

GEODEMOGRAPHIC SEGMENTATION: NEW METHODS, NEW RESULTS

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Background

Geodemographic segmentation or clustering in the marketing context involves classifying small geographic areas – for example, block groups, census tracts, or neighborhoods – into relatively homogeneous market segments. The exercise produces an “a priori” set of segments that are presumed to correlate well with individual preferences and consumer behaviors, though direct measures of those preferences and behaviors are not used explicitly in the classification process. While the goal of geodemographic clustering is to classify “places” – communities and neighborhoods – not the people who inhabit those places, and despite the obvious issues of ecological fallacy, clustering has generally proved a useful tool in the marketing context.

First generation (c. 1975-1985) cluster systems created by demographic data firms invariably spoke of “birds of a feather flocking together,” that people with similar characteristics, preferences, and consumer behaviors tend to live in like neighborhoods. However, the times – and American society over the past 25 years – have changed. The extent of diversity – whether socio-economic, ethnic, cultural, lifestyle, life-stage, or other dimension – both within and across America’s neighborhoods is such that a “useful” geodemographic cluster system must necessarily take into account unprecedented levels of “within neighborhood” differences as well as increased diversity

overall. This paper presents a methodological strategy for clustering in the marketing context that attempts to take that increasing diversity into account.

Fortunately, while diversity progressed, new tools and techniques have evolved to the benefit of geodemography. Advances in spatial analysis, geo-statistical software, and modeling techniques – along with the raw ability of computers to implement new clustering strategies – open the doors to spatial analytic worlds undreamed of only a few years ago. Geography – the science of location, spatial systems and networks, proximity, settlement context, and combinations thereof – is at the heart of geo-demographic clustering. This paper describes the results of a team effort of demographers and geographers at MapInfo Corporation* to produce PSYTE US Advantage, a segmentation product used for consumer market analysis.

Literature Review

Within the general literature of statistical clustering techniques in a market research and geographic context, reviewed well beginning perhaps with Punj and Stewart (1983) and extending at a minimum to Openshaw and Turton (1996), clustering has challenged researchers in numerous ways. More recently, cluster techniques in the sciences of genetics, artificial intelligence and digital signal processing have made long strides in the ability of analysts to classify complex data into their principal structures.

One set of challenges revolves around two approaches to clustering, hierarchical and non-hierarchical. The former operates in two modes: agglomeration and disaggregation. Agglomeration basically takes N observations and iteratively arrives at a

* The authors would like to thank and acknowledge the contributions of the other members of the PSYTE US Advantage development team: Anthony C. Lea, Danny Heuman, Chris Michels, and Fraser Baldwin. Peter Dixon provided invaluable support and vision with regard to the software infrastructure.

single, final cluster by combining pairs of previous clusters. Dissaggregation, on the other hand, starts with one cluster and iteratively divides clusters until N observations remain. Hierarchical approaches are generally computationally intense and restricted in use with small data sets. Moreover, this pairwise approach also results in less variance being captured when compared with the more holistic non-hierarchical techniques. In contrast, non-hierarchical approaches work better with large datasets and generally capture more of the variance in a dataset (Lea, 2003), a characteristic that suggests they are well suited to geodemographic clustering.

First generation classification techniques applied to census data relied heavily on non-hierarchical approaches, with the *K-means* type classifications being the most widely used. Basically, this approach would start with N random starting positions in M dimensional space. The process would iterate until all observations in the data space were optimally assigned to one of the N starting positions, which in turn were allowed to move in order to achieve optimality. There are two significant drawbacks to this technique: a) the random starting positions can have a dramatic effect on the final outcome, especially with a small number of clusters, and b) the measures of similarity between the starting positions (the centroids) and the observations are not necessarily sensitive to the variance within the data space. (Lea, 2003)

A “Second Generation” set of tools emerged in the 1990’s when research in Artificial Intelligence and Neural Networks relating to pattern recognition and classification gained prominence (Schürmann, 1996). Some applications of these methods involved “machine vision” such as that used in the context of scanning vehicles at border crossings (Shenk, 2003). While the datasets involved were not necessarily large,

these new algorithms proved to be quite adept at separating the data objects from the “noise.” Moreover, for pattern recognition analysts, especially those in a security context, “time was of the essence,” as most requirements demanded real-time results.

Fortunately, since geodemography rarely has a real-time demand, the application of Neural Networks could be applied with longer processing times in exchange for the ability to analyze larger datasets. This opportunity, applied to the present case, offered the distinct advantage of faster processing and, ultimately, greater discrimination among clusters.

Unfortunately, the Neural Network approach presents its own set of methodological challenges. Essentially, a neural network classifier shares many characteristics of K-means: it has random starting locations, it is iterative, and it uses a centroid-like classification scheme. However, its distinguishing benefit relative to K-means is how similarity measures are calculated. Unlike K-means that uses a single measure of similarity (a squared-error function; see Han 2001), in the case of a Kohonen Neural Net classifier, a multidimensional comparison is made that has greater discriminating power. Furthermore, to appreciate the differences with respect to processing times, when comparing the K-means and Kohonen classifiers, during an initial phase of this project, we found that several months of work with the former could be reduced to just a few weeks with the latter.

Still, issues remain as to how to best utilize this technology in geodemography. Two issues, in particular, make non-hierarchical classifiers less than optimal. In the first place, they still rely on the user providing an initial desired number of clusters. Secondly, random starting positions are still used. While these conditions are not show stopping,

they remain detractors from the ultimate goal of developing a fully objective and successful process using non-hierarchical classifiers alone.

Hierarchical techniques, on the other hand, which have been applied less frequently due to their computational overhead, do not suffer from random start locations and subjective target cluster numbers. This discussion perhaps begs the question as to why, if computers are so much faster now, why can't hierarchical classifiers be used "brute force" to come up with clusters. Two reasons have been suggested (Lea, 2003) that would give pause in this regard. The first is that the hierarchical classifiers generally do not capture variance as well as non-hierarchical techniques. The second is that it remains difficult to control the final relative size of the clusters.

One emerging line of inquiry that seeks to use a combination of non-hierarchical and hierarchical techniques is the relatively new field in clustering called *auto-clustering* (reference?). Then, lying somewhere between the classic non-hierarchical techniques and auto-clustering of today are a set of methods known as two-stage clustering (Parthasarathy 2003) and hierarchical self-organizing maps or SOMs (Hagenbuchner, et al. 2003). These approaches attempt to combine the best features of hierarchical clustering with those of non-hierarchical clustering.

The research presented here represents an attempt to utilize the best available knowledge with regard to geo-statistical clustering techniques in a "consumer demographics" context. Because geodemographic clustering generally occurs in a competitive, market-oriented environment, additional constraints (e.g. positioning) are placed on the development process. Nevertheless, a central purpose of the present paper

is to suggest additional linkages in the ongoing discussions among demographers and geographers on both the applied and theoretical fronts.

The Development Process: Rationale and Summary

To some, geodemographic clustering in the marketing context necessarily involves a subjective process in which the selection of initial variables, the manner of their operationalization, and their purpose-driven weighting heavily influence the final clusters. However, today's computing environment, coupled with new methods of spatial analysis, obviate subjective methods to a greater degree. The authors suggest that subjectivity in clustering – including the implementation of predetermined cluster characteristics – is not necessary, indeed, is inhibiting to an optimal cluster solution. One primary tenet in the current research, therefore, is to “let the data speak for itself,” and thereby create a more scientifically reliable set of clusters.

In summary, the research team adopted a two-stage clustering process. The first stage involved using a proprietary Kohonen classifier while the second stage used a hierarchical classifier. The objective of the first stage was to develop a set of clusters that captured the essential demographic characteristics of neighborhoods along with their settlement context (defined below). This was accomplished with the Kohonen classifier creating sub-clusters or “atoms.” The atoms (numbering in the hundreds) delineated a neighborhood sub-cluster set that would in turn be the starting point for the second stage of the process. A larger topic, not discussed in this paper, is that the “second stage” process can in fact move in several directions. The software infrastructure developed for

this project embodies the vision of permitting “custom clustering solutions” involving the introduction of additional proprietary datasets.

The two-stage process described here relies on a several of fundamental assumptions. First, the census-defined Block Group is the basic geographic building block for the system. Second, demographic and settlement context measures are the only core data used in the first stage. Third, additional datasets including, for example, measures of consumer “lifestyles,” can be introduced for the second-stage processing but would not change the fundamental definitions of the neighborhood typology or the initial sub-cluster set. That is, the “atoms” and the initial neighborhood set are sacrosanct.

The first assumption ensures that reliable and valid data are always used, regardless of the application. Considering that a geodemographic clustering system is an *a priori* system, statistical reliability is paramount. To that end, census Block Group data are used as the primary unit of observation. In all cases, Block Groups are the starting point and all non-Census data used must be statistically significant for each Block Group represented. (N = 208,270)

The second assumption reinforces the fact that neighborhoods, census tracts, and block groups are best described in demographic terms. This may seem obvious. However, clustering deals fundamentally with a demographic environment and data related to the demography of the population best describe that environment. It appears untenable to maintain that significant amounts of non-demographic data – consumer purchase behavior, lifestyle indicators, and other non-census-based measures – however well operationalized, can substitute for the basic demographic characteristics of a population for clustering purposes. Moreover, descriptors pertaining to settlement context –

population density, proximity to commerce, complexity of street networks, and other measures – complement demographic attributes by providing spatial context to the analysis, thus adding geographic dimensionality and discrimination for the clustering algorithms.

The third assumption stipulates that the operational groupings of the block groups resulting from the first-stage process are, in fact, neighborhood sets. That is, the atoms fairly describe “neighborhoods” because they have similar geodemography. Once these sets are defined, they are never altered, and they become the multidimensional, operationalized definition of the neighborhood population. They may be further aggregated in subsequent stages depending on various application objectives, but they would never be disaggregated.

One advantage of the approach to clustering described here is the need to create atoms occurs only once per census period. Since atoms are immutable there is no need to recreate them for each clustering application. Given that the majority of work in a clustering solution is the collection, preparation and segmentation of atom level data, additional clustering solutions, or “updates” to such solutions, can be achieved with much less repetition of effort. With the basic methodology reviewed, we can now describe how these methods were applied in the development of PSYTE US Advantage.

Setting Up the Data

The development of PSYTE US began with processing and defining Census 2000-based databases. Next, the specific census variables that would go into the process, at their corresponding spatial scales (e.g. block group and census tract), were selected and

defined. In a clustering process, the character of the input data determines to a large extent the types of clusters that emerge in the output. For example, if family structure variables are not input, the output clusters will not have a family structure dimension. Likewise, if too many family structure variables are included relative to other variables, then the segmentation system will be predominately family structure clusters.

Several important statistical issues were kept in mind as the input variables were selected. In the first place, if the clustering technique is a parametric method (e.g. K-means), then all variables should be ratio data. However, if a non-parametric process is used (e.g. Neural Networks) then nominal, ordinal and interval data could be included.

The second statistical issue is whether the candidate variables are statistically reliable, especially that they are derived from a sufficient sample base in the case of SF3 variables, and that the inherent variability is sufficient to provide statistical discrimination in the cluster solution. Results will be less valid if all variables are not significant for each geographic unit being clustered. In general, the U.S. Decennial Census is an excellent source of reliable data since the data are collected at 100% and 20% samples. The same cannot be said for household list data, for example, that is sourced from commercial surveys, subscription lists and product registrations.

Third, every variable selected must also have a corresponding denominator or weighting variable. This requirement allows the data to be normalized with respect to its geographic level and provides for an accurate calculation of weighted means and standard deviations. Since all geographic units are not the same size in terms of area or population, the analyst must account for this by either calculating averages (e.g. income) or percentages (e.g. cohort composition). Not doing so would bias the classification

toward grouping geographies together based on their size rather than their true demographic profile.

Finally, considerable thought was applied to how the variables are weighted. For example, K-means clustering can use an explicit weighting scheme whereas neural net techniques generally use an implicit weighting scheme. One advantage of neural net techniques as used in PSYTE US is they can handle more variables of similar character. Therefore, as described below, several variables were selected to represent each key demographic dimension in the system.

Cluster Dimensions

Since geodemographic clusters are generally used in marketing and site analytic contexts, several sets of socio-economic and cultural variables were selected as primary inputs. Other variable types such as settlement context, population density, proximity to certain retail environments and community services, as well as lifestyle and purchase behavior variables (for the second stage analysis), were also developed and included in the processing. In the end, both census and non-census type variables were used. The non-census variables were normalized to the geography through the calculation of geographic potentials. The primary census-demographic variable sets included: age, dwelling type, education, employment, race and ethnicity, family structure, group quarters, Hispanic origin, home language, household composition, immigration, income, industrial classification, geographic mobility, mode of travel to work, occupation, and place of work.

The following comments illustrate some of the content and measurement issues considered in the development of PSYTE US for each of these variable sets:

Income

Four types of income statistics were included: 1) mean and median family and household income, 2) income distributions of family and household, 3) sources of income as expressed as a percentage of total income, and 4) income distributions by householder age.

Education

This category serves two objectives: identify the educational attainment of persons (which can correlate with affluence) and discern the current enrollment levels of the population to distinguish college towns from other types of residential areas.

Group Quarters

Due to the generally concentrated populations of military personnel, college students and correctional facility inmates, it is important to identify these areas and essentially “set them aside” during the clustering process since their consumption behavior is quite distinct. Using census data on populations in military barracks, college dorms, and prisons best identifies these areas. Incidentally, MapInfo data developers have corrected some, but not all, of the most egregious group quarters location errors in Census 2000.

Dwelling Type

Many characteristics are captured by dwelling characteristic or housing unit data. The principal ones are: size of dwelling (e.g. number of rooms or units), owner or renter occupancy, vacancy rate, housing vintage, and home value. Such data enhances any profile of residential areas with characteristics like level of affluence, areas of single-family detached housing, concentration of apartments, new or old communities, and seasonality of occupation.

Geographic Mobility

Geographic mobility includes a range of concepts including place of birth data, internal migration, length of residence, year of arrival, and immigration status. For example, identifying the classic Burgess 'Recharge Zones' helps determine neighborhood evolution or stability. Also, high levels of geographic mobility in some urban areas can be an indicator of gentrification.

Place of Work and Commuting

Place of work data determines the extent of commuting on a county and urban or metropolitan level. This helps to characterize commuting flows, commuting times, methods of transportation, and patterns such as inter-urban, intra-urban or extra-urban transit.

Mode of Travel

Not only is the mode of travel interesting in itself, but this concept also provides important insights into settlement context. For example, walking to work may

indicate mixed zoning (residential and business) or level of urbanity when combined with the presence of rapid transit systems.

Employment

Three general statistics are covered by this category: percentage of persons employed or in the work force, the number of hours worked per week, and the number of weeks worked per year. Thus, not only does such data indicate the general employment level in an area, but the data are also excellent for profiling full-time, part-time and seasonal employment.

Industrial Classification

Provides insight into the “industry” or area of work in which persons are employed. It is one key discriminator for affluence, but also describes the economic structure of area and the work interests of the population.

Occupation

Combined with industry, occupation indicates the range of skills and general compensation levels for the working population. Due to the number of groups within this category, major occupational groups were used and occupations were also summarized into three categories: Blue Collar, Gray Collar, and White Collar.

Age

The variables in this group provide the essential cohort population distribution and permits insight into the age profiles of a neighborhood. Family structure differences

and the presence of bimodal age groups, for example, are important indicators of the nature of a community.

Race, Hispanic Origin, and Ethnicity

Providing indicators of cultural diversity, which potentially contribute to differential consumption behavior, these data measure levels of diversity, indicate specific trends in diversity (e.g. suburbanization of minority populations), and offer descriptors of the “ethnic character” of a cluster.

Immigration and Ancestry

These variables provide key pieces of information about the immigrant population and their surrounding community. Period of immigration provides insight into the “age” of ethnic neighborhoods and whether they are still being “recharged.” Ancestry and country of birth provide additional cultural information.

Home Language

While home language can be seen to duplicate the statistical discrimination of neighborhoods offered by Hispanic, Ethnicity and Immigration variables, it provides an important additional descriptor: cultural assimilation, both in terms of knowledge of official languages, and retention of traditional languages at home.

Household Structure and Family Status

Capturing data about the number of families, family structure, marital status and presence of children provides a set of powerful indicators that relate to consumption behavior as well as to the overall household composition in the neighborhood.

The Clustering Process

Once the database is set up and normalized, the actual clustering process can begin. MapInfo analysts used the two-stage methodology as described above. The first stage involved the application of neural network geo-statistical techniques to classify the 209,780 block groups with 400+ census variables. The original PSYTE US developed by MapInfo analysts with 1990 Census data involved testing and experimentation with several neural network routines. The new PSYTE US implemented a proprietary neural network routine developed over several years of further testing and research. In general, neural network techniques, which involve pattern recognition in ways that mimic the human brain, have outstanding capabilities for identifying patterns in socio-economic data.

A perennial issue with geodemographic clustering is the problem of outliers. While great clusters may be produced, concerns remain about observations that are significantly different from the mean of the cluster across several dimensions. The issue is: Which is the best (most appropriate) cluster assignment of the outlier block group? The use of “atoms” in the first stage of the clustering process minimized the occurrence of outliers in PSYTE US. Several hundred atoms – smaller, preliminary clusters of block groups – were created. Since there were hundreds of atoms, the statistical likelihood of outliers existing at the atom level was greatly reduced. The second stage of the clustering process was executed on these smaller, statistically similar building blocks.

A Note On Homogeneity

In an idyllic world a clustering routine produces highly homogenous clusters. Clearly, the real world is different and ultimately more interesting. As discussed above, PSYTE US is a clustering system for neighborhoods, not individuals or households. Neighborhoods, like the people who inhabit them, are inherently heterogeneous. The issue is how to measure neighborhood heterogeneity. Neural network techniques are, in fact, uniquely able to measure not only the degree of homogeneity but also the specific combinations of socio-cultural dimensions that characterize a particular cluster's "heterogeneity." For example, many rural neighborhoods have been transformed by the presence of urban-oriented workers and their families. Likewise, some Hispanic neighborhoods are influenced by interactions with African American families, while others are influenced by the presence of recent Asian immigrants. Moreover, since social processes are not generally random, there is a significant likelihood that heterogeneous neighborhoods in one region will have characteristics of heterogeneity similar to neighborhoods in other regions. The authors confirmed that geodemographic clustering is still applicable to the task of grouping neighborhoods by their similar characteristics despite their increasing diversity over time.

Hierarchical Clustering

After the "atoms" were created, based primarily on socio-economic and demographic variables along with selected measures of settlement context, the next stage used hierarchical clustering techniques to group the 400+ atoms into the final 72 clusters. In this second stage of clustering, consumption data (e.g. car purchases, retail infrastructure

capacity, lifestyle indicators, etc.) were combined with the geodemographic atoms and further clustered. The proprietary hierarchical technique used provided more precise control over the clustering process (for reasons discussed above) and allowed researchers to “craft” the clusters in a scientifically reliable way.

In addition to hierarchical clustering techniques, Principal Components Analysis (PCA), a special implementation of Factor Analysis, was used. PCA is valuable as a method for its ability to reduce large datasets into their “principal components.” Each principal component represents a specific dimension of variance within the database and discards noise, or ineffectual data. Thus, as the hierarchical process was used to agglomerate atoms into final clusters, and as the analysts did not want too many variables to bias the process along certain dimensions, PCA was used to provide meaningful components among intentional characteristics without the need for a large number of variables.

Final Steps

Once the final 72 neighborhood clusters were established, and the analysts were content with their statistical reliability, the process of “visioning” could begin. Visioning in the process of describing the clusters consistent with their underlying characteristics. Cluster descriptions must ring true for the general characteristics of each neighborhood but also for their unique identifiers. Often, a unique combination of characteristics informs the “vision” of a cluster. Ultimately, each cluster is distinguished from all other clusters in the system, while simultaneously sharing characteristics similar to other clusters. Readers are referred to the PSYTE US cluster descriptions – maps, statistical

descriptions, and highlights – to more fully appreciate the final clusters. (See [PSYTE US Web Site.](#))

Conclusion

PSYTE US is fundamentally a geodemographic cluster system. Geodemographic cluster systems, in contrast to household-based systems or hybrid systems, use a census block group neighborhood base to provide stable and statistically reliable cluster assignments. Much like “settlement context” establishes the urban-suburban-rural nature (in a word: “urbanity”) of a place, the “neighborhood context” provided by PSYTE US provides a unique and identifiable description that permits marketers and site location specialists to use the system effectively. PSYTE US thus provides a multidimensional framework that allows analysts to capture the complexity of American consumer culture without having to manipulate literally thousands of census variables.

Over the last half-century long strides have been made regarding the methodologies and technologies used to segment geodemographic data sets. One of the principal goals during this evolution has been the increased rigor with respect to the statistical models and the scientific method thus migrating subjective human understandings to more reliable computational models. Simultaneously, the debate and interplay between hierarchical and non-hierarchical techniques has generated applications and processes that should lead to further advances. One promising advance, alluded to in the literature review, is the area of “auto-clustering.” Auto-clustering approaches promise to remove all subjective input to the process and analyze data based strictly on their structure of variance (Rauber et al. 2002). While clearly in early development, they hold some

promise and could eventually relieve the researcher of all tedious decisions except for the most important of all: What data are important in an a-priori segmentation system?

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Appendix

PSYTE US Advantage

Tuxedo Trails

Executive Domain

Nouveau Manors

Parchment Hill

Professional Duos

Cluster

Description

1	The rich follow different trails. They occasionally wear tuxedos, and in the case of westerners, ride horses, go boating, and dine at exclusive country club restaurants, dressing casual not in tuxes. This highest income cluster – 25 percent are householders with incomes above \$200,000 – epitomizes the wealthy set. Average household income is \$175,000. Wealth with a Western flair; families with kids; householders aged 35 to 54; graduate and professional education; business, professional, and entrepreneurial employment; predominantly white, non-Hispanic but be assured, this cluster also captures the highest income African American, Asian American, and Hispanic families.
2	Top business executives are busy and territorial. Their domain includes influential lifestyles as well as land. This cluster indexes highest on business managers, financial and health care professionals. They are families with kids; executives in peak-earning years – aged 35 to 59. Sixty percent are dual-earner couples. They have the biggest homes – most rooms and lowest average number of persons per room. They are educated with graduate and professional degrees; 88 percent are white, non-Hispanic. The remainder are “minority executives” indexing especially high on Asian householders.
3	Nouveau riche, yes, but also nouveau house. And not just a new house but a relatively large, new house. This cluster indexes highest on the newest homes, built since 1995. They are householders aged to 30 to 44 with families and children. They can afford the extra space as they have one of the highest indexes on dual-earner, college-educated couples. They are 80 percent white, non-Hispanic, but Asian, Hispanic, and African American new homeowners are also represented.
4	With their diplomas, degrees, and parchment proof of higher education, this highest concentration of college-educated executive and professional couples have a mean income of \$138,000. Many are DINKS (dual income no kids). With a 55/45 ratio of renters to owners some are too busy making money to settle down and buy a home. Fifty percent live in condos and rentals of 50+ unit structures. Twenty percent are immigrants, so their education is not just Ivy League. While 80 percent are white, non-Hispanic, all minorities represented.
5	These high-earning couples are second to Parchment Hill in proportion of dual professional couples and householders with professional degrees. They are found in all major metro areas. Fully 80 percent own their homes and are mostly married but with few children. This cluster’s ethnic mix is 75 percent white, non-Hispanic and 25 percent ethnically diverse. They have relatively high incomes – mean family income is \$116,000. They are doctors, lawyers, and educators. Half work in central cities but only 35 percent live and work in central cities.

Balancing Acts

6 Rush home from work, improvise dinner, pick up the kid(s), greet the spouse in the fog of go, go, go. These dual-earning couples in the suburbs are not necessarily two professionals trying to combine career and family but they manage. This is "soccer mom" country, and a "balancing act" because of the high proportion of school-aged kids and working parents. They have relatively new homes, 90 percent owner occupied, and are college educated scientists, information industry, and health care workers sharing high-speed internet connections. Fully 90 percent are white, non-Hispanic with an average family income of \$97,000. Go figure...and work out tomorrow's family schedule.

Equestrian Heights

7 They may not have a stallion in the barn but they likely pass a corral on the way home. These families with teens live in older, larger homes adjacent to or between suburbs but not usually tract housing. Most are married with teenagers but 40 percent are empty nesters. They use their graduate and professional school education – 56 percent are dual earners. Over 90 percent are white, non-Hispanic. Their mean family income is \$99,000 and they live within commuting distance of central cities. They have white collar jobs during the week but require a riding lawn mower to keep the place up on weekends.

Suburban Establishment

8 Today's young professionals usually gravitate to urban settings but an earlier generation knew better. They are the doctors, lawyers and accountants now with incomes significantly higher than their neighbors, living and working in non-metropolitan and semi-suburban contexts. Fully 65 percent work outside central cities. They index high on householders aged 50+ with few children at home and many empty nests. They have an older skew because some are retired and living in multi-unit structures surrounded by leafy maple and oak trees.

Suburban Wave

9 Caught between preserved green space and hold-out farmers, this relatively new housing cluster – 30 percent of homes built since 1995 – represents trailing edge baby boomers and leading edge baby busters. They are the highest percent of households living in suburbs and working in central cities. They are families with children, college-educated professionals with a relatively high 62 percent dual-earning couples. Ethnically 80 percent are white, non-Hispanic but all other minorities are represented. Their mean family income is \$83,000 enough to make the mortgage payments and take a nice vacation

Exurban Tide

10 Out beyond the established suburbs lies a semi-rural land inhabited by suburban-type families, householders aged 35 to 54 with plenty of school-aged kids and teens but some empty nests. Sixty percent are dual-earner couples. Their below average proportion of college-educated parents puts them at a slight disadvantage compared to New Suburbia. Still, 87 percent own their homes. White non-Hispanics predominate. Average family income is \$80,000. Vacations lean to family camping and local theme parks.

Only in America

11 The new USA – but still a nation of immigrants. Multi-ethnic – 75 percent white, non-Hispanic, Southern and Eastern European, Italian, Greek, Slavic immigrants and others plus 10 percent Hispanic, 9 percent Asian, 6 percent African American. These college-educated homeowners are cluster neighbors in detached, duplex, and multi-unit structures. With an older family skew and school-aged kids and teens present, they have above average incomes – \$75,000 mean family income – and are mostly dual earners. Their settlement context is primarily Eastern US regional and seaboard neighborhoods with traditional and “new” ethnic diversity.

Rural Renaissance

12 Some small towns attract youth and new energy due to their affordable housing, proximity to jobs, and just maybe – their appeal to nostalgia. The locals still hold political power but the newcomers are starting to express their collective will. This is an increasingly college-educated dual-earner family-with-children cluster in rural and proto-suburban areas near older cities. These areas index relatively high on recently constructed homes, single detached, owner-occupied homes, and above average family income -- \$78,000. They are predominantly white, non-Hispanic and only 25 percent work in a central city. Growth in this segment is driven by job creation in nearby suburbs, mid-sized towns, and micropolitan areas.

Sierra Snuggle

13 While not all woodsy log cabins this segment indexes high for new home construction in Colorado and other high-growth mountain and Western coastal states. The segment contains young families with kids (45 percent) in an 80/20 owner to renter mix. College educations and dual-earning couples boost mean family income to \$77,000. These folks are single and newly married couples postponing children. Naturally, because of the omnipresence of aging baby boomers there are a few 50+ folks with empty nests, all the better to snuggle. This cluster's Western skew accounts for its 12 percent Hispanic population.

Empty Nest West

14 Baby Boomers with more time on their hands, these householders are aged 40 to 59, some with teens but mostly with children gone off to seek their fortune or fight their causes elsewhere. Geographically dispersed Western opportunities imply greater distances between children and parents. An 80/20 owner to renter ratio indicates some parents, also, have moved on. These boomers are college educated and work(ed) in administrative, managerial, and sales jobs, 45 percent in central cities of Western metros. About 85 percent of householders in this cluster are white, non-Hispanic; the rest are primarily Hispanic. Mean family income is \$84,000.

Western Sprawl

15 Today's Western neighborhoods are often desert communities connected more to infinite varieties of cactus than to older settlement infrastructures. Young families -- householders aged 25 to 49 -- with kids inhabit these arid areas with a 70/30 owner to renter ratio with a high index of post-1995 construction. These college-educated spouses often both work in office environments, management positions, and white collar jobs to make an average of \$80,000 per year, but only 25 percent live and work in central cities. Long-term water supply needed.

Frontier Towns

16 Somebody's got to mind the general store (or C-Store) or the bank or the roadside diner. In these "frontier towns" families with children have high school and community college educations. Both spouses work to earn an average of \$67,500 per year. Only 56 percent are white non-Hispanic, 31 percent are Hispanic and 15 percent are foreign born. They also work in manufacturing, holding some administrative positions. These folks are the Western gray collar workers who hold down the fort in the face of a seemingly constant onslaught of newcomers.

Up-Country Environs

17 Beyond several major metropolitan areas – well past the last metro station – live established families in non-metro areas in owner-occupied homes built in the 70's and 80's with a modest five to seven rooms, reflecting a relatively high 80/20 owner to renter ratio. Most have HS diplomas, and some women spent some time in college. More than half of these couples both work bringing in an above average \$76,000 annually. Ninety percent are white, non-Hispanic. Fifty percent work in white collar jobs, the rest in manufacturing and local retail. For them, the big city is a nice place to visit.

The Professoriat

18 It's a pleasant life, despite the edict to publish or perish, where the Professoriat enjoys the contemplative pace of academia. These professors and college administrators inhabit college towns and urban areas ministering to the needs of the next generation. Half their nests are empty; then again, only half are married. With an 80/20 owner to renter split most live in homes built in the 60's and 70's. Their mean family incomes are \$92,000 but their mean household incomes are \$72,000 an indication of the advantages of partnering. These scientists, educators, and assorted college-connected officials enjoy foreign travel, fitness activities, gourmet cooking, and of course a good book.

East Meets East

19 Asian immigrants often gravitate to Asian communities in the US. This means they meet other Asians as well as Hispanics (35 percent of this cluster), Blacks and other Americans. So Asian Indians, Chinese, Japanese, Vietnamese, Filipinos, and others encounter each other in America's new "salad bowl" neighborhoods. Most have families with kids and live in single detached owned homes, although 35 percent are renters. They index high on college education and have a mean family income of \$64,000. They work in a variety of industries but index highest in mathematical and computer science occupations. In today's complex urban structure, only 40 percent of workers in this cluster work in central cities.

Empty Nest East

20 Empty nesters in the East tend to have less lifetime migration than those in Empty Nest West. Their neighborhoods may appear more settled, even old fashioned, compared to their generational cohorts in the West. Their kids are gone but not much else has changed. Family householders aged 50 to 74 inevitably have a few teens still hanging around but they are primarily empty nests. With an 85/15 owner to renter ratio, their homes also have an older skew. Most still working, although some are retired, these couples have above average indexes for college education and more than half are dual earners. Their mean family income is \$66,500 reflecting the presence of post-retirement couples, yesterday's empty nesters.

Towns in Transition

21 Some towns function as suburbs while retaining their more rural character. Their primary though not exclusive demographic is families with kids. Housing structure is 60/40 detached to multi-unit reflecting apartment construction to accommodate the 30 percent single-person householders. Mean family income is \$71,000 while median household income is \$52,000. Ethnicity is 85 percent white, non-Hispanic with 15 percent Hispanic, African American, and Asian. Proximity to good job markets means these transitional “suburban towns” will have economic legs well into the future.

Kids, Dogs, Vans

22 With the kids, dogs, and vans, this cluster is in a suburban groove. They index high on married couples with children of all ages. A family-oriented cluster inhabiting the towns and suburbs in and around metropolitan areas, their above average \$61,500 mean family income reflects dual-earner couples with average indexes on college education. Working in the offices, factories, and retail establishments of metro areas, these families are 80 percent white, non-Hispanic and 20 percent a variety of ethnic minorities – more ethnically diverse than its predecessor cluster but still in the groove. Did anyone feed the dog today?

Life’s a Peach

23 Twentysomething, college-educated, economically independent from mom and dad, these single and young married apartment dwellers are on a roll. A third have pre-school children but that was inevitable. Most are putting their education to work in business, entertainment, information, and educational organizations with the fourth highest index on computer-related employment. Their \$60,000 average household income goes a long way. What’s to worry?

Urban Villagers

24 City dwellers with attitude, these pop-culture conscious, college educated urban denizens are nothing if not diverse in terms of household composition, ethnicity, and occupational interests. They have the highest index of non-families in the 25 to 34 age group meaning they have either postponed marriage or found the institution wanting. Seventy percent are renters in multi-unit structures. The other 30 percent are split between condos and single-unit detached housing. With an average household income of over \$70,000 this cluster enjoys life in the city, though their neighbors will come and go, seeking perhaps the latest variation on a cup of coffee.

Cruisin' Couples

25 Pre-retirement and newly retired couples can look forward to the next twenty years, thanks to better health and health care. But this cluster is bimodal with respect to income – some have adequate finances, while others will have more of a struggle. Most will try to make the best of it with their average family income of \$79,000 but much of that is discretionary for a cluster with the second highest index for home-ownership without a mortgage. They also index high on income from interest-bearing accounts and dividends from investments. Ethnicity is over 90 percent white, non-Hispanic. Cruise anyone?

Suburban Melange

26 While America's suburbs were probably never really homogeneous, this cluster drives the point home. Diversity reigns: 50/50 owner to renter ratio, high indexes on non-families aged 15 to 54 but with 35 percent of households containing married couples with children under 18. Largely college-educated these singles and couples work in all manner of industries and bring in an average household income of over \$61,000. They are two thirds white, non-Hispanic and one third Asian, Hispanic, and African American – confirming the suburbanization trend of America's "minorities."

Retirement Horizons

27 Baby boomers contemplating retirement, or perhaps not, depending on their financial resources. The elder skew in this cluster takes off around age 55. These empty-nest married couples are college-educated dual earners looking forward to retirement, seeing many of their neighbors are already kicking back and scaling back their spending. With a 70/30 owner-occupied to renter ratio many of these couples are beginning to cut their expenses for the long term. Over 90 percent are white, non-Hispanic. Mean family income is \$74,000. True to form, however, boomers are likely to set new retirement lifestyle trends, or maybe they will just fade away. Don't bet on it.

Quiet Streets

28 Small towns in the Midwest are as numerous as they are charming. Families with kids in owner-occupied housing predominate. Fully 97 percent are white, non-Hispanic with average incomes a moderate \$62,400. They index high on farming though only 5 percent of the workforce works an agricultural occupation. Educational attainment is diverse ranging from high school only (40 percent) to Associate's and Bachelor's degree. Fewer than 2 percent live and work in a central city. You can almost hear the leaves fall.

Family Acres

29 The land was cheap and kids were cheaper by the dozen, once upon a time. These rural families live in larger, older homes; nearly 80 percent owner-occupied homes built in the 60's, 70's, and 80's. Most householders finished high school and nearly 20 percent of women took some college courses. A high 96 percent are white, non-Hispanic and householders aged 45 to 64 predominate as younger families have most likely left for greener pastures. Family income is an average \$61,000 derived primarily from manual occupations and some farming.

Moo's and Modems

30 Farm land taken over by development, apartments and mobile homes springing up where cows used to roam -- this cluster is a mix of the old and new. Young family householders with college educations work in the offices and factories of nearby metro areas. Some neighbors, however, still tend their herds and crops, driving the farm employment index over 200. Average family incomes are \$61,500 and ethnicity is 91 percent white, non-Hispanic. Of course, your truly modern dairy has a computer in the barn, too.

Home to Mama

31 Mama lives in Chicagoland, the Detroit area, Cleveland, even Buffalo, New York. With a high concentration of older couples and widows, this cluster is home to papa as well. These rust-belt metros contain unique communities of America's immigrants, seasoned city neighborhoods and suburbs with the highest indexes of Italian, Portuguese, Greek, Polish, and Slavic ancestries, among others. Household incomes are a moderate \$55,000 and educational attainment only reflects the more limited opportunities of an earlier generation. Manufacturing was a dominant way of life but no longer. Today, office work and retail predominate. And the food is unbeatable.

Echo Boomtown

32 What's a young married couple with a pair of college educations and no kids (yet) going to do? They gravitate to communities of opportunity and become renters in major metropolitan areas. They are joined by the 30 percent of this cluster who are recent immigrants. Ethnicity indexes super high on Asian but the cluster also contains 15 percent Hispanic and 14 percent African American. They work in a variety of jobs requiring college degrees from scientific, computer-oriented and health care to entertainment, media, the arts; average household income is \$58,400. It's a boomtown driven by youthful energy from all quarters.

Live to Work

33 This dawn-to-dusk cluster is the destiny of young families and young workers who either left high school early or took their high school diploma directly into the labor market. Their 50/50 owner to renter ratio reflects moderate incomes (median household income \$46,000) and the need for mobility to find work. Half are married couples, and of those 60 percent are dual earners. White, gray, and blue collars jobs are all represented.

Changing Places

34 Today's Baby Boomer households reflect a diversity of living arrangements, the result of a generation that experienced historically high divorce rates in the context of economic booms and busts during their prime earning years. This cluster reflects the reality of current boomer generation diversity: 50/50 owner to renter ratio, college educated but living in non-family households, fourth highest index on divorced males and females, 80 percent white, non-Hispanic, 20 percent various minority ethnicities, metro area-oriented, 50 percent in central cities.

Cultural Exchange

35 This higher-than-average income, predominantly Hispanic but also Asian, Hawaiian, and Pacific Islander cluster is home to many in the Cuban American community as well as upwardly mobile families of Mexican, Puerto Rican, South and Central American origins. They have done well either as immigrants or native-born citizens. The cluster has an older 50+ skew, a 60/40 owner to renter ratio, many homes built pre-1980, and most are high school graduates with some college. Latinos in this cluster tend to prefer the Spanish language due to a desire to maintain their culture and their older age profile. Fully 50 percent are immigrants with a high "year of arrival" index in the 1960's – the original wave of Cuban immigration – but most had children born in the USA. Their mean family income (lowered in part due to retirements within this group) is \$55,000. The cultural exchanges are constant – an older generation of immigrants with their American-born children -- Hispanics and Asians from various origins with an American cultural mainstream.

Active Seniors

36 Today's retired couples have higher incomes and better health than previous generations. Their travel patterns -- from snow-bird migrations to national and international eco-treks -- reflect their health and relative wealth. About 18 percent live in mobile homes, at least part of the year and 60 percent live in detached owner-occupied housing (one third of which is owned free and clear). Over 90 percent are white, non-Hispanic. Household income is bimodal reflecting differences between those who planned ahead for retirement and those who may not have. Mean income is \$56,600. As relatively young and newly retired, their activities may include golf, foreign travel, and visiting grandchildren.

Outback USA

37 Sometimes the most affordable housing is found in rural areas of America. Young families with and without children, as well as singles, head for Outback USA, which can be near a metro area but more characteristically ranges from rural to wilderness. Primarily high school educated but with some college, members of this cluster typically work with their hands and earn a moderate \$47,000 average household income. Over 80 percent are white, non-Hispanic.

New Neighbors

38 Both urban and suburban neighborhoods reflect America's increasing diversity. This cluster is 67 percent white, non-Hispanic, 33 percent minority. At least 15 percent are recent immigrants from Asia, Latin America, and Eastern Europe. Hispanic and African American neighbors represent 30 percent of this cluster, and many work in the suburbs as city-to-suburb commutes become more common. Mean household income is a slightly above average \$46,800.

Duty Calls

39 This service industry cluster keeps America's cities functioning. They are the policemen, firemen, maintenance and repair workers, and administrative support personnel who provide essential services. They live in urban neighborhoods proximate to their jobs. Empty nests, widows and widowers, and separated spouses are more common than families with children in this cluster. Mean household income is \$49,000. High school diplomas and some college degrees round out the educational profile.

The Neighborhood

40 Immigrant communities, some still dominated by a single ethnicity, are found across America's urban landscape. They are city neighborhoods. They are old neighborhoods. They are neighborhoods in transition, to be sure, but many have a character that has persisted for generations. Families predominate, living in single family homes, duplexes, and buildings with three and four or more units. Italian, Yiddish, Greek, Russian, Indic, and Chinese, et cetera spoken here. Spanish is increasingly heard on the corner. Median family income is \$44,400.

Old Metro, New Hands

41 The rust belt is down but not out; in fact, manufacturing is thriving in metros both old and new. It is just not the dominant source of employment for most workers. Younger factory workers have replaced older workers and young families and children inevitably follow. With an age profile under 45, this cluster has a 50/50 own to rent housing ratio. They index high on having left high school before graduation. About 35 percent are immigrants, primarily Hispanic from Mexico and Central America. The overall cluster mean household income is \$47,200.

Country Roads

42 With one of the highest indexes for people who still live the state where they were born, this cluster has a distinctly older age skew. Down these country roads they have a 65/35 owner to renter housing ratio due in part to their high proportion retired. Fully 97 percent were born in the US and 94 percent are white, non-Hispanic. For those still working, manual work is the order of the day, although these town and country areas also offer small office and retail-related employment. Mean family income is \$53,700. Oh, and these folks are not likely to move any time soon.

Family Farm Belt

43 The family farm way of life may be alive and well after all. This cluster captures a cross-section of viable family farms working everything from dairy cattle to cash crops, apple orchards to vineyards. With the highest index for farmers this cluster is characterized if not dominated by farming. After all, only 6 percent actually work farms while the rest work in all manner of farm town industries from farm supply stores to the local bank. Families with children once predominated but empty nests and families with teens itching to leave are common. The college educated are not uncommon in these towns but they are not likely to have been born and raised here. Mean family incomes are \$52,000.

Middleburgh

44 Some lucky small towns have economic staying power due to their proximity to larger metropolitan areas. Others develop the "look and feel" of suburbs while maintaining their older village core. These "middleburghs" are home to a higher-than-average share of dual-earner couples with average incomes of \$52,000. This cluster also captures some out-of-the-way country corners. Over 30 percent of Middleburgh dwellers work in nearby central cities, suffering a longer commute for the benefit of a more idyllic home life than their suburban cousins.

Opportunity Knocks

45 These young singles and couples without kids – only 20 percent of families have children – answered the old call of the New West, "Go West young person." They moved into existing towns and metro areas where job opportunities multiplied as Western states experienced economic growth. They have a 60/40 owner to renter housing ratio and nearly 50 percent are dual-earner couples. However, their mean household income is a moderate \$45,500 due to their average educational attainment and relative youth. Opportunity beckoned but they will suffer a few "knocks" along the path to greater prosperity.

Service Corps

46 The need for service workers does not stop at the city limits. This cluster represents the neighborhoods of suburban services workers -- from highway crews to county sheriffs' deputies -- whose neighbors may work in other industries while sharing a common, family-oriented lifestyle. Educational attainment is moderate (high school with some college) and mean family income is \$48,000.

Here to Stay

47 Found in every region, folks in this cluster tend to stay while their neighbors move, often on a seasonal basis. With the highest index for seasonal vacancies, split between winter vacancies and summer vacancies, these "stayers" are an interesting lot: age 50+ skew, many retired, older homes, 50/50 owner to renter ratio, high school with some college education, 92 percent white, non-Hispanic. Empty nest two-person households predominate with an average household income of \$48,800. Have they found Paradise?

Farm and Factory	48	These family-oriented farming communities have a significant manufacturing presence -- 25 percent of the workforce works in manufacturing -- but extraction industries and farming are also visible. With high school educations with some college, these family householders have a wide age range -- 25 to 74. The 92 percent white, non-Hispanic reflects minimal immigration -- 98 percent were born in the USA. Mean family income is \$48,000.
Singles Place	49	Singles Place has the highest index of persons aged 21 (a significant age) to 29 years. While 67 percent are renters and 25 home owners, the rest are either sharing or crashing. Found in all major metro areas, the college-educated unattached are 85 percent USA born and 15 percent immigrant; 30 percent are either African American or Hispanic; 70 percent are white, non-Hispanic. The divorced are overrepresented as are multi-person non-family households (unrelated persons living together). Average household income is \$44,800.
Rust Belt Blues	50	Blue collar and singin' the blues, this cluster captures an older population in older housing (40's and 50's vintage). A ratio of 75/25 single detached homes to multi-unit structures reflects a similar owner to renter mix. High school educated, their current job profile includes manufacturing but also material moving, maintenance and repair, and services. Only 32 percent are in white collar jobs. Overall average household income is \$43,600.
Irrigation Nation	51	Rain for rent, migrant labor for hire -- America's agribusiness communities are social systems unto themselves. Over 30 percent live in mobile homes with a 75/25 owner to renter ratio. Within the cluster some relatively new homes dot the landscape due to the Western geographic skew. Virginia and the Carolinas typify large scale farming in the East. Irrigation Nation in the West has 15 percent Hispanic population, while Irrigation Nation in the East has 15 percent African American population. Overall average family income is \$48,000.
Military Towns	52	Military Towns are definitely not all soldiers and sailors. Family householders aged 15 to 34 are typical, although the cluster has a super high index of population in military barracks. Make no mistake, these neighborhoods live and breath the military, but kids in school and an array of support services and industries round out today's Military Towns. Discretionary spending is prevalent in this youthful population because many basic needs are essentially met by the military. Average household income is \$40,500.
Southern Country	53	This Deep South cluster exemplifies a traditional rural lifestyle increasingly influenced by New South modernity. A variety of housing types exist including 30 percent mobile homes and a 75/25 owner to renter mix. Fully 98 percent of cluster residents were born in the USA and 75 percent were born in the state of current residence. Educational attainment tilts primarily to high school only with some college. Virtually absent within city boundaries, this cluster is one of the most rural. Average household income is \$43,000.

Home Town Harbor

54 The mirror image of "Opportunity Knocks" this cluster captures the young singles and couples who remained in the East and South while their friends and relatives moved out West. Home Town Harbor also has an older population that "aged in place" generating a relatively high 85+ population index. But these are primarily young singles and couples without kids, starting their work life, living independently from parents, in apartments and other rental housing. Like Opportunity Knocks they should have stayed in school longer to increase their options. Unlike Opportunity Knocks, the young adults in Home Town Harbor are sticking to the familiar territory of their home town. Their mean household income is \$43,500.

Plow and Plateau

55 Farmers, miners, and foresters are found in this broad swath of territory in the Northeast, northern Midwest, and Northwest. Their lifestyle is distinctly tied to Earth's bounty, a fact that likely affects their values and purchasing behaviors. A 65/35 owner to renter ratio obscures relatively high vacancy rates and seasonal occupancies. More than 15 percent live in mobile homes, and the cluster has a high recreational vehicle index. A high school diploma is the norm as is the dual-income home. An older age skew represents families with teens and empty nests. Average family income is \$48,000. The cluster is 88 percent white, non-Hispanic and 12 percent Hispanic.

Agrarian Edge

56 This rural cluster indexes high on mobile homes and RV's and has distinct Western and Southern flair. Primarily householders aged 25 to 54, these family heads work in agriculture and mining but also in office and retail environments. A 36 percent Hispanic presence indicates language diversity as well as Mexican ethnicity. The struggle to make a living in this context can require rural to central city commutes. Average family income is \$43,000 supported by the presence of 38 percent dual-earner couples.

Backwoods Blues

57 While the family farm may be on the decline, some of America's original farming towns survive using a variety of strategies. Elders in these communities have tended to "age in place" instead of pack up and head to Florida or Arizona. Young families have taken up residence and provided a broader base of economic support, including work in health care, transportation, and various trades. Incomes remain lower than average, however, in part because only 7 percent of workers in this cluster commute to cities. Average family income is \$43,000.

Latino Quarter

58 This Latino community is 70 percent Hispanic, second to Border Zone on that statistic. Concentrated in urban neighborhoods ranging from California to Arizona, Texas, Illinois, Florida, New Jersey and New York this cluster has the largest Mexican American contingent among Hispanic metro markets, but Latinos from all major countries of origin are represented. With a 33/67 owner to renter ratio, these families are still settling in. Fifty percent are foreign born and 30 percent immigrated since 1985. This cluster represents the core of the Hispanic market. An above average 35 percent of households are families with children. Average family size is 4.2 persons. Mean family income is \$41,000. Spanish is likely the language of preference for 75 percent and only 25 percent speak just English.

Exurban Refuge

59 This "beyond suburbia" cluster represents older, non-family households living beyond the towns that ring the suburban fringe. Their 65/35 owner to renter ratio indicates a substantial retirement segment, contentedly aging in place. Fully 98 percent are native US citizens and white non-Hispanic. Their \$32,000 below average income is likely the main reason they don't move to Florida or Arizona in the winter. They may be content right where they are.

Hispanic Hopes

60 This cluster of Hispanics on the move represents those who have moved out beyond core Hispanic communities into a more diverse cultural environment. In fact, only 54 percent of this cluster claims Hispanic origin, reinforced by the fact that two thirds of this cluster speaks English only or "very well." A 30/70 owner to renter ratio is common though most aspire to eventual homeownership. A range of origin countries from Mexico to South America, the Dominican Republic and Puerto Rico are represented. Median household income is \$31,400 which is lower than Latino Quarter income but this cluster is more youthful. They're just getting started.

Amer-Indian Corners

61 Concentrations of Native American peoples give this cluster its name, but the reality is that these communities are diverse. They average 10 percent Native American, 15 percent Hispanic, nearly 20 percent African American, and 50 percent white, non-Hispanic. Non-family households predominate but young families with children are a significant presence. The cluster is split 50/50 between owners and renters and has the third highest index for blue collar workers. Average household income is \$36,600.

Hip Nation

62 Diverse neighborhoods of minority families, hip hop aficionados and latter-day hipsters make this neighborhood a study of contrasts reflecting America's new (and old) diversity. Here young white singles seeking opportunities in the Big Apple mingle with African American and Hispanic families near blocks of significant poverty. Ten plus years of gentrification have infused many blocks with renovated apartment buildings and hip retail establishments. Non-families in multi-unit rental structures predominate, but families with children are also common. The 60/40 native born to immigrant ratio indicates a wealth of constantly renewable ethnic diversity. Virtually one third African American, one third White, and one third Hispanic make this perhaps America's most diverse neighborhood. Cutting a broad swath across Brooklyn, New York, Hip Nation is replicated in several major metro areas outside New York, from San Francisco and Los Angeles on the West Coast to Washington, DC and Miami in the East. Median household income is \$31,000.

Help Wanted

63 Populated by householders aged 18 to 34, this cluster of singles and young couples is found in every major metro area. With 25 percent immigrant, 37 percent Hispanic, and 50 percent white, non-Hispanic, this is the core labor pool that will respond to "help wanted" classifies -- limited education but eager to work. You see them in many settings from fast-food restaurants to the corridors of major hospitals. More than 70 percent live in apartments, indicating a degree of mobility consistent with this cluster's search for opportunity. Average household income is \$36,500.

Extraction Action	<p>64 A mix of families and non-families primarily involved in extraction industries, this cluster indexes highest for coal and other mining towns. Forestry and some farming are also common. With a 67/33 owner to renter housing ratio and a high propensity (80 percent) to live in their state of birth, this cluster is 90 percent white, non-Hispanic. Their mean household income \$35,800.</p>
Village Americana	<p>65 America's small towns are more numerous than appreciated. Every region, every state, every country road connects eventually to settlements whose livelihood stems as much from its own history as from enduring economic opportunity. The lucky ones connect to nearby metro areas or are renewed by in-migrants. Others, like those in Village Americana, languish in peaceful solitude, attracting the occasional scavenger of antiques. Average income is \$34,000.</p>
Border Zone	<p>66 America's border with Mexico is bustling with economic activity and the movement of people north and south. Border Zone is 84 percent Hispanic -- the most Latino of all clusters. The cluster is primarily found in the Southwest but it also picks up the international flavor of other border cities and ports of entry, such as the Seattle area, Chicago, Detroit and South Florida. Sixty percent live in owner-occupied housing, leaving 40 percent of housing (some mobile some not) for immigrants, emigrants, and other people on the move. Despite that constant movement, however, this cluster is a significant family-oriented cluster with a mean family income of \$34,000.</p>
Senior Circles	<p>67 Seniors, perhaps more than others, still "flock together" and socialize with gusto, playing bridge and shuffleboard to beat the band. This cluster indexes high on the 80+ population, widows and widowers. Over half (56 percent) are renters with an overall high index on high-rise apartment dwellers and population in nursing homes. Still, 40 percent are homeowners residing in the communities in which they have spent most of their lives. Incomes, derived primarily from Social Security, are characteristically low at \$24,000 median household income.</p>
College Towns	<p>68 Indexing highest on college dormitories, this cluster captures students on and off campus. Incomes are generally lower than the household average but discretionary spending is higher than expected. Dormitory neighborhoods also contain a mix of households (not typically the professors and college administrators, see The Professoriat) but others involved in education and its supportive industries. Median household income \$23,700.</p>
Black Memoirs	<p>69 Towns and villages of the South and elsewhere with significant African American populations -- 62 percent of this cluster -- have a history and a culture not easily replicated elsewhere. Families with children abound but also older adults left behind when earlier generations left for opportunities in Northern and Southern metropolitan areas. Farm and factory workers can be found here, for example, in meat packing operations and textile mills, but also a variety of manufacturing operations. Other industries, from education to small offices also employ residents of this cluster. Average family income is \$37,000. This cluster speaks volumes.</p>

Workin' on the Dream

70 Both inside and outside America's urban core neighborhoods some hope is kindled by workers and families who day in and day out try to make ends meet. They are 80 percent African American, have a high index of working single mothers, and 18 percent are females with "some college" education. With a mean family income of \$31,000 – 80 percent of which is derived from wages and salaries – their various occupations index high in the health care industry, food preparation, and protective services.

Project Renewal

71 Half minority, half white non-Hispanic, half in prison, half working or looking for work, this cluster -- largely the former Solo Tenements -- is found in areas of urban renewal in major cities, or in some cities "the projects." They are looking for and in need of Renewal.

Urban Stress

72 Suburban commuter trains pass through this cluster every day on their way to the high-rise city core. A high proportion of housing units are rental properties burdened by relatively high vacancy rates (18+ percent). Young families and non-family households have relatively low incomes – median household income is \$21,600. These areas have a high proportion minority population – 60 percent African American, 30 percent white non-Hispanic, and 10 percent Hispanic. Many other factors combine to produce high poverty rates and general urban stress.