of 100 (the higher the index, the higher the degree of consumer satisfaction). The higher satisfaction index for binaural owners provides support for the fitting of two hearing instruments versus one when appropriate. No comparable data is available from the 1984 HIA market survey. Clearly, we need to understand why a significant portion of the hearing-instrument owners are not satisfied with hearing instruments, for it has been estimated that each dissatisfied customer tells ten others about his or her experience.

Binaural Ownership

In the HIA market survey, 36.5% of hearing-instrument owners reported being binaural owners. Since 1984, binaural ownership has grown to 38.8%. Binaural hearing-instrument purchases in 1989, however, were in the 50%-to-53% range according to respondents to the MarkeTrak survey.

Hearing-Instrument Sales Growth

For measuring growth in sales of hearing instruments, we have created two indices: (1) purchases during the last six months and (2) intent to purchase during the next six months. The indices are based on the percentage of the hearing-impaired population either purchasing or intending to purchase, and on the most recent binaural-use rate. At this stage, these indices should be considered experimental. We hope, however, that they will emerge as relevant consumer-confidence indices specific to our industry.

Contrary to HIA unit-sales statistics, hearing-impaired consumers reported purchasing fewer hearing instruments for the periods Quarter 2, 1989 through Quarter 3, 1989 than they did for the previous two quarters (Quarter 4, 1988 through Quarter 1, 1989). In addition, the consumer future-purchase intent dropped significantly between the Spring and Fall surveys. This data correlates with declining general consumer confidence in the economy among lower-income individuals and individuals age 55 and over.

In addition, we suspect that the publication of the Financial Accounting Standards Board's (FASB's) proposed rulings on accounting for post-retirement medical benefits and the uncertain future of the Medicare Catastrophic Coverage concept have created a great deal of uncertainty among our target markets. There is a trend on the part of industry to cut post-retirement medical benefits. This is due to the projected negative impact resulting from moving toward accrual accounting of post-retirement medical benefits. As more of the burden of post-retirement medical coverage is shifted to retirees, there is the chance that hearing-instrument sales could be negatively impacted.

Third-Party Payments

In the 1984 HIA market survey, 27.3% of hearing-instrument owners reported having had some form of third-party-payment assistance. However, only 20% to 24% of recent hearing-instrument purchasers report third-party-payment help. Given these findings and the medical coverage issues facing our target markets, there is the possi-

bility that third-party payments for hearing instruments could drop even further. This is an area of concern.

Hearing-Instrument Distribution

In the most recent survey, the most frequently mentioned sources for hearing instruments were "dispenser" (32.1%) and "audiologist" (27.6%), compared to 47% and 23%, respectively, in 1984. The physician's influence has increased to 16.3% (ear/nose/throat and family-practice physicians), compared to 5% in 1984. In 1984, 9% of owners said they obtained their hearing instruments at a speech/hearing center. When we consider the total proportion of fittings performed within clinics, hospitals, and the Veterans Administration (10.6%), there appears to have been little change over the last 5 years. Mail-order sales, meanwhile, are probably unchanged from 1984: 2% in 1984 vs. 2.6% in 1989 (average of Spring and Fall surveys).

Recent Owners

First-time owners accounted for 10.5% (Spring, 1989) and 12.3% (Fall, 1989) of total hearing-instrument purchases in our two survey periods. This is an important measure, because it indicates whether new hearing-instrument consumers have been persuaded on the benefits of hearing instruments. And for this industry, new owners represent the principal possibility for growth.

Recent first-time owners, on average, are above retirement age (66.9 years), with household incomes between \$25,000 and \$34,000. Although the results are not directly comparable, owners of hearing instruments in the 1984 HIA market survey were 64.7 years of age, with an average household income of \$21,000. In future surveys we would hope to see the average age of new owners decline, because the younger impaired population represents the possibility of a longer period of hearing-instrument use.

Recent New-Owner Motivations

Individuals who purchased their first hearing instrument within the six months preceding the MarkeTrak survey were asked to check off factors that influenced their purchase. A list of potential influencing factors including the names of celebrities who have most recently promoted hearing help was presented to the respondents.

As shown in Table 2, the most important factors influencing first-time trial of hearing instruments—in rank order—are: (1) perceptions that hearing loss is worsening, (2) children and relatives, (3) ear doctors, (4) spouses, (5) audiologists, and (6) family physicians.

Among the media and public relations tools, hearing-loss literature received the most mentions. The celebrities mentioned most often are President Ronald Reagan, Eddie Albert, and Nanette Fabray.

Hearing-Instrument Penetration

In 1984, hearing-instrument market penetration among adult respondents to the HIA survey was 27.1%. If we consider the total adult hearing-impaired population, knowing that 12.2% of the hearing impaired would not admit to hearing loss and did not participate in the survey, then 1984 market penetration was probably closer to 23.7%. Table 3 shows 1989 hearing-instrument penetration in the overall U.S. population and by selected demographic characteristics. In the Spring 1989 survey, 25.7% of hearing-impaired adults reported owning hearing instruments. Six months later in the Fall 1989 survey, only 22.5% reported hearing-instrument ownership. The large difference in penetration rate between the two surveys is difficult to explain, considering the large sample sizes employed; and because two data points do not constitute a trend, we would reserve comment on this difference until we obtain the results of future surveys.

Hearing-instrument market penetration by life stage and age group varies dramatically, with most of the variation due to age and degree of hearing loss. Among hearing-impaired adults,

only 31% of hearing-instrument owners are below retirement age compared to 64% for non-owners. Hearing-instrument penetration is highest among the lower-income and lower-education households. These findings are consistent with the 1984 HIA market survey. Clearly, the industry challenge is to reposition hearing instruments to appeal to the younger, more affluent, and less severely impaired segments of the hearing-impaired population.

PRIZM SEGMENTATION

The PRIZM target-marketing system breaks the U.S. population down into 40 distinct neighborhood-types, from the richest ("Blue-Blood Estates") to the poorest ("Public Assistance"). In the appendix to this article is a brief description of each of the 40 PRIZM Clusters.* Note that the names and descriptions of the PRIZM Clusters were not created by this author. Rather, they are the actual terms used in the PRIZM system and in the many market-research databases that have incorporated it.

The PRIZM system has been interlocked with dozens of market-research firms' databases—Nielsen, Arbitron, MediaMark Research, NFO, Simmons (SMRB), and Market Facts—permitting the profiling of target markets, media selection, direct-mail optimization, and even distribution-site selection.

One of the key benefits of PRIZM is its ability to profile any file that con-

tains a consumer ZIP code or address—such as our survey respondents. In addition, it can highlight-map those areas (whether neighborhoods, Areas of Dominant Influence [ADI], or any other geography) that have a high potential for purchasing a given product. For illustrative purposes, the map in Figure 1, showing the relative incidence of hearing impairment by ADI, was prepared using PRIZM on the Claritas COMPASS system (Spring survey only). In Figure 1, hearing-impaired populations are grouped into five equal groups (quintiles) based on their representation relative to the average incidence of hearing impairment in the general population. Higher-than-expected representation is reflected by the dark shading (quintile 1), while lower-than-expected representation is found in quintiles 4 and 5.

Table 4 shows the relative potential for hearing-instrument sales by PRIZM Cluster. Five indices are provided in Table 4 (from left to right): (1) hearing-impairment index (percent of impaired population divided by expected representation in the population); (2) hearing-instrument ownership index (percent of hearing-instrument owners divided by expected percent in the population); (3) hearing-instrument penetration (percent of impaired owning a hearing-instrument); (4) size of impaired non-owner market (in thousands); and (5)

*Interested readers may want to consult *The Clustering of America* by Michael J. Weiss (Harper & Row, 1988) for a more comprehensive description of each PRIZM Cluster.

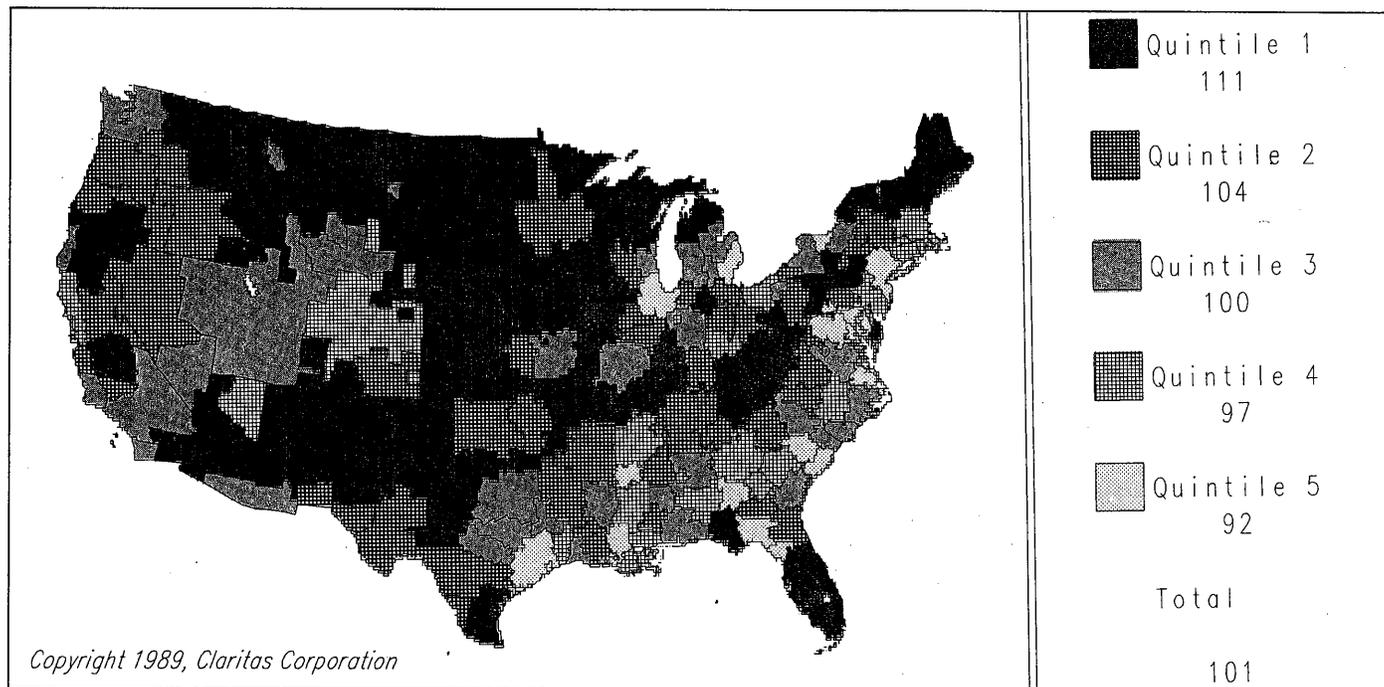


Figure 1. Relative incidence of hearing impairment by Area of Dominant Influence (ADI). Darker areas indicate higher-than-average incidence; lighter indicate lower-than-average representation. (Copyright 1989, Claritas Corporation.)

Table 4. Hearing-impaired population by PRIZM Cluster.

PRIZM Cluster	Hearing Impairment Index	Hearing Instrument				Non-owners	
		Ownership Index	Percent Own	Non-owners (000)	Opportunity Index	Median Income (000)	Median Age
1. Hard Scrabble (06)	134	127	22.9	410	137	14	57
2. Golden Ponds (33)	128	126	23.8	1094	128	24	61
3. Gray Power (39)	149	215	34.8	562	128	29	66
4. Shotguns & Pickups (19)	116	90	18.8	464	124	19	57
5. Grain Belt (35)	118	108	22.3	307	120	16	60
6. Back-Country Folk (10)	113	96	20.4	776	119	21	55
7. Norma Rae-Ville (13)	103	58	13.7	576	117	18	55
8. Money & Brains (08)	114	108	22.7	191	116	55	59
9. Coalburg & Corntown (29)	119	134	27.1	423	115	23	60
10. Sharecroppers (38)	115	114	24.1	872	115	18	56
11. New Beginnings (23)	118	134	27.3	777	114	31	53
12. AgriBusiness (34)	108	101	22.5	456	111	19	56
13. Mines and Mills (22)	110	110	24.1	618	110	21	55
14. Young Influentials (20)	107	100	22.5	492	109	43	51
15. Smalltown Downtown (18)	120	157	31.6	423	108	18	62
16. Single City Blues (26)	104	99	22.9	574	106	24	56
17. Middle America (16)	108	126	28.2	626	102	23	53
18. New Homesteaders (17)	99	91	22.0	863	102	29	51
19. Pools & Patios (07)	100	105	25.3	633	99	39	64
20. Rank & File (02)	102	118	28.0	242	97	32	58
21. Heavy Industry (04)	91	77	20.4	450	95	23	56
22. Levitown USA (27)	97	106	26.3	506	95	31	62
23. Blue-Chip Blues (30)	91	84	22.1	1211	94	34	53
24. Old Yankee Rows (36)	90	79	21.3	249	93	25	58
25. Tobacco Road (15)	84	60	17.2	236	92	14	61
26. Hispanic Mix (09)	101	142	33.9	345	88	25	52
27. Public Assistance (32)	81	58	17.3	514	88	9	55
28. Blue Collar Nursery (40)	91	111	29.5	392	85	30	53
29. Young Suburbia (24)	81	72	21.5	978	84	43	52
30. Towns & Gowns (12)	83	86	24.7	271	83	26	53
31. New Melting Pot (03)	83	86	24.9	115	82	42	63
32. God's Country (01)	83	89	25.9	442	81	42	53
33. Downtown Dixie Style (11)	78	70	21.6	543	81	19	60
34. Blueblood Estates (28)	89	118	32.0	187	80	68	64
35. Urban Gold Coast (21)	82	97	28.6	41	77	55	64
36. Furs & Station Wagons (05)	77	78	24.7	547	76	47	57
37. Emergent Minorities (14)	70	64	22.0	249	72	21	57
38. Bohemian Mix (37)	76	89	28.3	99	72	31	49
39. Two More Rungs (25)	57	59	25.1	65	56	55	52
40. Black Enterprise (31)	52	51	24.0	81	52	33	61

Note: Table based on the combined results from the Spring and Fall (1989) surveys.

hearing-instrument opportunity index (percent of non-owners divided by their expected representation in the U.S. population, where an index of 100 is average). The final two columns in Table 4 are median household income in thousands of dollars and median age of impaired non-owners of hearing instruments.

The PRIZM Clusters in Table 4 are listed by name, and ranked top-to-bottom by opportunity-index number (Column 5). The Top 10 clusters in terms of hearing-instrument industry opportunity are: 6—"Hard Scrabble," 33—"Golden Ponds," 39—"Gray Power," 19—"Shotguns & Pickups," 35—"Grain Belt," 10—"Back Country Folk," 13—"Norma Rae-Ville," 8—"Money & Brains," 29—"Coalburg & Corntown," and 38—"Share Croppers." In terms of population size, the largest segments of non-owners are represented (in millions) by: 30—"Blue Chip Blues" (1.2), 33—"Golden Ponds" (1.1), 24—"Young Suburbia" (.98), and 38—"Sharecroppers" (.89).

Many of the high-opportunity clusters can be found in rural areas where the median household income is below \$25,000. The high-opportunity segments tend to have a higher proportion of minorities and are significantly younger than traditional hearing-instrument-owner segments.

Table 5. Selected lifestyle correlates: Hearing-instrument owners vs. non-owners.

OWNERS	NON-OWNERS
CENSUS DEMOGRAPHY	
Northern European ancestry	Housing built 21-40 years ago
Household size 2 persons	Nondurable manufacturing
Households without children-married couples	Two-nine dwelling unit buildings
White persons	Households with no vehicle
Agriculture/forestry/fishing	Household size 5+ persons
Adults aged 55-64 years	Public administration
Household income: \$20,000-\$25,000	Children aged 14-17 years
Adults aged 65+ years	Transportation industries
Persons married	Service occupations
Rural/Town	Persons separated or divorced
Farming occupations	Adults aged 18-34 years
Construction industry	Single parents with children
Mobile homes and trailers	Females in labor force
Housing built in last five years	Black persons
Households with 3+ vehicles	Persons never married
ACTIVITIES/INTERESTS	
Belong to a veterans club	Belong to a book club
Belong to a fraternal order	Drink imported wine
Belong to a country club	Buy gospel/sacred music
Buy 1940s-1960s pop music	Play lottery weekly
Travel by car with camp equipment	Buy traditional/contemporary jazz music
Buy country music	Professional basketball fans
Home improvement by self	Drink imported beer
Do outdoor gardening	Drink Sangria/party wine
Rodeo fans	Buy contemporary pop vocal music
Horse racing (flats) fans	Bought 5+ 33 RPM & 45 RPM records last
Involved in public activities	Drink Scotch whiskey
Compact & standard pick-up truck	Smoke menthol cigarettes
Go freshwater fishing	Drink imported brandy/cognac
Go target shooting	Buy comedy records/tapes
Go power boating	Buy dance/rap music
Belong to a business club	Drink rum
	Buy soul/R&B/black music

Table 6. Selected media correlates: Hearing-instrument owners vs. non-owners.

OWNERS	NON-OWNERS
GENERAL MEDIA HABITS	
Health magazines	News: Radio audience
Subscribe to Cable TV	Top 20% all day TV viewing
Home service magazines	Radio 7 pm-Midnight M-F
Watch WTBS	Watch VH-1
Country: Radio audience	Top 20% Prime Time TV viewing
Spanish/Ethnic: Radio audience	TV 8 pm-11 pm M-F
Radio 10 am-3 pm M-F	Watch Showtime
Watch ESPN	TV 11 pm-11:30 pm M-F
Bottom 20% for outdoor	TV Pro Basketball
MOR/nostalgia: Radio audience	Contemporary/Soft Rock radio audience
TV horse racing	BET: Watch on Cable TV
CBN: Watch on cable TV	Prime Time TV sitcom
Early evening weekend TV news	TV 11:30 pm-2 am M-F
Fishing/hunting magazines	Jazz: Radio audience
CNN: Watch on cable TV	General-appeal magazines
Watch Learning Channel	Black: Radio audience
Watch WGN-TV	Urban/Contemporary radio audience
TV auto racing	Men's magazines
Adult contemporary radio audience	Women's fashion magazines
MAGAZINES	
Prevention	Soap Opera Digest
McCall's	Psychology Today
Reader's Digest	Mademoiselle
McCall's Working Mother	Seventeen
Family Handyman	Stereo Review
Colonial Homes	Sport
Country Living	Self
Rodale's Organic Garden	Vogue
Golf Digest	Conde Nast Limited
Field & Stream	People
Mother Earth News	Sports Illustrated
Better Homes & Gardens	GQ
Hearst Home Group	Conde Nast Mag/Women
Family Circle	Playboy
Creative Ideas	Jet
Popular Science	Glamour
National Geographic	Esquire
Sports Afield	Harper's Bazaar
Ladies Home Journal	Ebony
Town & Country	Essence

Comparisons between owners and non-owners with respect to census demography, activities, interests, and media habits are presented in Tables 5 and 6, for the interested reader. This type of information can be useful in effectively targeting the non-owner. For example, in a direct-mail campaign to potential hearing-impaired non-owners, it would make sense to ask the direct-mail firm to provide names and addresses of households from the clusters with the top-ten opportunity indices. Similarly, advertisements can be PRIZM-targeted via Sunday newspaper inserts in many metropolitan cities. In another industry, the same technique was employed and resulted in a 523% increase in response to direct-mail solicitation over that of traditional shotgun-approach mailings.

In reviewing the 40 PRIZM Clusters in Table 4 and the opportunities available, it would seem that the industry must employ multiple strategies to appeal to its diverse target-market segments. For example, would Richard Dysart, Arnold Palmer, and Bob Hope as spokespeople for hearing health/instruments be as effective among persons in the Hard Scrabble, Shotguns & Pick-ups, and Sharecroppers clusters as they would among Golden Ponds, Gray Power, and Blue Blood Estates?

Recall that hearing-instrument market penetration is under-represented among blue-collar workers, middle- to younger-age individuals, minorities, and farming and industrial employees. Thus, while we should continue to use messages from celebrities who would appeal to middle- and upper-class population segments, we also should consider enlisting *atypical* celebrity spokespeople for the hearing-instrument industry. These could be race car drivers, boxers, cowboys, bowlers, country-western singers, blues singers, jazz musicians, fly fishermen, hard hats, and pickup-truck owners. As one hearing specialist stated, "This industry needs a Marlboro man."

Another potential use of geodemographical data and mapping databases is to overlay such data on the current retailer distribution system in the U.S. This can lead to an understanding of the positioning of each distribution outlet. Some areas with a higher probability of hearing impairment might not be covered optimally; other areas might have more retailers than the opportunity there warrants. Systems like the PRIZM system actually permit the plotting of retail outlets in a local area, at the same time depicting the product opportunities available to the retail outlet.

With respect to media or public-relations targeting, one could, for example, obtain from PRIZM a media report for the top ten segments weighted by size or opportunity index. Such profiles can be obtained for areas as small as a given neighborhood.

With the diversity of hearing-impaired non-owners in mind, the industry needs a clearer vision of whom we are trying to reach and what needs consumers are trying to meet. In a recent local newspaper, we saw an advertisement that read merely, "Hearing aids, Hearing aid repairs, Batteries," followed by a name, address, and phone number. This advertisement could have been modified to more effectively reach our hearing-impaired markets with targeted marketing communication.

CONCLUSION

The 1984 HIA market survey concluded that there were significant opportunities, as well as significant obstacles, with respect to further consumer adoption of hearing instruments. Based on the shorter survey reported here, which in no way is meant to replicate the 1984 survey, one probably can reach the same conclusions. The opportunity is significant: The number of hearing-impaired non-owners is approximately 19 million. Assume that one-quarter of these (those with the greatest degree of hearing loss) can be persuaded over the next four years to purchase and use hearing instruments

at the prevailing binaural rate. Assume also, due to their younger age, the possibilities of a longer hearing-instrument-purchase "career." With these assumptions, it can be seen that at the retail level there could be the opportunity of an additional billion dollars per-year awaiting this industry.

The challenges to the industry, however, are not insignificant. These are: (1) to continue to find ways to educate physicians and consumers on hearing loss and the benefits of hearing instruments; (2) to reposition hearing instruments to appeal to younger, more affluent, and less severely impaired market segments; (3) to recruit hearing-loss spokespersons who would appeal to persons other than those in "traditional" hearing-instrument segments such as "Blue Blood Estates" and "Gray Power"; (4) to further promote the benefits of binaural hearing instruments; (5) to continue to work to remove the social stigma of hearing loss; (6) to improve consumer satisfaction with hearing instruments; (7) to find ways to make hearing instruments accessible to rural and low-income individuals. The above list of challenges is, obviously, not all inclusive.

We hope that the ongoing MarkeTrak survey will provide the vehicle for measuring our industry's progress in market expansion and contribute to the ongoing dialogue on the obstacles, challenges, and opportunities facing our industry. □

BHI Seeks Human Interest Story Ideas

In response to the MarkeTrak results, specifically the outlining of the 40 PRIZM clusters, the Better Hearing Institute (BHI) aims to develop human interest stories targeted to these segments of the United States. With the help of the readers of *The Hearing Journal*, the BHI would like you to identify atypical personalities who could serve as spokespeople for the hearing health industry. We are looking for individuals whose lives have been changed by receiving help for their hearing loss, someone who will appeal to one or more of the PRIZM segments.

While traditionally the Institute uses nationally known celebrities, in this instance BHI is more interested in the local celebrity, leader, or simply a role model for a series of human interest stories to be submitted to up to 15,000 newspapers across the United States. BHI is interested in diverse people across all walks of life. These might include a boxer, blues singer, cowboy, pilot, commodity broker, jazz musician, construction worker, air traffic controller, psychiatrist, PBA bowler, teacher, or fireman, etc.

If you know of someone who has a quality of life story to tell—appealing to one or more PRIZM segments—please write to the Institute. Please tell us about this individual and send name, address and phone number for both you and the personality you are nominating. Send information to: Better Hearing Institute, "Human Interest Story," 5021B Backlick Road, Annandale, VA 22003.

—Sergei Kochkin

APPENDIX

PRIZM Cluster Descriptions

01-GOD'S COUNTRY: Cluster 1 contains the highest socioeconomic, white-collar neighborhoods primarily located outside standard metropolitan statistical areas. These are well-educated frontier types, who have opted to live away from the big metros in some of our most beautiful mountain and coastal areas. Cluster 1s populations are highly mobile, and are among the nation's fastest growing neighborhoods. They are outstanding consumers of both products and media.

02-RANK & FILE: Cluster 2 is a blue-collar version of Cluster 27, five rungs down the socioeconomic scale. This new cluster absorbed the original Cluster 2s, and gathered many other traditional, blue-collar family neighborhoods whose children have grown and departed. Cluster 2s show high concentrations of protective service and blue-collar workers living in aged duplex rows and multi-unit "railroad" flats, and lead the nation in durable manufacturing.

03-NEW MELTING POT: The original European stock of many old urban neighborhoods has given way to new immigrant populations, often with Hispanic, Asian, and Middle-Eastern origins. These trends have formed a "new" melting pot, which includes many "old" melting-pot areas along with new immigrant neighborhoods. As a result, Cluster 3s are now situated in the major ports of entry on both east and west coasts.

04-HEAVY INDUSTRY: Cluster 4 is much like Cluster 2, only nine rungs down on the socioeconomic scale, and hard hit by unemployment. Cluster 4s are chiefly concentrated in the older industrial markets of the northeastern U.S. quadrant and are very Catholic, with a high incidence of Hispanic persons. These neighborhoods have rapidly aged and deteriorated during the past decade. There are fewer children, and many broken homes.

05-FURS & STATION WAGONS: Third in socioeconomic rank, Cluster 5 is typified by "new money" living in expensive new neighborhoods in the green-belt suburbs of the nation's major metros, coast to coast. These are well-educated, mobile professionals and managers with the nation's highest incidence of teenage children. They are big producers and big spenders.

06-HARD SCRABBLE: The term "hard scrabble" is an old phrase meaning to scratch a hard living from hard soil. Cluster 6 represents our poorest rural areas, from Appalachia to the Ozarks, Mexican-border country, and Dakota Bad Lands. With very few blacks, Cluster 6 leads the nation in native Americans (including many Indian reservations), and shows a high index for both Mexican and English ancestries.

07-POOLS & PATIOS: Cluster 7 once resembled Cluster 5, being upscale green-belt suburbs in a late child-rearing mode. But today, most of these children have grown and departed, leaving aging couples in empty nests too costly for young homemakers. Good educations, high white-collar employment levels, and double incomes assure "the good life" in Cluster 7.

08-MONEY & BRAINS: Cluster 8 enjoys the nation's second highest socioeconomic rank. These neighborhoods are typified by swank, shipshape townhouses, apartments, and condos, with relatively few children. Many Cluster 8s contain private universities, and a mix of upscale singles. They are sophisticated consumers of adult luxuries: apparel, restaurants, travel, and the like.

09-HISPANIC MIX: Cluster 9 represents the nation's Hispanic "barrios," and is therefore chiefly concentrated in the major markets of the mid-Atlantic and West. Cluster 9s feature dense, row-house neighborhoods with large families of small children, many headed by solo parents. They rank second in percent-foreign-born, first in short-term immigration, and are essentially bilingual neighborhoods.

10-BACK-COUNTRY FOLKS: Cluster 10 abounds in remote rural towns, geo-centered in Ozark and Appalachian uplands. It is predominantly white, and leads the nation in concentration of persons of English ancestry, some of whom are the descendants of original colonial settlers and still speak in Elizabethan dialect.

11-DOWNTOWN DIXIE-STYLE: Cluster 11 has a southern geo-center, with high concentrations in three dozen southern metros. These middle-density urban areas contain both white and black enclaves, the latter replete with black churches and colleges (and average college enrollments). On the whole, Cluster 11 is half black, with an average incidence for Hispanics (these mostly Puerto Rican).

12-TOWNS AND GOWNS: Cluster 12 contains hundreds of mid-scale college and university towns in nonmetropolitan America. The population ratio is three-quarters locals ("Towns") to one-quarter students ("Gowns"), giving Cluster 12 its name and unique profile. It shows extreme concentrations of age-18-to-24 singles and students in group quarters, very high educa-

tional, professional, and technical levels in contrast with modest incomes & home values, and a taste for prestige products.

13-NORMA RAE-VILLE: Cluster 13s are concentrated in the South, with their geo-center in the Appalachian & Piedmont regions. They include hundreds of industrial suburbs and mill towns, a great many in textiles, and other light industries. Cluster 13s are country folk with minimal educations.

14-EMERGENT MINORITIES: Cluster 14 is almost 70% black, the remainder largely composed of Hispanic and other foreign-born minorities. Cluster 14 shows above-average concentrations for children of all ages, almost half of them in homes with single parents. It also shows below-average levels of education and white-collar employment. The struggle for emergence from poverty is still evident in Cluster 14.

15-TOBACCO ROADS: Cluster 15 is found throughout the South from Virginia to Texas. However, its greatest concentrations are seen in the river basins and coastal, scrub-pine flat lands of the Carolinas, Georgia, and the Gulf States. Cluster 15 is half black and a fifth English stock. There is some light industry, but poor, unskilled labor predominates. Still dependent upon agriculture, Cluster 15 ranks last in white-collar occupations.

16-MIDDLE AMERICA: Cluster 16 is well-named on several counts. It is composed of mid-sized, middle-class satellite suburbs and towns. It is at center on the socioeconomic scale, and is close to the U.S. average on most measures of age, ethnicity, household composition, and life cycle. It is also centered in the Great Lakes industrial region, near the population geo-center of the U.S.

17-NEW HOMESTEADERS: Cluster 17 is much like Cluster 1 in its mobility, housing, and family characteristics. The big difference is that Cluster 17 is nine rungs down on the socioeconomic scale, with all measures of education and affluence being significantly lower. Cluster 17 shows peak concentrations of military personnel, and picks up some Hispanics and Native Americans as a result of its strong Western skew. It is one of our largest and fastest-growing clusters.

18-SMALL TOWN DOWNTOWN: A hundred-odd years ago our nation was laced with railroads and booming with heavy industry. All along these tracks, factory towns sprang up to be filled with laborers, in working-class row-house neighborhoods. Many can be seen today in Cluster 18, mixed with the aging, downtown portions of other minor cities and towns.

19-SHOTGUNS & PICKUPS: Cluster 19 aggregates hundreds of small, outlying townships and crossroads villages that serve the nation's breadbasket and other rural areas. Cluster 19 has a more easterly distribution and shows peak indices for large families with school-age children, headed by blue-collar craftsmen, operatives, and transport workers with high school educations. Cluster 19s are dedicated outdoorspeople.

20-YOUNG INFLUENTIALS: Cluster 20s could be imagined as tomorrow's Cluster 8s. These are young, metropolitan sophisticates, with exceptional high-tech, white-collar employment levels. Double incomes afford high spending, and lifestyles are open, with singles, childless couples, and unrelated adults predominating in expensive, one- and two-person homes, apartments, and condos. Cluster 20 is skewed to the "new West."

21-URBAN GOLD COAST: Cluster 21 is altogether unique. It is the most densely populated per-square-mile, with the highest concentration of one-person households in multi-unit, high-rise buildings, and the lowest incidence of auto ownership. Other mosts: most employed, most white-collar, most professional, most rented, most childless, and most New York. Cluster 21 is the top in Urbana, a fit address for the 21 Club.

22-MINES & MILLS: Industry, both light and heavy, is king in Cluster 22. Cluster 22 gathers hundreds of mining and mill towns scattered throughout Appalachia, from New England to the Pennsylvania/Ohio industrial complex, and points south. It ranks first in total manufacturing and blue-collar occupations. It has very few black or Hispanic minorities.

23-NEW BEGINNINGS: This neighborhood type finds its roots in Cluster 23 of an old PRIZM Model: "Bunker's Neighbors." The new residents are now largely techs and lower-echelon white collars. The predominant age is 18-34, and the mode is pre-child. They are highly mobile, employed, divorced, and rented. Many 23s have provided homes for a steady flow of young migrants to the South and West in search of new job opportunities and lifestyles.

24-YOUNG SUBURBIA: Cluster 24 is one of our largest clusters, found coast to coast in most major markets. It runs to large, young families, and ranks second in incidence of married couples with children. Cluster 24s are distinguished by their relative affluence and high white-collar employment levels. As a result, they are strong consumers of most family products.

25-TWO MORE RUNGS: Just behind Cluster 7 in affluence, Cluster 25 has a high concentration of foreign-born European ethnics, and is somewhat older, with even fewer children. It is also more dense, with a higher incidence of renters in multiple-unit, high-rise housing, with a northeastern geo-center. Cluster 25s show a high index for professionals, and more conservative spending patterns.

26-SINGLE CITY BLUES: This cluster represents the nation's dense, urban downscale singles areas, found in most major markets, including those of the new West. Many are located near city colleges, and the cluster displays a bimodal education profile. With very few children, and its off mixture of races, classes, transients, and night trades, Cluster 26 could be aptly described as "poor man's Bohemia."

27-LEVITTOWN, U.S.A.: The post-WWII baby boom caused an explosion of tract housing in the late '40s and '50s-brand new suburbs for young white-collar and well-paid blue-collar families. As with Cluster 7, these babies are now largely grown and gone. Aging couples remain in comfortable, middle-class, suburban homes. Employment levels are still high, including double incomes, and living is comfortable in Cluster 27.

28-BLUE BLOOD ESTATES: America's wealthiest socioeconomic neighborhoods, populated by super-upper established managers, professionals, and heirs to "old money," accustomed to privilege, and living in luxurious surroundings. One in ten millionaires can be found in Cluster 28, and there is a considerable drop from these heights to the next level of affluence.

29-COALBURG & CORNTOWN: Cluster 29 fits a popular image of the Midwest, being concentrated in small peaceful cities surrounded by rich farmland, and populated by solid, blue-collar citizens raising sturdy, Tom-Sawyerish children in decent, front-porch houses.

30-BLUE-CHIP BLUES: Cluster 30, ranked third in married couples with children, is similar to Cluster 24 on most dimensions save social rank, its predominant high-school educations and blue-collar occupations being reflected in fewer high-end incomes and lower home values. However, high employment and double incomes yield similar discretionary spending patterns, and make Cluster 30 an outstanding market.

31-BLACK ENTERPRISE: Cluster 31 is 60% black, with median black household incomes well above average and consumption behavior to match. A few downscale pockets can be found, however, the majority of blacks in Cluster 31 are educated, employed, family-oriented, and solidly set in upper middle class.

32-PUBLIC ASSISTANCE: With 70% of its households black, Cluster 32 represents the nation's poorest neighborhoods, with twice its unemployment level, and five times its overall share of public assistance incomes. Cluster 32s have been urban-renewal targets for three decades, and show large, solo-parent families in rented, public high-rise buildings interspersed with aging tenement rows.

33-GOLDEN PONDS: Cluster 33 includes hundreds of small, rustic towns and villages in coastal resort, mountain, lake, and valley areas, where seniors in cottages choose to retire among country neighbors. While neither as affluent nor as elderly as Cluster 39, Cluster 33 ranks high on all measures of independent retirement.

34-AGRI-BUSINESS: Cluster 34 is geo-centered in the great plains and mountain states. It has an above-average Spanish language index. These are, in good part, prosperous ranching, farming, lumbering, and mining areas. However, the picture is marred by rural poverty, and a continuing youth exodus, from the Dakotas to Colorado.

35-GRAIN BELT: Cluster 35 is a close match to Cluster 34 on most demographic measures. However, these areas show a far higher concentration of working farm owners, and less affluent tenant farmers. Tightly geo-centered in the great plains and mountain states, Cluster 35s are also the nation's most stable and sparsely populated rural communities, with the highest incidence of farmers in single-family homes.

36-OLD YANKEE ROWS: Cluster 36 is well-matched to Cluster 3 in age, housing mix, family composition, and income. However, Cluster 36 is dominated by high-school-educated Catholics of European origin, and has comparatively few minorities. These are well-paid, mixed blue/white-collar areas, firmly geo-centered in the older industrial cities of the northeast. In Cluster 36, girls often go to work after high school, and often live at home until married.

37-BOHEMIAN MIX: It's only a \$5 cab ride from "the East side" to "the Village." The drop in income, and shift in perspective, is far more dramatic. Cluster 37s are America's Bohemia, a largely integrated, singles-dominated, high-rise hodge-podge of universities, hippies, actors, writers, artists, divorcees, widows, and races. An interesting phenomenon: Cluster 37s are chiefly found in major harbor cities.

38-SHARE CROPPERS: Cluster 38 is represented in 48 states, but is deeply rooted in the heart of the South. Traditionally these areas were devoted to such industries as tenant farming, chicken breeding, pulpwood and paper milling, and the like. But sunbelt migration and a ready labor pool have continued to attract light industry and population growth. A high index for blacks and "Cajun" French reflects the cluster's Mississippi Valley geo-center.

39-GRAY POWER: Cluster 39 represents over a million upscale senior citizens who have chosen to pull up their roots and retire among their peers. Primarily concentrated in sunbelt communities of the South Atlantic & Pacific regions, Cluster 39s are the nation's most affluent elderly, retired, and widowed neighborhoods, with the highest concentration of childless married couples, living in mixed multi-units, condos, and mobile homes on nonsalaried incomes.

40-BLUE-COLLAR NURSERY: Cluster 40 leads the nation in craftsmen, the elite of the blue-collar world. It is also number 1 in married couples with children and 3-plus-member households. Cluster 40s are low-density satellite towns and suburbs of smaller industrial cities. They are very well paid and very stable. Minority presence is negligible.