



Hazardous Substance Information and Education Office (HSIEO) Phone User Profile Study Report Executive Summary

Introduction

This document summarizes the *HSIEO Phone User Profile Study* completed by Hebert Research, Inc. in September 2006. The report is available from Ms. Cedar Bouta, the HSIEO Coordinator at Washington Department of Ecology's Hazardous Waste and Toxics Reduction Program. She may be contacted at 360-407-6853 or cebo461@ecy.wa.gov.

In order to identify the HSIEO audience, Washington Department of Ecology (Ecology) contracted with Hebert Research, Inc. (HR Inc.) to conduct a demographic and marketing analysis of the HSIEO toll-free phone line users. Ecology will use the results to redesign the phone script and develop marketing tools, and will share the results with Cascadia Consulting Group and their sub-consultants who are redesigning the HSIEO website.

In addition to HR Inc.'s work, Cascadia Consulting Group, Inc. will survey 12-15 households that have called the toll-free information line. They will attempt to interview the actual caller and learn more about the caller's demographics and preferences related to using the phone and web.

Methodology

HR Inc. took the last three years of HSIEO phone bills (14,734 total calls) and removed businesses and duplicates. They then researched addresses for the remaining phone numbers. This resulted in a 2,331-sample size. Factors affecting the ending sample size were:

- The older the phone call the less likely the phone number is still in service and assigned an address.
- Many addresses are unavailable because of the national "do not mail" list.

HR Inc. believes the sample size adequate to provide reliable results.

Based on the address of the callers, HR Inc. then:

- Compared the demographic makeup of callers to the demographic makeup of Washington State as a whole.
- Grouped the location of callers by county and indexed to census tract data.
- Grouped the location of callers by zip code and indexed to census tract data.
- Grouped callers by social groups using PRIZM (see page 3) and summarized general characteristics of groups (this will be one source of information used for developing marketing recommendations).

Limitations of the results:

- A phone number and address do not tell us who called from within the household.
- Census tracts are the most economical and smallest unit of demographic data HR Inc. could use without doing door-to-door surveys.

Key Results

Overall, the analysis shows that the typical caller to the HSIEO toll-free line is a married homeowner, between the age of 45 and 54, most likely living in a relatively rural county on the west side of the state.

Demographics of Callers

■ Age – Older

The median age of heads of households for callers is higher than that of state population figures. Those in the 45-54 age bracket make up 22.1% of head of households in Washington State, but represent half our callers. The least represented age bracket is those under 25, who make up 5.9% of heads of

households in Washington State, but only represent 0.8% of our callers.

■ **Income – Both Ends of the Economic Spectrum**

Those with household incomes in the very low range and the very high range over-index the state averages. In particular, the index for callers with a household income less than \$15,000 is very high, 93% higher than the expected level. Callers with household incomes between \$150,000 and \$250,000 also index high, about 55-58% above expected levels.

It is possible that those with very low incomes are more likely to encounter hazardous chemicals. There are several possible explanations for calls from those with high incomes. Higher income individuals are typically better educated, more likely to own their own business, be civic-minded, and have a place within the community as a fully participating citizen or civic leader. In this capacity they are often used to having influence, being respected and taken seriously by government officials and other leaders.

Under this profile, once they become aware of an environmental hazard, such a person would be more likely to figure out how to report it to the appropriate governmental authority to solve the problem. Since these callers are more likely to be a business owner, this may include some calls from home that actually relate to their business. They may be more likely to report infractions or suspicious materials they observe in the interest of protecting their assets from harm. Their employees also may encounter hazardous materials, and they may call to find out how their employees should properly handle materials.

■ **House – Homeowners with Few Renters**

The overwhelming majority of callers are homeowners rather than renters. 92.4% of callers own their own home. Only 7.6% of callers are renters, which is 22% of what would be the expected level.

Renters are less likely to be responsible for spills or hazardous materials, leaving such concerns to landlords and property owners. Those who own their own homes must take on that responsibility for

themselves. Renters also are more likely to be younger and unmarried and living in metropolitan areas. Metropolitan areas such as King County tend to have more robust local hazardous substance programs than rural counties, and residents may call local service providers instead of relying on state resources. However, this does not explain the high number of calls received from Pierce County (see County Distribution of Callers, below).

■ **Marriage Status and Children – Married with No Children at Home**

Callers are also more likely to be married than single. In fact, nearly four-fifths of all callers come from a married household.

Despite the overwhelming number of married callers, a higher than expected (74.3%) of callers do not have children living at home. This is in part because 56.2% of callers are married, but have no children. This is also due to the prevalence of older callers whose adult children have left home.

■ **Race – White with Other Races Not Well Represented**

An overwhelming number of callers (90%) were white, but due to the largely white makeup of the state, the number only over-indexes the state by 1.1. All other races under-index the state. Particularly under-represented are Asians, African-Americans, and Native Americans. African-Americans made up only 0.5% of all callers, which under indexes the state by 0.16. The index for Native American callers is zero.

Part of this racial discrepancy may be attributed to the high number of callers from rural areas – which have a higher ratio of white residents. It may also indicate that non-white populations are not aware of the resources provided by Ecology.

(Note: State demographics for language, religion, and professional status are not available at this time.)

■ **Language – English**

Currently, HSIEO does not offer any services for non-English audiences and only advertises services in English language phone books. Thus, it is not surprising that 96.5 percent of callers prefer English as their first language.

■ Religion – Christian

Breaking down caller demographics by religion, 74.2% of all callers are Protestant, with 20.7% Catholic.

■ Occupation – Mixed

16.6% of callers are retired, while 38% are professionals.

County Distribution of Callers

The top five counties with the highest ratio of callers to population are Columbia, Ferry, Clallam, Stevens, and San Juan. These are among the smaller counties in Washington, with none over a population of 30,000. However, the total number of calls from these five counties is only 82.

These counties are more rural, have slightly older heads of households, a higher share of married households, a higher percentage of White/Caucasian, a greater incidence of home ownership, somewhat larger household sizes, and slightly lower incomes than the state average.

Pierce County has the most callers (350 callers or 22.1% of all callers). In addition, Pierce County has the highest ratio of callers to population among the larger counties in the state – ranking sixth on the overall county list.

This is an anomaly among the data and will be explored with Pierce County Moderate Risk Waste Program staff to discern what may be motivating callers. In contrast, King County, the largest county, has an index of just .64 – considerably under-indexing relative to its population.

Eight out of the 11 counties with the lowest indexes were in Eastern Washington. Residents on the east side of the state may be unaware of the resources available to them in Olympia, or are less interested in environmentally related topics.

Zip Code Distribution of Callers

An analysis of callers by zip code revealed similar demographic findings to that of the county analysis.

Twelve of the 30 zip codes associated with callers are in Pierce County. Pierce County zip codes represent 7 of the top 8 zip codes in a ranking using the ratio of callers to population by zip code.

Sequim was the number one ranked zip code. The type and long length of homeownership associated with this zip code is likely influenced by the presence of retirement communities (where phone numbers change less often).

PRIZM Analysis

The PRIZM NE lifestyle system, developed by Claritas, is a "neighborhood lifestyle segmentation" system that classifies all U.S. households into one of 66 categories based on census data, leading consumer surveys and media measurement data, and other public and private sources of demographic and consumer information. Claritas updates PRIZM NE annually to reflect the latest available demographic and consumer information.

PRIZM NE operates on the principle that "birds of a feather flock together." It's a worldwide phenomenon that individuals with similar cultural backgrounds, needs, and perspectives naturally gravitate toward one another. They choose to live in neighborhoods offering affordable advantages and compatible lifestyles.

One of the fundamental elements of PRIZM is identifying the type of neighborhood or community of each household. Town/ country includes rural and smaller town areas. Suburban includes neighborhoods and bedroom communities surrounding major metro cities like Seattle. 2nd City refers to mid-sized cities such as Tacoma, Everett and Olympia that are not large enough to be major urban cities like Seattle but have a substantial economic base and are larger than the smaller towns. Finally, Urban includes the City of Seattle.

■ Urban Density of Callers

One clear finding is that our callers are mostly from small town or rural communities. Of the 1,581 callers analyzed, 701 are associated with the "Town/country" level of density community. While 34.7% of households statewide are in this type of

community, 45% of HSIEO callers are from this type (30% greater than normal).

The number of callers from the “Suburbs” level of density community is comparable to state population distribution (531), and “2nd City and urban neighborhoods” are represented below average.

PRIZM Land Use Density Categories of Callers

# of Callers	PRIZM “Neighborhood”	Level of Urbanization
701	Town/Country	All other towns
531	Suburban	Suburbs of Seattle, etc.
261	2nd City	Secondary cities (i.e. Tacoma, Spokane)
64	Urban	Major urban (Seattle)

■ Characteristics of Callers by Social Groupings

Almost half (45.1%) of the callers are from the following PRIZM social groupings. HR Inc. uses this information, the demographic information, and their expertise with Washington consumers to make marketing recommendations in the final report.

Rustic Living Group (Index 1.44; 10.9% of callers)

Rustic Living residents are in the nation's most isolated towns and rural villages. As a group, residents have relatively modest incomes, low educational levels, aging homes, and blue-collar occupations. Many of the residents, a mix of young singles and seniors, are unmarried, and they have watched scores of their neighbors migrate to the city. In their remote communities, these consumers spend their leisure time in such traditional small-town activities as fishing and hunting, attending social activities at the local church and veterans club, enjoying country music and car racing.

Country Comfort Group (Index 1.34; 13.9% of callers)

Country Comfort communities are filled with predominantly white, middle-class homeowners. In their placid towns and scenic bedroom communities, these Americans tend to be married, between the ages of 25 and 54, with or without children. They enjoy comfortable upscale lifestyles, exhibiting high indices for barbecuing, barhopping, and playing golf as well as home-based activities

such as gardening, woodworking, and crafts. Reflecting their rural, family environment, they prefer trucks, SUVs, and minivans to cars.

Middle America Group (Index 1.23; 9.6% of callers)

Middle America communities are filled with middle-class homeowners living in small towns and remote exurbs. Typically found in scenic settings throughout the nation's heartland, Middle Americans tend to be white, high school educated, living as couples or larger families, and ranging in age from under 25 to over 65. Like many residents of remote communities, these conservative consumers tend to prefer traditional rural pursuits: fishing, hunting, making crafts, antique collecting, watching television, meeting at civic, and veterans clubs for recreation and companionship. Friday nights are for celebrating high school sports.

Landed Gentry (Index 1.19; 10.7% of callers)

Widely scattered throughout the nation, the Landed Gentry social group consists of wealthy Americans who migrated to the smaller boomtowns beyond the nation's beltways. Many of the households contain Boomer families and couples with college degrees, professional jobs—they are twice as likely as average Americans to telecommute—and have expansive homes. With their upscale incomes, they can afford to spend heavily on consumer electronics, wireless and computer technology, luxury cars, powerboats, books and magazines, children's toys and exercise equipment.

Marketing Recommendations

Ecology’s goal with this project is to better understand callers using the HSIEO toll-free phone line. The purpose is to translate these insights into marketing and communication tactics and strategies that encourage additional use of the phone line for information and reporting.

Results indicate a pattern of callers that is geographically large and diverse. Densities in rural counties do not provide manageable specific target marketing areas. No one segment of callers or group of segments is overpowering. This creates a budget conundrum; how does Ecology take limited

resources, reach such a large and diverse area, and yet provide the marketing needed?

Key to the HSIEO's future success is awareness of available services. This will require a focused and carefully managed marketing and communication strategy. A major element will be the development of a HSIEO brand. This is not necessarily a new name or a cute symbol, but an overall image and presentation that is well-coordinated and speaks with one voice no matter which medium is used. It is recommended that an outside marketing and communication consultant be retained to develop the brand and manage its implementation. This can be either a full service Advertising Agency or a Public Relations firm with experience marketing messages to diverse constituents. As part of the branding program, key metrics for communications roll-out and awareness measurement will need to be established.

Because of limited existing personnel and production resources within Ecology, the consultant would be responsible for the following areas:

- Brand development
- Concept development
- Campaign creation and management
- Creative direction
- Design services as required
- Copywriting services as required
- Press Release and Communication input and guidelines for program consistency
- Production management
- Video production
- Consultation and program review

The recommendation is that most of work and production be handled within Ecology, requiring only strategic and tactical participation by the consultant once an overall marketing/communication plan is established. Those tasks that cannot be efficiently handled in this manner, the consultant would take on as assigned projects. Research designed to understand the various audiences and the effectiveness of the marketing/communication plan should be designed and implemented. The current study was based on appended telephone records of non-business calls to the phone line. The collection of these numbers and

appending in two-year cycles would help measure change longitudinally (over time), for example. An increased call sample size would help verify whether the awareness and key messages are increasing use of the phone.

One future challenge will likely be an increased use of cellular phones as the primary point of connection for households, particularly with younger populations. The ability to append to these numbers will be increasingly difficult, resulting in the necessity to use other forms of data collection technologies to understand phone users.

Though the web is now a primary source of information for most individuals, the convenience of the phone for an initial contact is still highly desired. A staffed phone line with the ability to redirect callers to local programs by pass-through connection (direct phone connection) would be highly valued by a public that is more and more time conscious. The fewer steps a caller has to take to get information or report a potential problem, the better. People still prefer to talk to a real person.

The HSIEO should explore a new phone number. The goal would be a number that is memorable and has secondary meaning as part of an overall marketing/communications plan. For example, if the HSIEO could obtain a number like 800-123-4567, the simplicity of the number works mnemonically and provides an opportunity to deliver messages built around seven key actions or understandings.

Online information and education is extremely important, and easy navigation to areas of interest or answers is critical. Any branding done for the HSIEO should include the web as well as all other media and communications. The web site should become the primary ongoing resource and point of communication for the public.

Major measured media (television, radio, newspapers) opportunities are numerous and should be explored. Though expensive, using these media would provide an opportunity to reach concentrated mass audiences with targeted messages. The dispersion of HSIEO callers indicates that all target populations fall within the primary ADI's (media

defined Areas of Dominant Influence) of the state. It is true that these ADI's cover the major metropolitan areas that have their own hazardous substance programs, however they also correlate with the identified secondary, tertiary, suburban, and rural markets that have the greatest propensity to use the HSIEO phone line.

This is not to say that these forms of mass communications do not come without their own challenges. I-pods, satellite radio, cellular broadcasting, Blackberries', and the web are increasingly taking attention away from television, radio and newspapers. The web is becoming a dominant force in the presentation of news and entertainment. Plus, localized broadcast television has given way to cable and satellite forms of delivery, which means delivery of localized messages has become challenging. However, television is still the most viable way to reach the largest audience and build awareness.

A suggested tactic in the use of television would be a blend of purchased and public service spots. The spots would be 10 – 15 seconds in length and use the same strong attention-getting device. Working closely with various broadcast entities in each media market plus the cable businesses, the HSIEO may find unique opportunities relative to unsold or inexpensive inventory in other than prime-time programming. Even 5-second spots or the banner position on the bottom of the screen on local newscasts or NW Cable News may be a viable option. A campaign rollout would be an important PR opportunity. Again, the objective of the communication should be awareness.

Radio offers some of the same opportunities, but on a more limited scale because it is an over-the-air broadcast medium. Some radio stations are now simulcasting on the web and this trend will grow. The messages and strategy should be the same as television. One unique opportunity is to be able to use ethnic language stations throughout the state. Also, banner ads tied to web broadcast and news sources are recommended.

Outdoor media is normally defined as billboards and transit signs (exterior and interior bus cards). Outdoor media has traditionally been used to build

awareness through reach and frequency against a single message or image. It is best used in conjunction with other media at the same time (television/outdoor or radio/outdoor for example). Outdoor media has a tendency to be more clustered in the major metropolitan markets. As transit reaches further and further into the suburban and rural areas of primary counties, particularly in western Washington, outdoor media would be a valuable part of the media mix for the HSIEO.

Newspapers continue to lose circulation and readership. As a medium, it is most valuable to HSIEO for Public Relations opportunities and story creation. Because of an increasing trend in online readership by current subscribers to the major regional newspapers, banner advertising may be a cost effective way to reach this audience.

Mail is still a powerful way to disseminate key messages. With the State of Washington's internal printing resources, coordinated household mailings are highly advised as a means to spread the brand and position the resources of the HSIEO. Additional opportunities may include working with local governments, banks, credit unions, insurance companies, doctors and dentist offices, major retailers, or any company or organization that sends out monthly statements by including an insert with their mailing.

The phone companies have historically sold lists of new move-in connects for direct marketing, which would work well for an introduction. The inclusion of a magnet with the phone number may be a good continuing reminder source. Moving companies and U-Haul and Penske franchisees, plus other moving related companies could include materials with every rental transaction. Equipment rental companies should also have this available for their customers.

Yellow Pages and phone books have been the key advertising and awareness vehicle for the HSIEO phone line up to this point. As time progresses, the effectiveness of this type of advertising will diminish due to the increased use of the web to provide traditional phone book services. It will be important to explore being part of online phone books and continue to have a presence in the State

Government section of the White Pages as long as they are being published.

As part of the awareness campaign, a coordinated plan of communication and education should be used. The campaign should provide information as well as point individuals to the web site.

Opportunities include but are not limited to:

- Libraries
- Schools (public and private K-12) including school districts
- Community Colleges and Universities
- The Health Care community
 - Organizations such as
 - Chambers of Commerce
 - Rotary
 - Service organizations such as the Lions, Volunteers of America, etc.
 - Churches
- Clubs including
 - Automobile and motorcycle in all of their forms
 - Fishing and hunting
 - 4H, Horse and agriculture
 - Gardening
- Manufacturers (focusing on employee education and awareness)
- Unions (focusing on member education and awareness)
- Youth organizations

The HSIEO has had limited communications packaging, budgets, and marketing resources. Therefore, a key recommendation is a strategy of macro to micro. The need is to raise awareness followed by education and increasing understanding. Chosen tools (media) and techniques will become obvious once the branding takes place and a clear positioning of services are established, followed by strategically targeting key identified audiences.

To this end, a strategic marketing/ communications plan to accomplish the recommended actions should be developed that contains a two-year budget and strategy.

The estimated budget for statewide marketing and communications that incorporates all the above described methods is \$300,000 in year one, and \$650,000 in year two. Given this is much greater than available funding, a marketing/ communications plan should be developed that contains a subset of the recommended actions focused on priority audiences and communities, and a roll-out covering longer than two years.

To access the full report, go to <http://www.ecy.wa.gov/biblio/0704010.html>

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