

LOCAL RADIO SYNDICATED SERVICES DESCRIPTION OF METHODOLOGY

DIARY AND PPM RADIO MARKET REPORTS/EBOOKS

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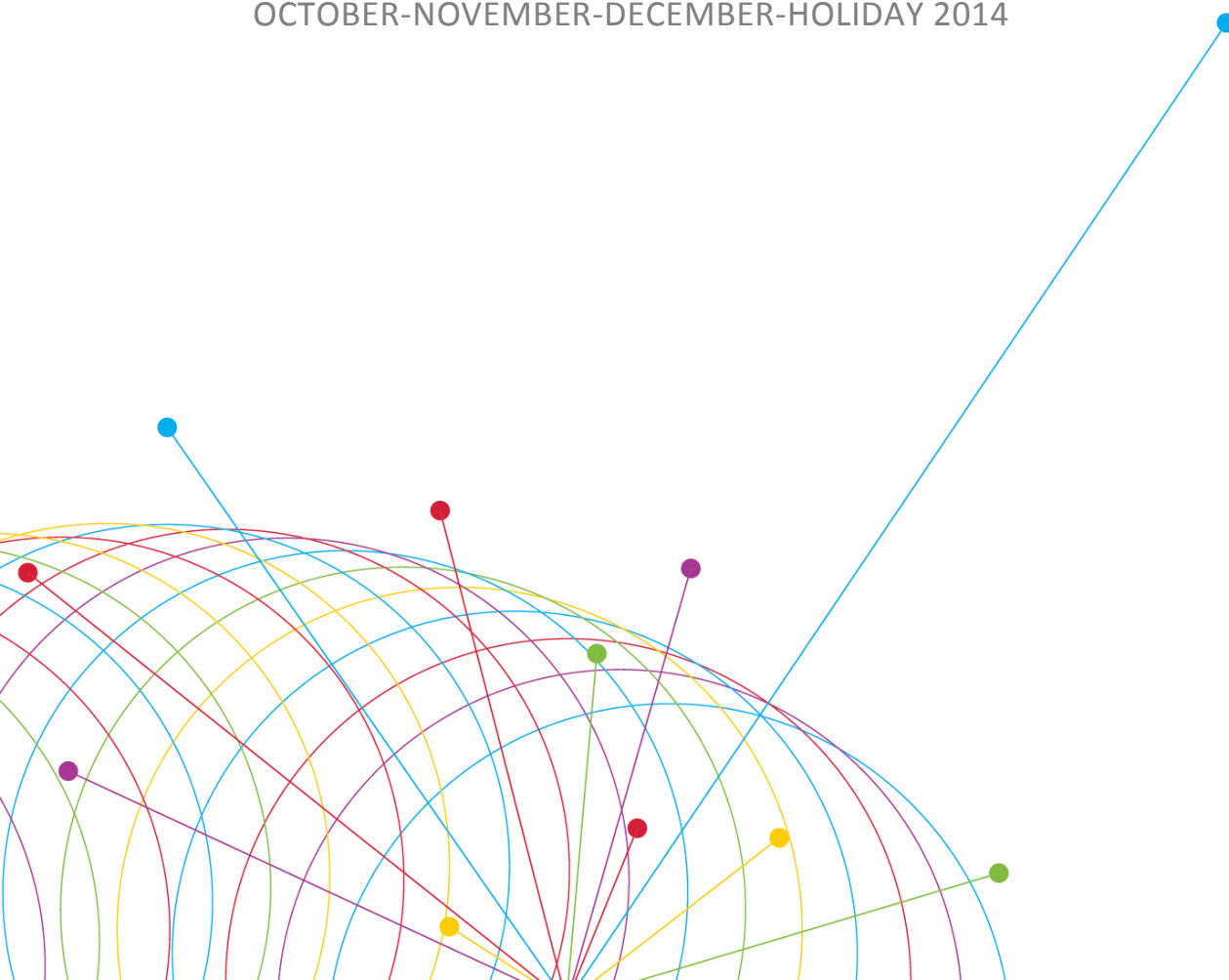


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CHAPTER ONE

INTRODUCTION

In our local radio syndicated services, we report our opinion of the size and demographics of radio station audiences. We report our currency estimates in the *Radio Market Report/eBook* and a suite of software programs that support it.

LOCAL RADIO SYNDICATED SERVICES DESCRIPTION OF METHODOLOGY

This book is the *Local Radio Syndicated Services Description of Methodology* (DOM). It provides a high-level description of the methodology, policy, and procedures we use to determine the estimates that we report in the RMR/eBook for markets in the 50 United States, the District of Columbia, and Puerto Rico.

We prepared this volume as a reference tool to help users of the data better understand how we determined the estimates and what the estimates represent.

Readers should be mindful that how we determine estimates for our other services, software programs, custom studies, special reports, and research tests, and how third parties prepare reports that use our currency data, may differ from the methodology we describe here.

SCOPE

The DOM provides a high-level overview of how we define markets, our sampling methods, the survey instruments, our data collection and processing steps, and applicable reporting policies.

It also includes a brief overview of the principals of statistical reliability, explanations of what the estimates represent, information about our rating distortion and rating bias policies, warnings regarding the use of the data, a detailed description of the data's limitations, and a glossary.

The information in this DOM is for general purposes only; the DOM is not a complete inventory of all local radio syndicated service methodology, policy, or procedure.

NAME

We generally publish a new version of the DOM once each quarter. We name each DOM for the Diary Survey and PPM reporting months to which it applies. We place the DOM's name prominently on its cover and in each page's footer.

While we will generally use the same methods, policies, and procedures from one survey to the next, these *may* change. Therefore, the reader should not presume that any information in a specific edition of the DOM will *also* apply to the present moment or in the future.

Prior to the start of each report period and survey, we announce new and/or changed methods, policies, and procedures on the 'Pre Survey Bulletin' (PSB). During the interval between DOM updates, please see the PSB for additional information.

ACCESS

Clients may access the DOM via the “Methodology” links in the RMR/eBook.

We will not grant non-clients access to the DOM.

COPYRIGHT

This *Local Radio Syndicated Services Description of Methodology*, including all Nielsen ratings, data, and other content, are protected under United States copyright and trademark laws, international conventions, and other applicable laws. It is provided subject to the Restrictions on Use and Limitations set forth in this *Local Radio Syndicated Services Description of Methodology*. You may not quote, reference, link to, frame, copy, modify, distribute, publicly display, broadcast, transmit, or make any commercial use of any portion of this *Local Radio Syndicated Services Description of Methodology* without prior written permission from Nielsen.



WHAT MRC ACCREDITATION MEANS

The Diary-based *Radio Market Report* service has been accredited by the Media Rating Council (MRC) since 1968. Accreditation applies to all markets measured as a part of the Diary service that are located in the 50 United States and the District of Columbia.

The PPM-based *Radio Market Report* service has been accredited by the MRC in:

Atlanta (accredited March 2011)	Minneapolis-St. Paul (accredited January 2010)
Baltimore (accredited July 2012)	Nassau-Suffolk (Long Island) (accredited August 2013)
Charlotte-Gastonia-Rock Hill (accredited February 2013)	Philadelphia (accredited March 2011)
Chicago (accredited February 2013)	Phoenix (accredited March 2011)
Cincinnati (accredited March 2011)	Pittsburgh, PA (accredited August 2013)
Cleveland (accredited August 2013)	Portland, OR (accredited August 2013)
Dallas-Ft. Worth (accredited August 2013)	Riverside-San Bernardino (accredited July 2012)
Denver-Boulder (accredited August 2013)	San Antonio (accredited July 2012)
Detroit (accredited August 2013)	San Diego (accredited February 2013)
Houston-Galveston (accredited January 2007)	San Francisco (accredited February 2013) <i>San Jose is not currently accredited.</i>
Kansas City (accredited March 2011)	St. Louis (accredited March 2011)
Los Angeles (accredited July 2012)	Tampa-St. Petersburg-Clearwater (accredited July 2012)
Miami-Ft. Lauderdale-Hollywood (accredited August 2013)	
Milwaukee-Racine (accredited March 2011)	

To merit continued MRC accreditation, Nielsen:

1. Adheres to the Council's Minimum Standards for Media Rating Research;
2. Supplies full information to the MRC regarding details of its operation;
3. Conducts its measurement service substantially in accordance with representations to its authorized users and the Council; and
4. Submits to, and pays the cost of, thorough annual audits of accredited Nielsen services by CPA firms engaged by the MRC.

In addition to paying sizable audit charges, Nielsen provides office and file space for MRC auditors as well as considerable staff and computer time involved in various aspects of the audit.

Further information about the MRC's accreditation and auditing procedures can be obtained from:

Executive Director
Media Rating Council, Inc.
420 Lexington Avenue, Suite 343
New York, NY 10170

CHAPTER TWO

SURVEY AREAS

In the RMR/eBook service, we report audience estimates for radio stations in different survey areas. This chapter provides a broad overview of those areas, the key policies we used to define them, and information about the Metro's life cycle. The information in this chapter is for general information purposes only, and does not constitute the full body of our methodology, policy, or procedure.

THE SAMPLING UNIT

We build our survey areas by grouping "sampling units" together. A sampling unit may correspond to a county, a county equivalent (such as a parish or incorporated city), or a portion of a county.

THE METRO

The Metro Survey Area, or "Metro," is the radio market's primary mercantile area. Generally, the Metro includes the market's population center; areas with similar commuting patterns bordering the Metro; and the radio stations that serve the area direct their sales, marketing, and promotional efforts toward persons that live and/or work in the Metro.

An *embedded Metro* is a unique mercantile area that is within the boundaries of a larger Metro. We use a detailed set of criteria determine where to establish an embedded Metro. These criteria are very narrow and apply to very few markets; additional information is available upon request.

DESIGNATED MARKET AREA¹ REGION

The Designated Market Area (DMA[®]) region is a geographic region used to report television audiences. In the RMR/eBook Service, we report DMA region-level audience estimates for select markets two times per year. In the Houston-Galveston market, each issue of the *Radio Market Report* includes DMA region audience estimates.

TOTAL SURVEY AREA

A Total Survey Area, or "TSA," includes all of the market's Metro counties and surrounding counties where respondents report listening to Home-to-Metro stations.

For a county to be in a market's TSA, a minimum of 10 In-Tab diaries must have been returned from the county, Home-to-Metro stations received a cumulative 10 mentions or more in those diaries, and mentions to the Home-to-Metro stations must have accounted for at least 15% of all mentions.

¹DMA[®] is a registered trademark of The Nielsen Company (US), LLC.

CUSTOM SURVEY AREA

We may also prepare a report for a custom survey area. Examples of custom area reports include regional reports and reports for a survey area specified by the party that commissioned the report.

MARKET NAME

A market name is descriptive of the area surveyed. A market's name generally reflects the common name of the mercantile area and may include the name of a city or county, the market's nickname, or other preferred term. We use a two-letter state abbreviation to differentiate markets that have the same name, markets that include counties from multiple states, and/or smaller markets. This Market Name guideline applies to Radio Metros and Custom Survey Areas only.

GEO SPLIT COUNTIES

To account for significant differences in radio listening patterns in one part of a diary-measured county as compared to another part of that county, we may "geo split" the county into smaller pieces.

Once split, we treat each of the subdivided pieces of a geo split county as individual sampling units. We apply a structured set of criteria to determine if a county should be split.

We do not geo-split PPM-measured counties; instead, we may establish 'Geo Zones' in these counties. For additional information on Geo Zones, see Chapter Three of this *Description of Methodology*.

DIFFERENTIAL SURVEY TREATMENT

A differential survey treatment (DST) is a special procedure we use to help maximize participation in the survey or panel by Persons in a demographic group with a history of under-representation in survey research.

The specific procedures we apply as part of a DST may vary from Metro to Metro. When determining these procedures, we take marketplace, demographic, and research considerations into account.

We will apply a Black DST in any Metro when the Metro's Persons 12+ population is at least 10% Black *or* when the Metro's Black population numbers 75,000 persons and accounts for between 5% and 10% of the Metro's Persons 12+ population.

We will apply a Hispanic DST in a PPM-measured Metro when the Metro's Persons 12+ population is at least 10% Hispanic *or* when the Metro's Hispanic population numbers 75,000 and accounts for between 5% and 10% of the Metro's Persons 12+ population.

We will apply a Hispanic DST in a Diary-measured Metro when *either* the Metro's Persons 12+ population is at least 10% Hispanic *or* when the Metro's Hispanic population numbers 75,000 and accounts for between 5% and 10% of the Metro's Persons 12+ population, *and* at least one of the following statements is true for the Metro: we apply a language usage or a Hispanic weighting model in the Metro; we prepare a Hispanic Summary Data Set for the Metro; at least one of the Metro's counties includes a

High Density Hispanic Area (see below); or a Spanish-language radio station is home to the Metro. We apply these criteria to Diary Metros to help minimize the potential impact to audience estimates that could result in those Metros from applying a DST to a population with low Hispanic proportionality.

Prior to the start of the spring survey/April report period each year, we evaluate each Metro that has a DST to determine if we should apply the DST in future surveys/report periods. In addition prior to the start of the fall survey each year, we further evaluate Diary Metros for application of Hispanic DST.

HIGH-DENSITY AREAS

A High-Density Area (HDA) is a zip code-defined area within a Metro county in an ethnic DST market that includes a high concentration of ethnic (Black or Hispanic) populations. For sampling purposes, we treat an HDA as a discrete sampling unit. Doing so helps to improve the In-Tab sample's ethnic representation in that area. An HDA may also be eligible for separate weighting and individual reporting (subject to applicable criteria).

We will establish a Black HDA in a sampling unit if the zip codes that we intend to include in the HDA have a collective In-Tab target of 21 or more and if 35% or more of all persons living in each of those zip codes is Black.

We will establish a Hispanic HDA in a sampling unit if the zip codes that we intend to include in the HDA have a collective In-Tab target of 21 or more and if 40% or more of all persons living in each of those zip codes are Hispanic.

In select sampling units, we may establish both a Black and Hispanic HDA.

Two times each year, we evaluate all DST Metros to determine if zip codes should be added or removed from the Metro's HDAs. PPM Metro HDAs may be subject to Geo Zone review. Additional information regarding DSTs and HDAs is available upon request. For additional information on Geo Zones, see Chapter Three of this *Description of Methodology*.

METRO START-UP

In order for us to start a new Metro service, the area must have a population of at least 50,000 Persons 12+; 30% of all radio listening returned in diaries from the proposed Metro's counties must be credited to stations that would be home to the Metro; at least 15% of commuting in the area must be either inter county or to another county in the proposed Metro; and the Metro service must have a station subscriber or prospect.

METRO REDEFINITION

To help ensure that a Metro appropriately reflects the marketplace, we may add or remove counties from the Metro (e.g. 'redefine the Metro').

A county is eligible to be added to the Metro if the county is contiguous to another Metro county, if at least 55% of radio listening in that county was credited to stations that are home to the Metro, and if the sum of the county's percent of listening to Metro stations plus the county's percent of commuting into the Metro is 70% or more.

We identify counties that meet these criteria during a set of structured analyses. We prepare a Metro redefinition analysis as often as once each calendar year for a Diary measured Metro and as often as once every three calendar years for a PPM measured Metro. We conduct a redefinition analysis for all Metros following the release of each decennial U.S. census.

After careful review of the analyses findings, Home-to-Metro clients may elect to amend their licensing agreements to include the additional counties in the Metro or leave the Metro's roster of counties as is. By amending their license agreements, authorized users agree to the cost of any sample increase needed to maintain the statistical reliability of the redefined Metro's audience estimates. The users also agree to a three-year freeze on additional redefinition analyses in that Metro.

METRO CANCELLATION

We may cancel a Metro service at any time. It is not likely, however, that we would cancel a Metro service to which a station subscribes or to which there is a prospect.

Upon cancellation, all research activity in the Metro in the context of the *Radio Market Report* service ends, and the countdown on the authorized user's window of access to the Metro's data starts (as outlined in the conditions of the user's license agreement).

We will continue to place Diaries in the cancelled Metro's counties during future surveys for our Nationwide, RADAR[®], and Radio County Coverage[™] services.

In response to *extraordinary* conditions that radically changed the market or disrupted business within it, we may elect to cancel a Metro in order to start a new, different Metro in its place. As the loss of all historical data for the cancelled Metro is a byproduct of this approach, it may lead to additional marketplace disruption. This approach may not be an option available to all Metros.

RESERVATION OF RIGHTS

All determinations regarding Nielsen survey areas remain solely with Nielsen. We reserve the right to modify, waive, or suspend any element of our policy as business conditions or research considerations warrant.

CHAPTER THREE

SAMPLING AND RECRUITMENT

This chapter provides a broad overview of the methodology we use to select and recruit respondents to participate in Diary surveys and PPM® panels. The descriptions included in this chapter are for general information purposes only, and do not constitute the full body of our methodology, policy, or procedure.

DIARY SURVEYS

a. Sample Universe

The Universe for Diary Surveys is Persons aged 12 and older.

b. Sample Target

A Diary Metro's sample target is the In-Tab sample size objective for that Metro. In concept, the sample target for a particular demographic is a root function that reflects that demo's proportion of the 12+ population. Additional information on the algebraic formulae used to determine a sample target is available upon request.

A non-Metro sample target reflects the market's "effective sample base" (ESB). The ESB provides an estimate of the size of a simple random sample that would be required to provide the same degree of reliability as the sample for a complex survey such as a Radio Diary survey. Additional information on the algebraic formulae used to determine an ESB is available upon request.

c. Sample Frame

In Metro counties, the survey sample frame is a hybrid "landline/address" frame that includes both residential phone numbers and addresses.

In non-Metro counties and counties that are not a part of any market segment, the survey sample frame is residential telephone numbers.

The sampling process begins when the data vendor provides us with a list of addresses and with a list of telephone hundred blocks (e.g., groupings of 100 telephone numbers where at least two are residential phone numbers). The vendor filters the lists to exclude known part-time residences, businesses, and group quarters dwellings (such as barracks, a dormitory, or a prison).

d. Selection From the "Landline Frame"

One may refer to the telephone number portion of the sample frame as the "landline" or "RDD" (e.g., "random digit dial") frame.

Within each Metro, the sampling system (and/or a data vendor) randomly selects numbers from the hundred blocks; an interviewer then calls the number to attempt to recruit the household to participate in the survey. To help ensure that we apply the same recruitment procedures to

households, a centralized computer-assisted system manages respondent communication. English-Spanish bilingual interviewers are available to speak with a household as necessary.

Within each market, the sampling system organizes the telephone numbers into several different categories that reflect whether the telephone number is listed or unlisted and whether or not the address that corresponds to the telephone number is known. We report sample performance metrics for these categories as applicable.

e. Selection From the Address Frame

One may refer to the address portion of the sample frame as the “address-based” or “ABS” frame.

The Sampling system (and/or a data vendor) randomly selects addresses in the market and attempts to match each to a landline telephone number. Any address that can be matched to a phone number is discarded from the address frame because that household is already eligible for selection from the landline frame.

Next, we mail a short questionnaire to the selected addresses. If the household returns a completed questionnaire, we place that household in the pool of households to which we may send Diaries.

Each week during the survey, we review the market’s in-tab and sample performance; we may select households from the pool and mail Diaries to the selected households as research considerations warrant. As always, our goal is for the market’s In-Tab to hit the applicable target and maintain appropriate proportionality.

Note: our vendor includes select demographic information with addresses (as applicable) in both the landline and address frames. We use this data during the sample ordering process to help improve the final in-tab sample’s proportionality, particularly for young persons and persons of Hispanic origin.

f. Incentives

We use a complex and multi-tiered set of incentives to secure a respondent’s participation in the survey. The types and values of the incentive(s) offered to a respondent, and the schedule for distributing the incentive to the respondent, will vary depending upon that respondent’s demographic characteristics and location. We apply special procedures for Persons 18-34 in all markets and for Black, Hispanic, and Black/Hispanic persons in applicable High Density Areas.

g. Second Chance

In continuously measured sampling units, landline households that consented to participate in the survey but that did not return any diaries are offered a “second chance” to participate in the survey. An interviewer re-contacts applicable households by phone approximately four calendar

weeks after the household's original survey week in order to determine if the household's eligibility to participate in the survey has changed, to re-verify the respondent's name and address, and to gain consent to send new diaries. If the household is still eligible to participate, we will mail the household another set of diaries.

PPM PANELS

a. Universe

The Universe for PPM panels is Persons aged 6 and older living in the Metro.

b. Sample Target

A PPM Metro's sample target represents the number of different In-Tab panelists that we believe will yield a statistically reliable sample for the panel on a media day. Factors we consider when determining a Metro's target include the Metro's population, additional sample purchased for the report, and/or other factors. We reserve the right to adjust a Metro's In-Tab target as business conditions or research considerations warrant.

c. The Sample Frame

The sample frame for PPM panels is a list of residential addresses. A sample vendor filters the list to exclude known part-time residences, businesses, and group quarters dwellings (such as barracks, a dormitory, or a prison). The vendor attempts to match each address on the list to a telephone number. The vendor will successfully match a large subset of the addresses to phone numbers.

d. The Address Pool

The vendor provides addresses and any matched phone numbers from the list; at this stage of the process, each of these records represents a household. The sampling system will store these households in an address pool. We will select households for sample prep from this pool as necessary. A household is retired from the pool if the sampling system does not select that household within two years from the date it was provided from the vendor.

e. Sample Prep

During the sample prep select, the system classifies each household as a Basic or as an Alternate. This classification is important because we use different approaches for recruiting Basic and Alternate households.

In order to increase the number of households with eligible demographics within the recruitment pool, we use differential sampling rates for the demographic strata. This approach increases the probability that the enumerated households will have demographic characteristics that address the recruitment pool's needs.

An interviewer will call any household for which a telephone number was matched to an address. When the household answers the call and provides the interviewer with the household's demographic information, the sampling system places that household in the pool of households for recruitment via a telephone interview.

We mail a short questionnaire to the households in the pool for which a telephone number wasn't matched to an address. When the household returns the questionnaire and provides the household's demographic information and a contact telephone number, that household is also placed in the pool of households for recruitment via a telephone interview.

The sampling system will retire a household from the recruitment pool if it does not select that household within 18 months of its first contact with the household. Because it designates and interviews Alternate households on an ongoing basis, there will always be a pool of households from which the system will be able to select.

f. Basic and Alternate Recruitment

The sampling system randomly selects Basic and Alternate households from the recruitment pool as needed. The system organizes its Basic pool by placing each Basic household into one of two mutually exclusive demographic categories. The system organizes its Alternate pool by placing each Alternate household into mutually exclusive demographic categories. These demographic categories are market specific and may be updated throughout the year based on performance. If a Basic household refuses to participate in the panel, we attempt to recruit an Alternate household to meet the demographic needs of that market's panel.

Telephone recruitment procedures include a complex set of scripted communications, premiums, and incentives. The number of communication attempts, the types of premiums, and the amount of incentives offered may vary from market to market and from demo to demo.

g. In-Person Recruitment

Basic and Alternate households that did not return a completed questionnaire are placed into the pool of addresses that may be selected for an in-person recruitment visit. The sampling system randomly selects these addresses from the pool as needed. A Nielsen representative attempts to recruit the household residing at a selected address during a visit to the household. If the household agrees to participate, the Nielsen representative collects demographic information about the household members, explains the incentive program, provides the household with PPM equipment, and assists with the installation of the equipment.

h. Geo Zones

A “Geo Zone” is a group of zip codes within a county or sampling unit that are in close proximity to each other that contain clusters of residents with similar demographic and socioeconomic characteristics. In PPM-measured counties, we conduct all sampling activities within the context of the Geo Zone (rather than in the larger context of the sampling unit).

Due to the small size of a Geo Zone and the narrow demographic range of respondents within it, using a Geo Zone model in these areas will help the Sampling team exert a greater degree of control over the size and representativeness of the In-Tab sample than would be possible otherwise.

We used a structured set of criteria to determine what zip codes to include in a particular Geo Zone; these criteria took such factors as geography, socioeconomic characteristics (when possible), population density, and that sampling unit’s In-Tab target into account.

We review Geo Zones once each year, and will update a Geo Zone, as applicable, for the October report period.

i. Panel Tenure

The maximum amount of time any household can be in the Panel is 26 months from the date the household first agreed to participate. As a practical matter, it is very likely that we will either replace a household, or that household will choose to leave the panel, well before reaching that maximum.

We will remove a household from the Panel if that household moves out of the Metro, if the household is not compliant with our instructions, or if other changes in the household make the household no longer eligible to participate.

j. Additional Studies

We may recruit Panelists from the market’s currency PPM panel to participate in additional research studies. A PPM panelist will remain eligible to participate in the currency PPM panel regardless of whether he or she agrees to also participate in the additional studies.

k. Ascription of Demographic Information

Our interviewers collect a wide range of demographic information from households and panelists. We use a subset of this information to weight the In-Tab sample. We will not include a Panelist in the In-Tab sample if that Panelist does not provide information necessary for sample weighting.

We use another subset of this information purposes unrelated to sample weighting. While unlikely, it is possible that a household will have been recruited without having providing the full complement of this non-essential information. To account for missing data in this data set, we will ascribe a value for missing household income, personal education, and birth month to a panelist as necessary.

(Users of the data should be mindful that these characteristics may be used as weighting variables in other services and reports; ascription rates are disclosed in applicable reports.)

I. The Houston-Galveston Panel

The Houston-Galveston panel was the PPM demonstration panel. As such, there are procedures in Houston-Galveston that are different from all other PPM Metro services. This section addresses some of the key differences.

The Houston-Galveston market includes all Metro and non-Metro counties in the DMA region. The sample frame for the market is a list of residential addresses.

The sampling system organizes the addresses by census blocks within the address' sampling unit or "cluster." Next, the system randomly designates one address as the Basic and the remaining addresses as Alternates; a cluster will always contain one Basic address and up to 75 Alternate addresses. We mail a questionnaire to each Basic address on the list to collect some general demographic information about the household residing at that address.

Because they system designates Basics and Alternates within the cluster, a particular Alternate is always within close geographic proximity to the Basic that it may someday replace.

Our first attempt to recruit a Basic household is via telephone interview. If the household refuses to participate in the panel, we will send a representative to recruit the household with an in-person visit to the household. If the household cannot be recruited either via a telephone interview or an in-person visit, we will attempt to recruit an Alternate household that is demographically similar to the Basic on the predetermined matching criteria.

CUSTOM SURVEY AREA REPORTS

A Custom Survey Area's (CSA) target is based upon each sampling unit's proportion of the CSA's total 12+ population. Should a CSA sampling unit have more than one sample target, we will use the higher of the targets. We may add extra sample to the CSA per the customer's specifications or as business conditions warrant. In our data and reports, we designate sample ordered exclusively for a CSAR by appending the word "Special" to the county name (e.g., "Floyd County Special, Georgia"). CSA sampling units are eligible for differential survey treatments as described above with the exception of regional or state CSA's that are not eligible for DST as a whole.

SAMPLE PERFORMANCE METRICS

We report sample performance metrics for our Diary surveys and PPM panels via a wide range of sample performance metrics including consent rate, return rate, response rate, unified sample performance indicator, average unified weekly In-Tab, alternate response rate, and designated delivery index, as applicable.

RESERVATION OF RIGHTS

We reserve the right to prospectively or reactively change, modify, waive, or suspend any aspect of the methodology, policies, or procedures described herein and/or implement new policy or procedures at any time as research conditions or business conditions warrant.

CHAPTER FOUR

STATION INFORMATION

A data source we use to prepare audience estimates is the facility information we collect from radio stations. The timeliness and accuracy of this information is a key attribute of the estimates' quality.

This chapter provides a broad overview of policy and procedures related to how we collect and maintain station information. The overview offered in this chapter is for general information purposes only, and does not constitute the full body of our methodology, policy or procedure.

THE STATION RELATIONS TEAM

The Station Relations Team manages the collection, input, and storage of reference data from stations. The Station Relations Team is a radio station's primary point of contact for all inquiries pertaining to station information. The Station Relations Team is available during Eastern business hours via telephone at (410) 312-8062, via fax at (410) 312-8619, or via email at rsimail@nielsen.com.

RADIO STATION INFORMATION DATABASE

The Radio Station Information Database (RSI) is the centralized warehouse for station information. The station relations team inputs all of the station information that it collects from stations into this database. The RSI database includes multiple safeguards that help to ensure that all information input into it conforms to applicable business rules and that the systems drawing information from the database use information pertinent to the survey or report period.

STATION INFORMATION

The information we collect from AM, FM, and HD-multicast stations include the station's call sign, frequency, station name, and format. We also collect information about the station's broadcast plant including its FCC-designated city and county of license, effective radiated power, height above average terrain, the station's mailing address, email address, and telephone numbers.

Should an AM, FM, or HD-multicast station indicate that the station streams its signal, we collect additional information about the stream.

FM TRANSLATOR INFORMATION

Should an AM, FM, or HD-multicast station indicate that the station is retransmitted on an FM translator, we will note the translator's dial position as an "alternate address" for the station in the station information database and crediting tools.

ONLINE STATION INFORMATION FORM

A radio station may request a station information update at any via the online Station Information Form. When a station submits an update request via this form, a member of the Station Relations team will

review the requested update, confirm that it conforms to applicable business rules, and update the station's information in our database. In some circumstances, the Station Relations associate may contact the station for additional information.

We recommend that all station General Managers, Operations Managers, and Program Directors log into the online Station Information Tool on a regular basis to review the station's information and confirm that it is accurate, complete, and up-to-date. At a minimum, we recommend that a station review its station information in advance of each quarterly survey period.

IMPORTANCE OF UP-TO-DATE STATION INFORMATION

The PPM system processes audience information every day. For this reason, it is in a station's interest to have up-to-date information on file for the station at all times. If a station's information on file is out of date, there is risk that the system may use the out-of-date information to process audience estimates.

We encourage stations to notify us of a change in the station's call sign, frequency, station name, or contact information as soon as possible after the changes take place. Stations may wish to notify us of impending changes before the changes take place. In such circumstances, we keep information regarding the upcoming changes confidential.

ONLINE STATION PROFILE

A subscribing radio station may review our station information files for current survey or report period by accessing the Online Station Information profile via the applicable link on the station's login page.

UNIQUE MARKETPLACE CONDITIONS

During a survey or report period, stations in the same market, or stations that have overlapping signal coverage areas, may make facility changes that introduce ambiguity regarding a station's identity or dial position. Examples of these unique marketplace conditions include when a station moves from one dial position to another, when two stations "exchange" dial positions, or when two (or more) stations within the same area use the same call sign during the survey.

In such instances, we determine the call sign with which to label the station's estimates based upon analysis, interpretation, and verification of information provided by the stations and on file with the FCC.

We disclose information related to such unique marketplace conditions in the report's "Special Notices."

OFF-AIR STATIONS

"Off-air" stations are not eligible for crediting or reporting in the RMR/eBook service. We will classify a station as off-air when the station has ceased regular broadcasting and the FCC has terminated the station's license, or if the license's owner has let the license expire, or if a licensed station has been dark for a period of six continuous calendar months.

CHAPTER FIVE

ENCODING

This chapter provides a broad overview of our PPM encoding technology and the key policies we developed to support it. The descriptions in this chapter apply to the local syndicated radio services only; policies and procedures for other services, and for media outlets other than radio stations, may differ from those described here. The descriptions included in this chapter are for general information purposes only, and do not constitute the full body of our methodology, policy, or procedure.

WHAT IS A PPM CODE?

In the scientific sense, a PPM code is a sound wave. In the sound wave are an attention signal that indicates to a panelist's meter that additional information is forthcoming, a unique station identifier, a time stamp that notes the time the encoder transmitted the code, and other information. The format of PPM codes and the specific information included in them are confidential, patented, and proprietary.

THE ENCODER

A PPM encoder is the piece of studio equipment that inserts PPM codes into a media outlet's audio signal. As it inserts the code into the outlet's signal, the encoder continuously analyzes the audio to determine the amplitude at which to insert it so that it will not be audible.

We recommend that a station install its PPM encoder in its air chain after all of the station's audio processing equipment; by doing so, the signal input to the encoder will reflect the acoustic properties of the on-air signal.

Additional information regarding PPM encoding best practices is available in the 'Policy & Guidelines' section of Nielsen Answers, in the technical manuals we provided with your encoding equipment, or upon request.

STATIONS ELIGIBLE TO ENCODE

AM, FM, and HD radio stations that are FCC-licensed to a county in a PPM Metro's DMA region, or that have signal coverage in a PPM Metro county, are eligible to encode.

The streaming versions of these stations are also eligible to encode.

THE ENCODING AGREEMENT

The Encoding Agreement is a contract that establishes an encoding relationship between a radio station, group, or broadcaster and Nielsen. By signing the agreement, the user agrees to all of the terms and conditions of the agreement, including those relating to the authorized uses of encoding equipment.

THE ENCODING MONITOR

A PPM encoding monitor is a piece of audio equipment that is always listening for a station's encoding. In the event that a station's encoding monitor does not hear the station's encoding, it will alarm.

We encourage station engineers to integrate the station's PPM encoding monitor into the station's critical alarm systems; an engineer that does so helps ensure that he or she will be notified quickly in the event of a monitor alarm.

IN-STATION ENCODING MONITORING

It is the responsibility of an encoded radio station's staff to monitor the station's encoding. Many stations and engineers have made in-station PPM encoding monitoring a business priority.

In circumstances where a station is on-air and its encoding monitor has alarmed for three continuous minutes or longer, the station engineer should enable the station's backup encoder and contact our Electronic Verification Systems Team for additional instruction.

Monitor alarms that are shorter than three continuous minutes in duration generally indicate a temporary lessening of encoding quality or a pause in encoding continuity that is unlikely to affect a station's listening credit.

THE PPM CODE POLICY

Because a station's PPM codes are unique, a radio station must transmit the appropriate PPM codes.

Additionally, the station may not retransmit any other station's PPM codes, nor may it stream it's on air encoding on the Internet, nor may it provide its encoded signal to any other station for retransmission.

Station encoding activities that do not comply with the PPM Code Policy violate the terms of the station's Encoding Agreement and may constitute Rating Distortion.

EAS AND EMERGENCY CONDITIONS

The PPM Code policy does not apply to radio stations during Emergency Alert System broadcasts or tests. Additionally, we may waive the policy for stations that suspend regular programming in favor of special programming in response to a weather event, natural disaster, or other emergency.

FM TRANSLATORS, BOOSTERS, AND REPEATERS

Today, we automatically include audience delivered by a translator in the audience estimates we report for the station that re-transmits its signal on the translator. In light of this reporting policy, and because FCC regulations prohibit them from originating any programming, FM translators, boosters, and repeaters are exempt from the PPM code policy. A translator, booster, or repeater may re-transmit the PPM codes in its host station's signal.

HD1

We automatically include audience delivered via an HD1 (i.e. 'HD primary channel') in the audience estimates we report for the analog FM station. For this reason, the broadcaster may use one encoder/the same PPM code to encode the analog FM and HD1 signals. Because there is no business reason or ratings advantage to encode an HD1 channel with a unique code, nearly all radio stations transmit the same PPM codes in their analog/HD1 signals.

PODCAST RADIO

An encoded radio station may compile a sample of its encoded signal for podcast. To be eligible to receive podcast listening credit, the podcast audio must be an exact copy of the audio broadcast on-air.

CODE LAYERING

Different PPM codes can be 'layered' in the same audio. For example, a particular radio broadcast may include a code for the station that broadcast the audio, another code indicating the radio network that programmed the audio, and another code that identifies the audio content. The presence of codes on these different layers does not degrade the audio's quality or the codes' quality.

For the RMR/eBook service, we use "station" layer encoding only.

DAILY LISTENING DATA REVIEWS

To supplement a station's in-station monitoring, the Electronic Verification Systems team indirectly observes a station's encoding by reviewing unedited data returned from the panel each day.

Should a review indicate a potential encoding issue, a Nielsen broadcast engineer will contact the station engineer. We do not intend for stations to rely upon these reviews as a PPM encoding monitoring service.

UNENCODED INTERVALS

When an encoded radio station is on-air but is not encoded, the station receives no listening credit. Such a period is an "unencoded interval." We list the details of all station-confirmed unencoded intervals in the Special Notices section of the applicable *Radio Market Report*.

"DOUBLE ENCODING"

A station is "double encoding" when more than one of the station's encoders are simultaneously encoding the station's signal. We list the details of station-confirmed double encoding circumstances that occurred in the Monday-Sunday 6AM to Midnight daypart in the Special Notices section of the applicable *Radio Market Report*.

Because a station generally receives credit for each Quarter-Hour of listening when it was double encoded, it is not possible to estimate the degree to which double encoding did or did not affect the station's audience estimates.

HEALTH CHECK

A station engineer can verify that his or her station is encoded and/or provide us with updated technical information at any time via our self-service PPM encoding 'health check' process. For additional information, a station engineer should contact his or her Nielsen Audio contact.

ADDITIONAL INFORMATION

For additional information on the topics included in this chapter, consult the policy briefs available for view on the 'Policy & Guidelines' area of Nielsen Answers, the technical manuals we included with your encoding equipment, or contact a Nielsen Broadcast Engineer.

CHAPTER SIX

PANELIST EQUIPMENT AND PANEL RELATIONS

This chapter provides an overview of the Portable People Meter™ and information regarding how we interact with PPM panelists. The information included in this chapter is for general information purposes only, and does not constitute the full body of our methodology policy, or procedure.

PPM 360

The data collection instrument for PPM panels is the PPM 360.

The PPM 360 resembles a flip-model cellular phone. Inside each meter is a battery, a high-quality microphone, an accelerometer, and data storage/cellular technology. The PPM 360's outer shell includes a small LCD screen that displays messages to the panelist.

We provide each Panelist household with at least two 'in home beacons.' The in-home beacon emits a signal that we use to identify radio listening that takes place in the home.

(Note: today, a small number of our previous generation meters remain in the field. We will sunset these meters organically over time as the households that still use them leave the Panel. These meters work the same as PPM 360; however, we collect data from these meters via a wired connection.)

INSTALLATION

The PPM system is self-contained and plug-and-play; the household does not need any special tools to install the equipment or any special knowledge to use it.

A member of the Panel Relations Team verifies that the household installed the equipment properly via a quality assurance test; a household is not eligible to be In-Tab until it passes this test.

PANEL RELATIONS TEAM

The Panel Relations Team interacts with panelists. Members of that team are available to answer panelist questions, explain the incentive structure, coach panelists, and provide additional support.

By maintaining a dynamic and personalized relationship with panelists, the panel relations team helps to improve the panel's representativeness.

COMPLIANCE

We instruct each panelist to wear or carry his or her PPM, and only his or her PPM, during all waking hours, and to charge the meter when retiring for the day. We closely monitor the extent to which the Panelist complies with these instructions.

As business conditions warrant, we will also monitor a household's data in order to identify circumstances where the household may be using its meters improperly.

Should a Panelist not follow our instructions, we will reach out and coach the Panelist. If we suspect that a household has improperly used its meters, we will contact the household to discuss. If after additional coaching the household's compliance does not improve, we will remove the household from the Panel.

We take special circumstances, such as an employer's prohibition against electronic devices in the workplace or an extended disruption in electrical service, as we evaluate a Panelist's compliance.

TRAVEL

If the panelist will be traveling away from home for more than two weeks, we instruct the panelist to leave his or her meter at home. For shorter trips, we instruct the Panelist to wear his or her meter while travelling.

INCENTIVES AND PREMIUMS

We compensate panelists for their cooperation via a multi-tiered set of incentives and premiums. The form, amount, and timing of these may vary from market to market, from report period to report period, and from demo to demo. There is no connection between the types or amount of media the panelist consumed, or will consume, our incentives and premiums. We provide clear verbal and written statements to all panelists stating this is the case.

DEMOGRAPHICS UPDATE

A panelist's demographic characteristics may change during his or her time in the panel. We use automatic updates (calibrated to the Panelist's birth month) and periodic re-verifications to verify that the panelist's information is up-to-date at all times.

TENURE

The maximum amount of time a household may participate in the panel is approximately 24 months from the date the household agreed to participate in the panel. Most households elect to exit the panel before that term of eligibility expires.

CONFIDENTIALITY

We instruct Panelists to refrain from openly discussing their participation in the panel in any live setting or in social media.

If a Panelist discloses his or her participation in the panel to a radio station employee or representative, we will immediately remove that panelist's household from the panel.

We reserve the right to take additional action against any radio station that breaches, or attempts to breach, a panelist's confidentiality.

CHAPTER SEVEN

THE DIARY AND DIARY PROCESSING

This chapter provides an overview of the radio listening diary, how we process diaries, and key diary edit procedures. The descriptions provided in this chapter are for general information purposes only and do not constitute the full body of our methodology policy, or procedure.

THE STANDARD DIARY

The radio listening diary is a paper survey booklet that includes an instruction page, daypages, a comments page, and a set of demographic/lifestyle question pages. The diary is self-contained within a postage-paid mailer.

a. Instructions Page

On the diary's instructions page, we instruct the respondent to "...record all your listening..." with listening defined as: "...any time you can hear a radio—whether you choose the station or not. You may be listening to radio on AM, FM, the Internet or satellite." The instructions page includes example listening entries.

b. Daypages

The diary includes seven daypages—one for each day of the survey week. The format of the daypages allows the respondent to record the essential details of each radio listening occasion, including start and stop times, station identifier(s), AM/FM indicator(s), and listening location(s). Each daypage also includes a checkbox at the bottom of the page that the respondent may use to indicate that he or she did not listen to any radio on that particular day.

c. Comments Page

The diary also includes an open-ended "comments page" that the respondent may use to write comments or additional information. Generally, we do not use comments page information when crediting diaries; we may, however, refer to information recorded on this page during quality assurance audits and re-crediting.

d. Demographic and Lifestyle Question Pages

Each diary includes a set of demographic and lifestyle questions following the daypages. On these pages, we collect the respondent's age, gender, employment status, ethnicity, race, and, in applicable areas, the primary language spoken in the respondent's home (e.g., English or Spanish).

Should a respondent return a diary that does not include age or gender information, an interviewer will attempt to contact the Diarykeeper via telephone and collect this information. If the interviewer is unable to collect this information, we will discard the Diary.

Should a respondent return a diary that does not include race, ethnicity, or primary language spoken in the home, an interviewer will attempt to collect the information via telephone. If the interviewer is unable to collect the information, we will assign a value for the missing information. To determine the value to assign, we review information returned from other respondents in the household and/or information collected during recruitment.

THE QUALITATIVE DIARY

The qualitative diary is an expanded version of the diary that contains additional lifestyle and consumer behavior questions.

THE BILINGUAL DIARY

Standard and qualitative diaries are available in a Spanish-English bilingual format. We mail bilingual diaries to any household that requests them, to any household that includes a member of Hispanic origin, and to all households in the Puerto Rico market. Every bilingual diary includes a question on whether English or Spanish is the primary language spoken in the home.

OVERVIEW OF DIARY PROCESSING

Upon receipt of a diary, we scan images of the diary's cover and daypages into the diary processing system. Staff and/or vendors then key-enter the information represented on the daypages into the diary process databases.

Once all of the Diarykeeper responses are key-entered, the processing system groups the responses into complete listening entries. The system then organizes entries within each diary into chronological sequence. Diary processing staff members review and resolve conflicting start/stop times according to established policy and protocol. If the chronology of listening events in the diary is ambiguous to the extent that conflicts cannot be resolved, we discard the diary.

Next, the Diary processing system and Diary Creditors assign credit for the listening entries to the appropriate radio stations. To assign listening credit, the diary processors use a complex suite of online tools that cross-reference information contained in the diaries with information collected from radio stations.

Last, a team of analysts reviews the market's crediting. During this analysis, the team identifies crediting anomalies that fall outside of acceptable tolerances. This team will re-credit entries, or take other action, as necessary.

Upon completion of these analyses, the diary processing system transfers the final credited results to sample weighting and estimates reporting modules.

DIARY USABILITY

We make a reasonable effort to use all returned diaries. There are conditions, however, that make it impossible for us to use the diary. Examples of such conditions include if the respondent mailed his or her diary too early or too late, if the diary is not complete, or if the diary includes amounts of listening in excess of the applicable thresholds.

We have developed quality checks at various points of the diary processing workflow to identify diaries that we will not be able to use. Each check serves as a “gate” through which a diary must pass to proceed to the next stage of processing. The diary processing system rejects and discards diaries that do not pass these checks.

To complement these standard usability checks, we also use procedures to identify diary tampering; because of their sensitive nature, these procedures remain confidential.

We provide data pertaining to unusable diaries to the Media Rating Council. This information is otherwise unavailable.

DIARY EDIT PROCEDURES

We use a complex body of diary edit procedures to assign listening credit to radio stations for the entries recorded in diaries. Following is a summary of several key diary edit procedures. Additional information regarding specific procedures is available upon request.

a. Station Reach

On-air radio stations are eligible for listening credit in any sampling unit where the radio station may be heard. A data vendor estimates the reach of radio stations into sampling units based upon the station’s antenna height and effective radiated power plus a mileage allowance (as applicable). We calibrate our crediting tools to account for the data vendor’s results. When crediting diaries, we may also consider other factors including commuting patterns in the area and the results of prior surveys. Radio station streams are eligible for credit in all sampling units.

b. Call Letter Hierarchy

Diarykeeper confusion over a station’s call letters, band, and/or unclear handwriting may result in key-entered call letters that are not licensed or are the call letters of a radio station that does not reach into the sampling unit. Through an automated series of sequential and logical steps, the diary processing system assigns credit to radio stations for such call letter entries.

c. Station Credit and FM Translators

An AM, FM, or HD-multicast radio station is eligible to receive credit for entries that clearly report listening to the station via an FM translator. As a practical matter, we do not assign credit “to” any translator; instead, we assign credit for diary entries that report listening to the translator to the station that re-transmits on the translator.

d. The 1% Rule and Ascription

In circumstances where two or more AM or FM stations are eligible for credit of the same Diary entry, we will use the “1% Rule” to assign listening credit.

To qualify for credit via the 1% Rule, the station must have received listening credit in 1% (or more) of all In-Tab Diaries returned from that sampling unit during the previous survey year.

In the event that only one of the eligible stations “makes 1%,” we will credit that station. If both stations make 1%, we will assign credit via ascription. If neither of the stations make 1%, we will credit the entry to “Unidentified Listening” (i.e. neither station will receive credit).

(Note: radio station streams are not eligible to receive listening credit via the 1% Rule.)

e. The “Blank Station” Edit

A “blank station” diary entry does not include a station identifier. In certain circumstances, we may assign credit for a blank station entry based upon patterns of listening entries recorded elsewhere in the diary.

f. Special Handling

In the unlikely instance that standard diary edit procedures may not assign credit for a particular entry appropriately, we may use special edit procedures.

For an entry to be considered eligible for such “special handling,” the entry must be received in diaries from the same market over the course of multiple surveys. Based upon an in-depth analysis of those entries, and perhaps Diarykeeper re-interviews, we will develop a special edit rule for crediting the entries.

We re-evaluate all special handling rules at least once per year to determine if we should maintain, update or retire the special handling rule.

g. Unidentified Listening

If we are unable to credit an entry to any *specific* radio station, we will credit the entry to ‘unidentified listening.’ We include all Quarter Hours of unidentified listening in our Persons Using Radio estimates (i.e. “Market Totals”).

h. Non-Licensed Radio and Pureplays

We discard diary entries that report listening to non-licensed (i.e., “pirate”) radio stations and to pureplay media outlets.

i. Modeled Daypages

The threshold for the minimum number of completed daypages in an In-Tab diary is five. In diaries with one or two blank daypages, the diary processing system will impute final credit from other days in the diary to the blank day(s). The system imputes listening based upon a

predetermined, empirically derived substitution matrix. The system will reject any diary in which both Saturday and Sunday are blank.

j. Lifestyle Question Edits

The system will impute a value to an unanswered lifestyle (i.e., “qualitative”) question. The system determines what value to assign based upon how other respondents of similar age or gender answered the question. If the respondent records multiple answers to a lifestyle question with mutually exclusive categories, the system uses the highest or the affirmative value.

(Note: gender, age, employment status, race, ethnicity, or primary language spoken in the home are not “qualitative” questions; we process responses to these questions separately, and in advance of, the answers to qualitative questions.)

QUALITY ASSURANCE

The Quality Assurance team audits a randomly selected sample of each diary processor’s work, and the work of diary processing vendors, each day. During these audits, the quality specialist maintains a detailed log of all errors and/or deviations from procedures. Managers use information concerning these errors to identify staff members in need of training and to identify procedures that may be in need of additional development.

In addition to daily reviews of each individual’s work, the quality assurance team monitors overall accuracy rates month-to-month via a separate audit of a randomly selected sample of diaries processed that month.

ON-SITE DIARY REVIEW

A client (or the client’s designated representative) may visit the Client Services Suite in Columbia, MD, to review diaries. We provide visitors access to the electronic images of all usable diaries and the diaries’ corresponding credited listening information. While in the suite, a visitor may not photograph, copy, or reproduce daypage images.

Visitors must schedule a visit to Client Services in advance of the day of the visit. Clients should be mindful to schedule a review of diaries in advance of the end of the applicable retention period.

RETENTION PERIOD

We retain the electronic images of diaries scanned into its system for one year from the date of the release of the last syndicated report that includes information collected in those Diaries.

We retain paper diaries for 60 days after the release of the final *Radio Market Report* for which the diaries were In-Tab.

CHAPTER EIGHT

PPM DATA EDITING

The PPM data processing system applies a series of edits to the data it collects from the panel. As a group, these edits transform the raw data into a meaningful record of the panel's radio listening. The edits also increase the validity of PPM audience estimates compared to what the estimates' validity may have been, had we used unedited data to produce them.

This chapter offers a broad overview of several key PPM data edit procedures we use in the local radio syndicated service. Edits for other services may differ from those described here. Additionally, the descriptions included in this chapter are for general information purposes only, and do not constitute the full body of our methodology, policy, or procedure.

WHEN A PANELIST LISTENS TO ENCODED RADIO

When a panelist listens to an encoded radio station, the panelist's meter receives the station's codes and stores them in its memory. The meter then adds its own time stamp to each code indicating the time that it received the code and a marker that indicates the meter's assessment of the code's quality. The collection of codes, time stamps, and quality markers form a "log" of the panelist's radio listening.

THE MEDIA DAY AND IN-TAB

The media day begins at 4AM and continues until 4AM the next day. Each day, the PPM system collects data from the panel for the previous media day. A panelist is eligible to be In-Tab for a particular media day if the panelist wore or carried his or her meter for the applicable number of hours that day.

To be In-Tab on a particular media day, a panelist aged 18 years or older must have worn or carried his or her meter for at least eight hours that media day; a panelist aged 6-17 must have worn or carried his or her meter for at least five hours on that media day.

SEGMENTS AND INTERVALS

The PPM system downloads the In-Tab panelist's listening log in chronologically ordered 15-second segments; the system then groups the 15-second segments into 30-second intervals that correspond to either the first or second half of a clock minute.

LAST BEST CODE

While most intervals will include a single station's code, if a particular interval includes two different codes, suggesting that the panelist tuned into more than one station during that 30-second interval, the system keeps the last code in the sequence. If, however, the first code in the sequence is complete and the second code is not, the system will keep the first code.

INCOMPLETE CODES

While most of the codes that the system will eventually credit to a radio station are complete when received by the panelist's meter, it is possible that the meter may not receive all of a particular code.

When a meter does not receive all of a code, the data processing system reviews other codes in that panelist's listening log in the 15 minutes prior to and the 15 minutes following the incomplete code. If the incomplete code is "one character-off" from a code within that 30 minute window and meets other technical criteria, the system credits that code to the time corresponding to the incomplete code.

When it does not meet the one-off criteria, the system will credit a code from the media outlet broadcasting in that same medium (i.e., radio or television) as the incomplete code that is nearest to the time corresponding to the incomplete code. When it applies the "same medium" edit, the system looks to the five minutes before and the five minutes after the incomplete code for a code to credit.

LEAD-IN EDIT

To account for the possibility that it may take a moment for the panelist's meter to receive the station's code when the panelist first tunes into the station, the PPM edit system applies a "lead-in" edit to the beginning of each listening event.

Via the lead-in edit, a radio station receives credit for up to the 60 seconds immediately prior to when the panelist tuned into a station—assuming, of course, that the panelist was not tuned into *another* station at that time. The lead-in may also bridge a brief interruption within an extended listening period.

CONSOLIDATING SEGMENTS INTO MINUTES

The system then bundles the 30-second segments into minutes of listening. If two different stations receive credit for a particular clock minute's 30-second segments, then *both* stations receive credit for the minute. Because of the way the system organizes listening, it is not possible for more than two radio stations to be eligible to receive credit for a single minute.

BUILDING QUARTER-HOURS

The system then builds Quarter-Hours of listening credit by combining minutes of listening. The system will credit a code for any Quarter-Hour when the panelist listened to the station for five or more cumulative minutes during that Quarter-Hour.

STATION CREDIT

In the final step of the process, the PPM data processing system cross references the codes against the station information database. During this translation, the system assigns credit to a station for all of its codes and the Quarter-Hours of listening associated with them.

LOCATION

The panel household's in-home beacon emits a low-power radio frequency (RF). We report radio listening as having taken place "At Home" for all credited Quarter-Hours during which the panelist's meter detected the in-home beacon's RF signal at least once during the Quarter-Hour.

TIME SHIFTING

By comparing a PPM code's time stamp and the time stamp the panelist's meter appended to the code, the system identifies when the panelist was exposed to the encoded media at a time later than the media's broadcast time. The industry refers to this mode of media consumption as "time shifting."

CLOCK ADJUSTMENT

Should the PPM data processing system discover that *all* of an encoder's time stamps do not match the corresponding meter time stamps, it will apply a correction factor to the encoder time stamps.

By bringing the meters' and encoder's time stamps into better alignment, this data adjustment helps ensure that the station receives listening credit for the appropriate Quarter Hours.

PODCASTING

A radio station will receive credit for its podcast listening if the podcast's audio was broadcast on-air, if the podcast audio is encoded, if the podcast includes at least five minutes of audio from the quarter hour, and if the panelist listens to the podcast within one day of the audio's original broadcast. The station will receive credit for the panelist's listening as if he or she listened to the original broadcast. The PPM system discards podcast/time-shifted listening that it is unable to credit.

QUALITY ASSURANCE AND SYSTEM SECURITY

We built quality assurance measures into each process step and software module of the end-to-end PPM data processing system. Because of their sensitive nature, these measures are proprietary and remain confidential.

METER SECURITY

We also developed procedures that help ensure the published results do not include inauthentic listening, unrealistic amounts of listening from a single panelist, or a single panelist's listening represented as the listening of multiple panelists. These procedures are objective and empirical. Due to their sensitive nature, meter security measures, and the analyses that support them, are proprietary and remain confidential.

Should a potential breach of meter security occur, we will take action to protect the quality of the In-Tab sample. Examples of the actions we may take include additional panelist coaching, removal of the panelist from the In-Tab sample, or removal of that panelist's household from the panel.

CHAPTER NINE

SAMPLE WEIGHTING

Survey researchers generally use some form of sample weighting to compensate for the disproportionate representation of specific segments of the population in the sample. As such, weighting is a tool that helps the sample more closely represent the universe from which it was selected.

This chapter provides a broad overview of the methodology we use to weight the In-Tab sample for Diary and PPM *Radio Market Reports*. The descriptions included herein are for general information purposes only, and do not represent the full body of our methodology, policy, or procedure.

SAMPLE BALANCING

Our method of sample weighting is *sample balancing*. This method of sample weighting was developed by Drs. W. Edwards Deming and Fredrick F. Stephan, and is widely used in survey research. [For a detailed explanation of sample balancing, see Chapter Seven of Dr. Deming's book, *Statistical Adjustment of Data* (Dover Publications, 1964).]

POPULATION ESTIMATES

We weight our In-Tab samples to the applicable population estimates. In each issue of the RMR/eBook, we disclose the population estimates we used for weighting the sample.

Generally we use a set of population estimates for one year; with the start of each Fall survey/October PPM report period, we will use an updated set of population estimates.

WEIGHTING VARIABLES

We may weight In-Tab sample on up to six variables including geography, sex/age, race/ethnicity, dominant language, employment status, and the presence of children in the household. The specific variables used to weight the sample will vary from Diary Surveys to PPM panels and from market to market.

a. Geography

We weight all sample to the county, county-equivalent, or county cluster level. Thus, the number of geographic classes may vary considerably from one market to the next.

b. Sex/Age

We weight our In-Tab
Diary sample to 16 sex/age classes:

Males	Females
12-17	12-17
18-24	18-24
25-34	25-34
35-44	35-44
45-49	45-49
50-54	50-54
55-64	55-64
65+	65+

We weight our In-Tab
PPM sample to 18 sex/age classes:

Males	Females
6-11	6-11
12-17	12-17
18-24	18-24
25-34	25-34
35-44	35-44
45-49	45-49
50-54	50-54
55-64	55-64
65+	65+

Note: During recruitment for the PPM panel, if a respondent will not provide his or her exact age, we ask the respondent to identify his or her age range from a series of mutually exclusive categories. If the respondent selects an age range, we classify the respondent’s age as the midpoint of the selected range. If the respondent refuses to provide an exact age or to select an age range, that respondent is ineligible to be a panelist.

c. Race/Ethnicity

In ethnic-controlled Metros, we weight the sample to race/ethnicity. There could be two or three race/ethnic classes, Black and Other; Hispanic and Other; or Black, Hispanic, and Other. For sample balancing purposes, Black and Hispanic are considered mutually exclusive categories. We classify respondents who indicate that they are both Black and Hispanic as Hispanic.

Metros that do not qualify for ethnic controls but that are embedded in ethnically controlled Metros may qualify for race/ethnic weighting, based on certain thresholds for race/ethnic estimated population percentages and expected race/ethnic In-Tab.

d. Dominant Language

In Hispanic-controlled Metros where universe estimates are available, we weight Hispanic In-Tab sample to one of two dominant language classes: English-dominant or Spanish-dominant. (Note: we also use these population estimates for a calendar year, and start using a new set of estimates each January.)

e. Employment Status

We weight the PPM In-Tab to one of two employment statuses—full-time or not full-time. Note: we do not weight panelists under the age of 18 by employment status.

f. Presence of Children

We weight the PPM In-Tab sample based on the presence of children in the household under the age of 18.

EXAMPLE OF SAMPLE WEIGHTING

Following is an example of how we weight our sample. This example assumes that the survey area has two ethnic classes (Hispanic and Other), 16 sex/age classes, and three county classes. While this example applies directly to Diary surveys, the statistical principles demonstrated in the example also apply to PPM panels.

Step One: If Hispanic Persons 12+ represented 15% of the population but only 12% of the In-Tab, a weight of 1.25 ($0.15 \div 0.12$) would be assigned to all Hispanic diaries. Similarly, since Other (non-Hispanic) Persons 12+ represented 85% of the population but 88% of the In-Tab, a weight of 0.97 ($0.85 \div 0.88$) would be assigned to all Other Diaries.

Step Two: If, after summing the Step One weights for the diaries in County A, County A represented only 15% of the population but 20% of the In-Tab, a weight of 0.75 ($0.15 \div 0.20$) would be assigned to all County A diaries. The same process applies to County B diaries and County C diaries.

Step Three: If, after summing the products of the Step One and Step Two weights for Women 35-44, Women 35-44 represented 6% of the population but only 5% of the In-Tab, a weight of 1.20 ($0.06 \div 0.05$) would be applied to all Women 35-44 diaries. The same process applies for the 15 remaining sex/age classes.

In this example, each diary has been weighted three times: once for ethnicity, once for geography, and once for sex/age, with each successive adjustment taking into account the results of previous adjustments. The example shows collective (i.e., class-level) adjustments because that is how the adjustments are determined, but in effect, each individual diary—which started out with a value of 1—is being continually adjusted around that value until convergence (see below) is attained.

It is extremely unlikely that, after the county and sex/age adjustments, the weighted Hispanic In-Tab would still equal 15% of the total sample. Because we weighted some Hispanic respondents up for county, some down for county, some up for sex/age, and some down for sex/age, the weighted Hispanic In-Tab might now be only 14.5% of the total sample. In this case, we automatically initiate a second iteration of weighting.

Step One: This time, the weights will be much smaller than before. For example, $0.15 \div 0.145$ would produce a weight of only 1.03 for all Hispanic diaries, and $0.85 \div 0.855$ would produce a weight of only 0.99 for all non-Hispanic diaries.

Step Two: Another round for county.

Step Three: Another round for sex/age (end of second iteration).

The successive adjustments for any particular class—one additional adjustment per class per iteration—are multiplicative. For example, Hispanic diaries received a weight of 1.25 in the first iteration and 1.03 in the second, for a total adjustment of 1.29 (1.25×1.03) thus far. The iterations will continue until no further adjustment is necessary (i.e., until the adjustment for each marginal category is so slight that it does not affect the proportions for any of the other categories). This point of resolution is called *convergence*. The resulting weights will be the basis for diary values used to process the data in each *Radio Market Report/eBook*.

DETERMINING WEIGHTS

Our sample balancing procedures produce weights for each marginal class within a survey area. Because each In-Tab respondent belongs to one class within each marginal category, we weight every respondent multiple times. In the above example, a respondent who is a Hispanic woman age 42 from County A might receive the following weights:

Hispanic weight = 1.29

County A weight = 0.79

W 35-44 weight = 1.23

This would compute to an overall weight of 1.25 ($1.29 \times 0.79 \times 1.23$). The final Diary PPDV or PPM weight would be equal to the model population divided by the model In-Tab (or average weight) times 1.25.

Example: If the model population was 82,500 and the In-Tab was 165, the average weight would be 500; with a weighting factor of 1.25, the example respondent would have a final weight of 500×1.25 , or 625. This weight is the number of persons that the respondent represents.

In non-embedded condensed Metros, data collected during two survey periods are combined in each release of a *Radio Market Report/eBook*. For example, data to be included in the Fall 2013 report included data collected during the 24 weeks of the Fall 2013 and Spring 2013 surveys. For estimates published in a *Radio Market Report/eBook* in these Metros, we derive PPDVs as described above for each individual survey period and then divide them in half, so that the sum of the PPDVs for all In-Tab diaries returned during the two-survey reporting period will approximate population estimates for each marginal class.

(Note: for MaximiSer® and Media Professional® releases in non-embedded condensed Metros, we average the audience estimates for each survey included in the two-survey reporting; we may perform additional rounding to help ensure that the MaximiSer/Media Professional listening estimates will generally match those found in the *Radio Market Report*.)

When determining final weights, we rounds to tenths.

MAXIMUM RESPONDENT WEIGHT

During preliminary rounds of sample balancing, should a respondent's weight exceed the pre-determined maximum permitted weight, we will adjust that respondent's weight by applying a factor to the weight so that, once all sample balancing routines are complete, the respondent's weight will not exceed the maximum. In such circumstances, we redistribute the weight adjusted to other respondents with similar weighting characteristics.

During any particular survey or report period, we expect to apply these procedures to a small percentage of the In-Tab sample. Over the broad continuum of time, however, these procedures may help to reduce survey-to-survey bounce in a station's estimates that may have resulted from a survey that included In-Tab with heavy listening to the station combined with an excessive weight.

Based on a detailed analysis of empirical data, once each year we determine a maximum weight threshold for all Diarykeepers and a threshold for all Panelists. Once determined, our expectation is that the threshold will remain in place for the next 12 calendar months of audience measurement. We may, however, prospectively reset these thresholds for any survey as business conditions or research considerations warrant.

Due to their sensitive nature, our maximum respondent weight thresholds are proprietary and remain confidential.

DIARY SURVEY MODELS

The context in which the researcher performs sample balancing (e.g., the particular group of diaries being sample-balanced together) is a "model." Previous sections of this chapter explained how we perform marginal weighting for a particular group of diaries in a "survey area." While models generally correspond to a survey area, or a subset of survey areas, this may not always be the case.

Following is an example of a common weighting model. This example reflects a typical model configuration for a market that qualifies for DMA region reporting, and presumes that there are no Metro counties that are not also in the DMA region, and that there are no DMA region counties that are not also in the TSA:

Model 1: Metro/DMA region counties—All Diaries

Model 2: Non-Metro TSA/DMA region counties—All Diaries

Model 3: Non-Metro TSA-only counties—All Diaries

A model may also correspond to race or ethnicity within a particular Metro. Generally, we use race/ethnic models if the theoretical In-Tab target for each applicable category is at least 160. If neither criteria is met, race/ethnicity remains a marginal category within the model.

For example, following is a typical model configuration for a market where the Metro qualifies for Black DST but the market does not qualify for DMA region reporting:

Model 1: Metro counties—Black Diaries

Model 2: Metro counties—Other Diaries

Model 3: Non-Metro TSA counties—All Diaries

In the two Metro models above (“Metro—Black” and “Metro—Other”), race would not be a marginal category; the only marginal categories in each model would be sex/age and county.

Regardless of how the models are defined, every diary in a market is assigned to one, and only one, model. However, due to overlapping markets (primarily overlapping TSAs), a diary may be sample-balanced multiple times—once for each market.

DESIGN WEIGHTS

Because a household that is in both the telephone and address sample frames has a greater probability of selection than does a household that is in only one frame, we apply a factor or “design weight” to all diaries returned from households that could have been in both frames. This factor “pre-weights” the household’s In-Tab diaries prior to sample balancing.

PPM SAMPLE BALANCING CONFIGURATIONS

In some Metros, we balance the entire PPM In-Tab sample to one set of independent population estimates. In other Metros, we sample-balance applicable race/ethnic classes to race/ethnic, sex/age, and geographic population estimates separately and then balances the entire Metro’s In-Tab to population estimates for other marginal variables.

The particular model we use to balance a Metro’s sample depends upon that Metro’s specifications and service level. Note: For sample balancing purposes, PPM-measured non-Metro DMA region counties in the Houston-Galveston market are combined with Metro counties.

DAILY AND WEEKLY WEIGHTS

Because we produce daily and weekly PPM audience estimates, a particular panelist may have different weights in different services; a panelist’s weight depends upon the weighting model we use for that particular service.

In general, we use a “daily weight” to derive daily audience estimates such as daily Cume and AQH. Panelists who are In-Tab for at least six days during the media week (Thursday-Wednesday) qualify for weekly In-Tab. We weight the final weekly In-Tab sample for each media week to produce a weekly weight, which we then use to determine weekly estimates, such as average weekly Cume and TSL.

CSAR SAMPLE WEIGHTING

We also weight In-Tab diaries for Custom Survey Area Reports by the methods described above. When weighting Diary CSAR sample, we combine the county’s “special” CSAR over-sample with the county’s sample for its syndicated reports and weight the aggregated sample as a single unit. If a custom survey area includes a PPM or Diary Metro county (or counties), we use the respondents’ currency weights whenever possible.

RESERVATION OF RIGHTS

We reserve the right to waive, suspend, change, or modify any element of the methodology described above as business conditions warrant. All determinations regarding the sample weighting policy and procedure, including weighting variables, models, maximum weights, and sample balancing configurations, remain solely with Nielsen.

CHAPTER TEN

AUDIENCE ESTIMATES

This chapter provides a broad overview of the audience estimates that we report in the local radio syndicated services. This overview is for general information purposes only and does not constitute the full body of our methodology, policy, or procedures.

DEMOS AND DAYPARTS

We report audience estimates for stations across a range of standard demos and dayparts in the *Radio Market Report*. The demos and dayparts included in a particular report will depend upon the Metro's survey instrument and service specifications. To complement the standard demos and dayparts, a licensed user of the data may use our software programs to create custom reports that reflect non-standard demos and dayparts.

CUME

a. Cume Persons

A station's "Cume Persons" or "Cume" is the number of unique persons that listened to the station during the specified daypart. We determine a radio station's Cume Persons by summing the PPDV's or weekly panelist weights averaged across the report period (as applicable) for each of the station's listeners and rounding that sum to hundreds.

b. Cume Rating

A station's "Cume Rating" is the percent of a demo's population that listened to the station during an average week of the survey or report period. We determine a station's Cume Rating by dividing that station's Cume Persons by the specified demo's population and then multiplying that product by 100.

c. Cume Duplication Percent

A station's Cume duplication percent with another station represents the percent of the station's listeners that also listened to that other station. We determine a pair of stations' Cume Duplication Percent by dividing the sum of the PPDVs or weekly panelist weights averaged across the report period (as applicable) for respondents that listened to both stations during the survey or report period by the selected station's Cume Persons and then multiplying that product by 100.

AVERAGE QUARTER-HOUR

a. Average Quarter-Hour Persons

A station's "Average Quarter-Hour Persons" or "AQH Persons" is the average number of persons that listened to the station during a 15-minute period in the specified daypart during the survey or report period.

We determine a station's AQH Persons by multiplying each listener's PPDV or daily weight averaged across the number of days in the daypart (as applicable) by the number of Quarter-Hours that respondent listened to the station. We then sum the products of those equations, divide by the total number of Quarter-Hours in the daypart, and round to hundreds.

b. Average Quarter-Hour Rating

A station's Average Quarter-Hour rating is the percent of a target demo's population that listened to the station during the specified daypart. In a Diary-based report, we determine a station's AQH rating by dividing the station's AQH persons for the specified demo by that demo's population and then multiplying that product by 100. In a PPM-based report, we determine a station's AQH rating by dividing its Average Daily AQH by the Average Daily Population for the demo and then multiplying by 100.

c. Average Quarter-Hour Share

A station's AQH share is the percent of all radio listening represented by that station's audience. To determine a station's AQH share, we divide the station's AQH Persons by the Market Total AQH Persons for the applicable demo and daypart and then multiply that product by 100.

TIME SPENT LISTENING

A station's Time Spent Listening (TSL) is the average number of Quarter-Hours the station's listeners listened to that station during the survey or report period. To determine a station's TSL, we multiply the number of Quarter-Hours in the daypart by the station's AQH or Average Daily AQH (as applicable) in that daypart and then divides by the station's Cume or Average Daily Cume for the daypart. TSL estimates are expressed in hours and minutes.

(Note: we report the estimate "Average Weekly Time Exposed" in select software services. While similar in concept to TSL, the calculations that we use to determine the two estimates are slightly different. For additional information on AWTE, see the software's reference materials.)

COMPOSITION

In select reports, we provide a “Composition Report” that includes station estimates based upon a subset of respondents. We determine these estimates described as above for the applicable demos and dayparts.

LISTENING LOCATION

In select reports, we provide a “Listening Location” report that includes station estimates based upon the respondents’ listening location including “At Home,” “Away from Home,” “In a Car,” “At Work” or “Other Place,” as applicable.

EXCLUSIVE LISTENING

A station’s “Exclusive Cume” is the number of respondents that listened only to that station during the survey or report period. We determine a station’s Exclusive Cume by summing the PPDVs or weekly panelist weights averaged across the report period (as applicable) for all respondents that listened only to that station during the survey or report period and then rounding to hundreds.

MULTIBOOK AVERAGES

In select Diary-based reports, we report a two-book or four-book average for select station estimates. We determine these multibook averages by averaging audience estimates for the applicable surveys. We will not report a multibook average for any station unless that station met minimum reporting standards for each of the surveys included in the multibook average. Additionally, we do not publish estimates under the heading “4-book” or “2-book” in reports for non-embedded condensed markets (e.g., “two-book average” markets) because station estimates in these markets reflect information from a two-survey reporting period.

CHAPTER ELEVEN

REPORTING POLICY

We use our reporting policies to determine the stations that will appear in a report and how we will report them. As a group, these policies help ensure the report includes a large amount of data but is still easy to use.

This chapter provides an overview of our key reporting policies. These descriptions are for general information purposes only, and do not constitute the full body of our methodology, policy, or procedure.

RADIO STATIONS

Encoded FCC-licensed, commercial and non-commercial AM, FM, and HD-multicast radio stations are eligible to be reported in PPM-based *Radio Market Reports/eBooks*.

FCC-licensed commercial AM, FM, and HD-multicast radio stations are eligible to be reported in Diary-based *Radio Market Reports/eBooks*.

STATION STREAMS

Encoded radio station streams and radio-video streams are eligible to be reported in PPM-based *Radio Market Reports/eBooks*.

A commercial AM, FM, and HD-multicast station stream is eligible to be reported in Diary-based *Radio Market Reports/eBooks*.

STATION COMBOS

A “Total Line Reporting combo” is a group of stations. For stations that request Total Line Reporting (TLR), we sum the stations’ audiences and report that sum as if it were one station’s audience.

To be eligible for TLR, the combo’s broadcast radio stations must be 100% simulcast, including all programming and commercials, for the duration of the report period or survey.

For the combo’s streaming partner to be eligible for TLR, the streaming audio delivered to listeners located in station’s home Metro/DMA region must be 100% simulcast, including all programming and commercials, with the stream’s on-air counterpart. The broadcaster may replace commercials in the streaming audio delivered outside the DMA region and remain eligible for TLR.

The combo’s streaming partner will also be eligible for TLR if the streaming audio delivered to all listeners is 100% simulcast with the stream’s on-air counterpart, including all programming and commercials, with the exception of advertisements not streamed at the advertiser’s request. In place of the removed advertisements, the broadcaster may stream a cleared commercial for the same advertiser or other non-commercial content.

(Note: broadcasters to whom the ‘advertiser opt out’ provision of the policy applies must secure the advertiser’s consent for this arrangement. In select circumstances, we may request a station provide us with that documentation.)

We do not report standalone audience estimates for any station or stream that is a part of a Total Line Reporting combo in any syndicated report. Additional information may be available upon request.

Clients may review a list of stations and streams that requested Total Line Reporting via the secure client website and in the Special Notices section of the applicable *Radio Market Report/eBook*.

ADDITIONAL STATIONS

We may also report audience for Low Power FM (LPFM) radio stations, Canadian stations licensed by the CRTC, Mexican stations licensed by COFETEL, and FCC-licensed analog LPTV channel 6 stations in markets where these stations may be heard, subject to the applicable encoding, crediting, and reporting policies. Additional information is available upon request.

MINIMUM REPORTING STANDARD

In a PPM *Radio Market Report/eBook*, we report estimates for any eligible station, stream, or combo that has a Cume Rating of 0.495 or greater in the Metro among Persons 6+ during the Monday-Sunday 6AM-Midnight daypart during the report period.

In a Diary *Radio Market Report/eBook*, we report audience estimates for any eligible station, stream, or combo that received credit in a minimum of 10 In-Tab Metro diaries, that has a Cume Rating of 0.495, and that has an AQH rating of 0.05 or greater in the Metro among Persons 12+ during the Monday-Sunday 6AM-Midnight daypart during the survey.

Reminder: The minimum reporting standard for other reports, software, and services may differ from those described above.

FM TRANSLATORS, BOOSTERS, AND REPEATERS

We automatically include any audience delivered via a translator in the estimates we report for the station that retransmits on the translator; we do not report estimates for a translator as if it were a stand-alone, full service radio station. We apply this same policy to boosters and repeaters.

STREAMING PROGRAM LOOP

A streaming program loop (SPL) is a radio station stream that streams just one of the station’s programs over and over each day. In PPM reports, we include audience delivered by an encoded SPL in the station’s estimates. If a panelist listens to an encoded SPL we credit that station as if the panelist had listened to the program when it was broadcast live.

RADIO PODCAST

A ‘radio podcast’ is a podcast that includes audio a radio station broadcast on-air. If a respondent downloads and replays a radio podcast, the radio station may receive listening credit.

There are many factors that affect whether a station will receive listening credit for the podcast. These factors include the survey instrument, the time the radio station first broadcast the audio, the podcast’s duration, the time the respondent listened to the podcast, and our edit rules.

Additional information regarding our podcast credit policy and edit rules is available upon request.

ESTIMATES LABELING

In our reports, we label each station’s audience estimates with a unique label that includes the station’s FCC-designated call sign that was in effect on the last day of the survey followed by a suffix that indicates the station’s band or the media outlet’s “type” as follows:

BAND ID	STATION	EXAMPLE
AM	AM radio station	WAAA-AM
FM	FM radio station	WBBB-FM
IA	AM station’s stream	WAAA-IA
IF	FM station’s stream	WBBB-IF
F2, F3	HD-multicast station	WBBB-F2, WBBB-F3
G2, G3	HD station’s stream	WBBB-G2, WBBB-G3
A8	AM station radio-video stream	WAAA-A8
F8	FM station radio-video stream	WAAA-F8

We label a TLR combo’s estimates with the primary station’s calls signs indicated by the broadcaster.

REPORTING SEQUENCE

In the RMR/eBook, we list stations, streams, and combos alphabetically by call sign, with outlets that are home to the Metro separated from those that are not by a dashed line.

We classify a station as ‘home’ to the Metro if the station’s FCC-designated city of license is within a Metro county. In some instances, a station that is not home to the Metro can request home status.

AUTHORIZED USERS

We indicate stations and streams that are authorized to use our data with the indicator “(s)” next to the outlet’s call sign on the Station Information Page(s) of the report.

SPECIAL NOTICES

In the “Special Notices” section of the report, we include information to assist users in making evaluations of the data.

REISSUE

If we discover that a processing error affected the data, if we used invalid or out of date reference data to process the report, if a special station activity occurred, or if another error/policy violation affected the data, we may elect to correct the error, reprocess the data and reissue the report.

We will generally reissue a report if reprocessing the data changes a significantly ranked station’s AQH Persons rank in either the Persons 6+, 12+, 18-34, or 25-54 demo during the Monday-Sunday 6AM to Midnight daypart, *and* if the affected station’s reprocessed AQH Persons estimate is at least 5% different in the demo/daypart where the station’s rank changed.

When applying these guidelines, we also consider other factors including whether advertisers are likely to buy time on the station, the importance of the affected demo to the station, the station’s performance in other dayparts and demos, marketplace conditions, and other factors.

We may also elect to reissue a PPM report if we discover that we over- or under-reported a significantly-ranked station’s Average Weekly Cume estimates by 10 percentage points or more in the Persons 6+ demo for the Monday-Sunday 6AM-Midnight daypart.

When applying this guideline, we will also consider the effect reprocessing may have in estimates for other key demos, the extent to which reprocessing will affect the lineup of stations in the revised report compared to the original report, and the length of time the marketplace used the original report.

We may also elect to take action other than to reissue as warranted in our judgment.

The final decision regarding report reprocessing and whether to reissue lies solely with Nielsen. We reserve the right to amend our reissue policy at any time as business conditions or research considerations warrant.

STATION REPORTING IN A DIARY METER COMBO DMA REGION

We report DMA region-level audience estimates two times per year in 100 U.S. markets. A market where we measure Metro counties via PPM and the non-Metro DMA region by diaries is a ‘Diary Meter Combo DMA Region.’”

We determine a station’s Diary Meter Combo (DMC) audience estimates using the listening information we collect from respondents 12 years of age and older.

To determine an encoded station’s DMC estimates, we sum the station’s Metro and non-Metro audience and then divide by the DMA region’s Persons 12+ population.

DMC estimates for a station that is not eligible to encode or that elected not to encode reflect that station's non-Metro audience divided by the DMA region's Persons 12+ population.

We will report DMC estimates for any station that has a Cume Rating of 0.495 or greater in the Monday-Sunday 6AM-Midnight daypart for the applicable survey and report periods.

The MRC has accredited our DMA region audience estimates in all Diary-measured markets, and in the Houston-Galveston market. We plan to seek accreditation for our other PPM-based DMC estimates.

SOFTWARE SOLUTIONS PROVIDERS

Users of our data may access the data via software and reports provided by a third party software solutions provider. A software solutions provider that uses our data may apply unique reporting policies and station labeling schema in its systems and services. Contact the vendor for additional information.

CHAPTER TWELVE

SPECIAL STATION ACTIVITIES

Years ago, the industry convened a task force of researchers, radio broadcasters, advertisers, and industry stakeholders to help define station activities that have the potential to undermine the data's credibility. Over time, we evolved those guidelines into the dynamic policy that we enforce today.

This chapter includes an overview of our 'Special Station Activities' policy. The descriptions in this chapter are for general information purposes only and do not constitute the full body of our methodology, policy, or procedure.

MEDIA AFFILIATION

Any household that includes an employee of a radio or television station is ineligible to participate in a Diary survey or PPM panel.

Additionally, any household that includes an employee of a broadcast television network, cable television network, or advertising agency may not participate in a PPM panel.

We ask every recruited household a media affiliation question. We rely on the household's response.

Should we discover that a media-affiliated individual participated in a Diary survey or PPM panel prior to the release of the audience estimates, we will remove that household's data from the In-Tab sample.

If we discover the media affiliation after the release of the estimates, we will take additional action, which nearly always includes reissue of the report.

RATING DISTORTION

Rating Distortion includes any act or statement made by a person either employed by or acting for the station that may prompt a respondent to identify his or her participation in a survey or panel, surrender control of the survey instrument, misreport listening, misuse the meter, or provide us with false household information. The misuse of in-station PPM encoders may also be Rating Distortion.

RATING BIAS

Rating Bias includes any act or statement made by a person either employed by or acting for the station that may 'over sensitize' the station's listeners to the survey as compared to other stations' listeners.

Examples of activities with rating bias potential include, but are not limited to, those that may differentially prompt the station's listeners to participate in the survey; differentially prompt panelists to wear their meters when listening to that station; prompt a listener to report listening to that station differently listening to other stations; emphasize the importance of the survey'; or alert the audience to the survey or panel.

VIOLATIONS

Should we determine that a station has violated our Rating Distortion or Rating Bias guidelines we will take appropriate action as warranted in our judgment.

Examples of actions that we have taken in the past include removal of a station from the report (i.e., “delisting”), listing the station out of alphabetical sequence or below a special distinguishing line, citation of the event in the report, and/or other special communications with the marketplace.

We reserve the right to take other appropriate action depending upon the content, context, frequency, or repetition of the activity.

SOCIAL MEDIA

Our Rating Distortion and Rating Bias guidelines also apply to social media activities in which a radio station and/or station personnel engage, including publicly-accessible ‘personal’ accounts.

OTHER MEDIA AND PLATFORMS

Our Rating Distortion and Rating Bias guidelines apply to communications across all other media and platforms including broadcast, streaming, internet, mobile, multimedia, and print.

ESTIMATE SOURCING

Generally, we do not consider a station referring to its success in previous surveys or report periods to be Rating Bias. We may consider such a remark to be Rating Bias, however, if it is made in the context of an appeal for support.

PRE-REVIEW

To avoid activities that may have Rating Distortion or Rating Bias potential, a station can submit an overview of planned activities for a confidential pre-review. A radio station may also request an inquiry into the activities of another radio station.

ADDITIONAL INFORMATION

For additional information, to request a pre-review or for access to the *Rating Distortion and Rating Bias Handbook*, contact the Special Station Activities Committee or your account executive.

CHAPTER THIRTEEN

RELIABILITY

One can think of *reliability* and *validity* as measures of a survey's accuracy. Reliability refers specifically to sampling error and validity refers to non-sampling error. Just like any other survey's results, our local radio services' audience estimates are subject to both sampling and non-sampling error.

This chapter provides a broad conceptual overview of the principles of statistical reliability and the measures we use to determine the estimates' reliability. The descriptions in this chapter are for general information purposes only, and do not constitute the full body of our methodology, policy, or procedure.

ESTIMATED RELIABILITY

This chapter is specifically concerned with *estimated reliability*, which refers to how close the estimate would come, in repeated applications of the sampling procedures, to the result that would be achieved through a complete census of the same population (defined by the sample frame using the same methods and procedures).

It is important to keep in mind that reliability is not a measure of the validity of the estimate. Instead, reliability provides the user with information that's important to understanding the role that sample design and other procedures may play in determining the estimates.

RELIABILITY MEASURES

There's more to a rating than simply the reported value. The reported value is only an estimate of the actual rating that exists for the entire population; reliability measures supplement the reported ratings.

For example, if we report an AQH rating of 0.5 for a station in a given survey, that means the information from the sample for that survey indicates that, on average, .5% of persons in the market were exposed to the station for at least five minutes during each 15-minute period.

However, that's only part of the story. The natural question is what is this average for all people in the market? Perhaps, the average for the market population is actually 0.4 or 0.7. Reliability measures provide a likely range for that population average.

STANDARD ERROR

Because we base our radio audience estimates on a sample of the population, the estimates are subject to uncertainty. As it applies to our local radio services, the statistical concept of "standard error" can be thought of as the amount of uncertainty involved in estimating the size of a radio audience.

The uncertainty comes from the fact that any one of the possible random samples of the population will result in different estimates than any other. The variation in these hypothetical estimates over all possible samples is called sampling error. The standard error is a measure of this sampling error.

CONFIDENCE INTERVAL

As it applies to our local radio services, the statistical concept of a “confidence interval” can be thought of as the range of plausible values for the actual population average.

For example, a confidence interval range of 0.4 to 0.7 for an AQH rating of 0.5 indicates that it is likely that the actual population rating is somewhere between 0.4 and 0.7.

Users of the data should exercise caution when interpreting confidence interval ranges, however, as they do not provide a complete picture of the likelihood of the population rating being *any* particular value.

For instance, in this example, the most likely value of the population rating is 0.5 and the values near 0.5 are more likely values for the population rating than are the extremes of the confidence interval.

Each confidence interval references a specific confidence level. The confidence level indicates how strong the evidence is that the population rating is contained in the confidence interval range. The larger the confidence level, the larger the likelihood that the range contains the population rating.

REPLICATION STUDY

From 2007 to 2009, Arbitron conducted several replication studies of PPM and Diary radio ratings in a number of markets. We used the findings of that study as the basis for our Ratings Reliability Estimator (RRE). These replication studies were similar in concept and design to previous studies, including the 2005-2006 PPM replication studies and 1981's *Replication II* study.

RATINGS RELIABILITY ESTIMATOR

The RRE is a web-based application that a client can use to determine standard error estimates and confidence intervals for our currency radio audience estimates. The client may find a link to the RRE on his or her secure customer website.

Clients should be mindful that -- due to the limitations described in Chapter 15 of this *Local Radio Syndicated Services Description of Methodology* -- it is not possible to determine the reliability of our estimates, data, reports and their statistical evaluators to any precise mathematical value or definition.

CHAPTER FOURTEEN

THE PUERTO RICO MARKET

We report audience estimates for the Puerto Rico radio market. Puerto Rico is a market within the local radio syndicated service, not a service separate and distinct from it.

As such, we generally apply the same methods, policies, and procedures in the Puerto Rico market that we apply in all other Diary-measured markets.

However, due to the market's infrastructure, its location and geography, and the population's demographics, we also apply a small body of unique procedures in the market.

This chapter outlines those unique procedures and additional key points of interest.

Except for as specifically described below, users of the data should presume that all of the policies and procedures described in this *Description of Methodology* also apply to the Puerto Rico market.

THE MARKET

Because we treat the whole of the island as a market, the Puerto Rico market does not have a Metro or TSA in the traditional sense.

The basic sampling unit in the Puerto Rico market is the municipio. There are 80 different municipios on the island. All municipios are "home" to the market; there are no "non-Metro" municipios.

To reflect how the market buys and sells radio, we also group municipios into several mercantile regions; these regions reflect the area's topography and marketplace preference.

SAMPLING AND RECRUITMENT

a. Landline Sample Frame

The market's landline sample frame is a list of telephone numbers known to be part of a working telephone exchange. Because we do not match telephone numbers and addresses in the market, our initial contact with all landline households is by telephone.

b. Cell Phone Sample Frame

The market's cell phone sample frame is a list of addresses that are likely to exist. We develop this list using a proprietary methodology that estimates addresses that may exist from detailed information pertaining to known addresses.

We mail a short questionnaire to addresses randomly selected from this list. The screener we use on the island asks for less information than does the screener we use in other markets.

c. Differential Survey Treatments

Due to the market's sample performance history, we do not apply any differential survey treatments in the market.

d. Bilingual Survey Materials

We mail Spanish-English bilingual survey materials to all households in the market that agree to participate in the survey.

DIARY EDIT PROCEDURES

a. Frequency

We adapted our frequency edit procedures to account for the fact that all radio stations on the island are home to the market; that few home-to-market radio stations broadcast at the same dial position; and that radio station signals from other markets cannot reach the island.

When a station is the only station broadcasting at a particular dial position on the island, that station will receive credit for all diary entries that include that frequency.

If two stations broadcast at the same dial position, and only one of the stations reaches the municipio from which the diary was received, the reaching station will receive listening credit.

In the event that two stations broadcast at the same dial position and both stations reach the municipio from which the diary was received, the Diary creditor will attempt to assign listening credit based upon information recorded elsewhere in the Diary. If he or she cannot assign listening credit based on that information, we will credit the entry as "Unidentified Listening."

b. The 1% Rule

Diary creditors apply the 1% Rule and ascription, as necessary, to station name, network, and program entries.

c. Program Entry Edit Procedures

As compared to respondents in other markets, a significantly greater proportion of Puerto Rico diarykeepers report listening via entries that include the name of a program or personality.

For this reason, we collect detailed program information from home-to-market radio stations; diary creditors refer to this information when crediting diaries.

SAMPLE WEIGHTING

We do not apply any ethnic or language weighting in the Puerto Rico market.

STATION REPORTING

In the Puerto Rico *Radio Market Report*/eBook, we report audience estimates for radio stations in the market as a whole.

In the TAPSCAN service, we report audience estimates for radio stations in the market as a whole and pre-tabulated estimates for each of the market's mercantile areas.

The user may also create custom reports in TAPSCAN. Because we do not weight the sample by language or by ethnicity, "Other" is the only ethnic/demographic option the user may select when creating custom reports.

MRC ACCREDITATION

As of this writing, we are evaluating the Puerto Rico market for accreditation consideration. We will notify the marketplace should we elect to submit the market for accreditation.

CHAPTER FIFTEEN

RADIO COUNTY COVERAGE

In our *Radio County Coverage* service we publish audience estimates for radio stations county by county.

Because we port final In-Tab data from our local currency services to *Radio County Coverage*, the methods, policies, and procedures we describe in this DOM are latent in *Radio County Coverage*.

This chapter provides an overview of the unique methods, policies, and procedures we apply to *Radio County Coverage*.

MRC ACCREDITATION

Radio County Coverage is MRC-accredited. The MRC accredited *Radio County Coverage* in 2003.

THE REPORTS

We publish *Radio County Coverage* audience estimates in printed books. We prepare a book for each state and the District of Columbia. We mail the books to clients in mid-April. Clients may use the software program 'Custom Coverage' to create custom reports.

SURVEY AREA

The survey area for a *Radio County Coverage* report is all counties, county equivalents, and county clusters within the state.

SURVEY INSTRUMENTS

We use either diaries or PPM to measure radio listening in a county. We note each county's survey instrument at the top of that county's page(s) in the report.

SURVEY PERIOD

The *Radio County Coverage* survey period is the "fieldwork year." A county's fieldwork year includes all days of audience measurement that we conducted in that county during the calendar year.

In PPM-measured counties, the "Holiday" report period may span New Year's week. As such, a PPM county's fieldwork year may include up to a few days of the next calendar year.

MINIMUM COUNTY IN-TAB

We will prepare and report *Radio County Coverage* audience estimates for any county from which we have collected data from 30 or more respondents during the fieldwork year.

COUNTY CLUSTERING

If we collect data from fewer than 30 respondents in a county, we may combine or 'cluster' that county with an adjacent county in that same state and time zone that we measured via the same instrument. If we cluster counties, we weight the sample and report estimates for the cluster as if it were one county.

Factors we consider when determining if it is appropriate to cluster counties include the counties' weight indexes relative to each other (we won't cluster counties with indexes that are too dissimilar), market conditions, and broadcaster preference.

Additionally, we will not cluster a county if we collected "zero" In-Tab from the county. Due to the nature of random sampling, it is very unlikely that we would not collect *any* In-Tab from a county.

CREDITED LISTENING

We determine a station's *Radio County Coverage* audience estimates by aggregating all Quarter-Hours of that station's listening credit in the county and weighting it according to the methods described below.

MODELED PPM MEDIA DAYS

Before it weights the data, the *Coverage* processing system imputes the final credited results of a panelist's In-Tab PPM media days to other media days when the panelist was not In-Tab.

The system imputes final credit results on a same day-of-week model with, for example, listening from one of the previous four Tuesdays copied to an out-of-tab Tuesday.

We report the percentage of media days modeled in a county on our secure client website. Reminder: we do not model PPM days in the local radio syndicated service.

WEIGHTING

We use 'cell weighting' for *Radio County Coverage*; this method is materially different than the method we use for the RMR/eBook.

In *Coverage's* cell weighting methodology, we assign each In-Tab diary or PPM panelist a weight. In Diary-measured counties, we determine this weight by dividing that cell's population by that cell's In-Tab. In PPM-measured counties, we determine this weight by dividing that cell's population by that cell's Unique Weekly Qualified In-Tab (adjusted for the number of weeks each panelist was In-Tab).

We use ethnicity as a weighing variable in all counties to which we applied an ethnic control to all surveys or report periods (as applicable) for the whole of the fieldwork year.

For *Radio County Coverage* weighting, we use the county's population estimates for the Fall survey / October-November-December report periods. For split-county population estimates, we allocate estimates to respective splits based on zip code population estimates provided by a data vendor.

We also apply a weighting factor to PPM In-Tab to normalize it to the format of Diary In-Tab. This is necessary because a single panelist may contribute up to 52 weeks of data to the report.

We apply a different weighting factor to the Diary In-Tab to account for the fact that some households could be included in multiple sample frames (and thus may be more likely to be selected for the sample than are other households).

DEMO

The demo for *Radio County Coverage* is Persons 12+.

DAYPARTS

We report *Radio County Coverage* audience estimates for the Monday-Sunday 6AM-Midnight and Monday-Friday 6AM-7PM Dayparts.

STATION INFORMATION

We apply the station information on file for the last day of the Fall survey/December report period to the whole fieldwork year.

ELIGIBLE STATIONS

FCC-licensed, commercial AM and FM radio stations that have signal coverage in a county are eligible to be reported in that county's audience estimates.

MINIMUM REPORTING STANDARD

In counties from which we collected In-Tab data from fewer than 350 respondents, we will report estimates for a station if three or more of the respondents listened to the station.

In counties from which we collected 350 or more respondents, we will report estimates for a station if 1% or more of the respondents listened to the station.

TOTAL LINE REPORTING

Because we apply a station's Fall station information to the whole of the fieldwork year, it will materially affect a TLR combo's *Radio County Coverage* estimates if the broadcaster starts, ends, adds partners, or removes partners from the combo. Contact your Nielsen account executive for additional information.

REPORTING SEQUENCE

We list stations in a *Radio County Coverage* report alphabetically by call sign, with stations that are home to a Metro grouped ahead of stations that are not.

"OTHERS"

We also report an estimate listed as 'Others.' This estimate is an aggregate of listening credited to stations that did not meet the applicable minimum reporting standard, stations that are not eligible for reporting, stations that signed off-air during the fieldwork year, and listening reported by Diary keepers that we could not credit to any particular radio station.

SPECIAL NOTICES

An "unencoded interval" is a period where an encoded radio station is on-air but not encoding.

A 'technical difficulty' is a period where a station is off-air, broadcasting at reduced or intermittent power, or experiencing signal interference.

Both unencoded intervals and technical difficulties can affect a station's audience estimates.

With the release of each edition of *Radio County Coverage*, we will publish notices that detail stations' unencoded intervals and technical difficulties that accounted for 5% or more of the fieldwork year's broadcast hours. These notices will be available for view via the secure client website.

REMEDIAL ACTION AND REISSUE

Should we discover that a data, processing, or other error affected a *Radio County Coverage* report, we may elect to correct the error and issue a revised report. We will generally reissue a report in circumstances where correction will substantially change a significantly ranked station's audience estimates. When determining if we will reissue a report, we will also consider the amount of time that the marketplace used the original estimates and the extent to which the affected station's audience estimates are available in other services.

STATISTICAL RELIABILITY

In 2006, Arbitron conducted a replication study to estimate reliability factors for the *Radio County Coverage* service. We continue to use these factors to calculate *Radio County Coverage* ESBs. Clients can find the estimates' statistical reliability and information on how to interpret that information by using the online *Radio County Coverage* reliability estimate calculator available via the secure client website.

RESTRICTIONS ON USE AND LIMITATIONS, DISCLAIMER OF WARRANTIES, WARNINGS

The restrictions on use, limitations, disclaimer of warranties, and warnings described in Chapter 16 of this DOM also apply to the *Radio County Coverage* service.

RESERVATION OF RIGHTS

We reserve the right to modify, waive, or suspend any *Radio County Coverage* method, policy, or procedure that would appear to be unreasonable, illogical, or impractical in light of known conditions.

We also reserve the right not to produce *Radio County Coverage* in circumstances where there is insufficient data available to meet our minimum research standards or when any event has jeopardized the reliability of the data.

All determinations about the *Radio County Coverage* service, including crediting, clustering, weighting, and reporting, lie solely with Nielsen.

CHAPTER SIXTEEN**RESTRICTIONS ON USE OF REPORTS AND LIMITATIONS****RESTRICTIONS ON USE OF REPORTS**

All Nielsen *Radio Market Reports/eBooks*, including the audience estimates and maps contained therein, software and information related thereto, are confidential, proprietary to, and protected by various intellectual property laws, including but not limited to state and federal copyright laws by Nielsen. They are provided to properly licensed authorized users pursuant to the terms and conditions of their executed license agreement(s) with Nielsen (whom are neither in breach nor default with Nielsen), and in accordance with the restrictions and limitations on use stated herein.

All Nielsen audience data, estimates, reports, software, and Nielsen products related thereto, are for the exclusive use of properly licensed authorized users and their authorized representatives, and may be disclosed only to advertisers, prospective advertisers, and their agencies for the purpose of obtaining and retaining advertising, accounts, and through advertising or promotional literature as permitted hereunder or in the license agreements between Nielsen and its clients. Any use of the audience data, estimates, reports, software, and Nielsen products related thereto, for the purpose of selling advertising time or space by or on behalf of broadcast, cable, print, Internet, or any other medium, must be under the terms of a written license agreement between an authorized user and Nielsen specifying the permitted uses. For an authorized user to divulge or provide any data, estimates, reports, and/or software to a non-subscribing party, or, unless expressly authorized by Nielsen in writing, to lend and/or give a copy and/or a reproduction of any part of any report or Nielsen software program(s) to an unauthorized party, including but not limited to print media, advertisers, and/or their agencies, constitutes a willful breach of the license agreement between Nielsen and the authorized user, and a violation of Nielsen intellectual property rights, including but not limited to Nielsen copyrights. A violation of Nielsen U.S. federal and state copyright rights can subject an infringer to statutory damages and attorney's fees. Quotations by authorized users of the estimates as allowed by this section for purposes of advertising or promotion must identify Nielsen as the source and that Nielsen data, estimates, reports, and software are copyrighted by Nielsen. Users of the *Radio Market Report/eBook* service shall also mention that the audience estimates are subject to all qualifications and limitations stated in the Nielsen report and shall include the appropriate market, survey period, type of audience estimate, applicable daypart(s), and applicable demographic group(s) (e.g., New York Metro, January 2013, Average Quarter-Hour Estimates, Monday-Friday 6AM-Midnight, Persons 25-54).

An authorized user to any particular *Radio Market Report/eBook* may not use or reference, in whole or in part, the demographic data or audience estimates stated in the "Target Listener Trends" section that reference a *Radio Market Report/eBook* to which the authorized user did not subscribe.

The *Radio Market Report*/eBook, nor the map contained therein, nor any audience estimate, nor software, or products related thereto, may be used in any manner or for any purpose by unauthorized parties without the express written permission of Nielsen.

Users of audience estimates are also referred to the current policies of the Federal Trade Commission relating to the use of audience estimates.

WARNING

All Nielsen audience estimates and maps are proprietary and confidential. Each Nielsen audience estimate and map are protected by various intellectual property laws, including but not limited to U.S. federal and state copyright laws. The unauthorized use of any Nielsen audience estimate or map may constitute willful copyright infringement that can subject a willful infringer to statutory damages of up to \$150,000 per act of infringement and criminal penalties of up to 10 years imprisonment and a \$500,000 fine pursuant to Chapter 5, Sections 504 and 506 of Title 17 of the U.S. Code, and attorney's fees associated with any such enforcement of Nielsen intellectual property rights. All users of the Nielsen *Radio Market Report* are referred to "Restrictions on Use of Reports and Limitations," on this page.

DISCLAIMER OF WARRANTIES

NIELSEN MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS, CONCERNING: DATA GATHERED OR OBTAINED BY NIELSEN FROM ANY SOURCE; THE PRESENT OR FUTURE METHODOLOGY EMPLOYED BY NIELSEN IN PRODUCING NIELSEN DATA, ESTIMATES, REPORTS, AND/OR SOFTWARE PROGRAMS; AND/OR THE DATA, ESTIMATES, REPORTS, AND/OR SOFTWARE PROGRAMS PROVIDED BY THIS SERVICE. ALL NIELSEN DATA, ESTIMATES, REPORTS, AND/OR OTHER ASPECTS OF THIS SERVICE REPRESENT ONLY THE OPINION OF NIELSEN, AND RELIANCE THEREON AND USE THEREOF SHALL BE AT AUTHORIZED USER'S OWN RISK. ALL SOFTWARE PROGRAMS ARE PROVIDED ON AN "AS IS-WHERE IS" BASIS AND RELIANCE THEREON AND USE THEREOF SHALL BE AT AUTHORIZED USER'S OWN RISK. IN NO EVENT SHALL NIELSEN BE LIABLE FOR THE FAILURE OF ANY THIRD PARTY TO PROVIDE ANY DATA OR SERVICES IN CONNECTION WITH THE DATA, REPORTS, AND/OR SOFTWARE LICENSED BY NIELSEN.

RESERVATION OF RIGHTS

Nielsen reserves the right to exercise its judgment in modifying, waiving, or suspending any policy, procedure, or element of methodology that would appear to Nielsen to be unreasonable, illogical, or impractical in light of known conditions.

Additionally, Nielsen reserves the right not to produce data, and/or listening estimates, and/or any report(s) and/or service(s) whenever, in its judgment, insufficient data are available to meet its minimum research standards or any event has jeopardized the reliability of the data.

LIABILITIES AND LIMITATIONS OF REMEDIES

The sole and exclusive remedy for Nielsen liability of any kind, at law or in equity, including without limitation liability for negligence or delay with respect to any service, shall be limited to an amount as set forth in the license agreement between Nielsen and its authorized user. In no event shall Nielsen be liable for special, incidental, consequential, or punitive damages, nor shall Nielsen be subject to injunctive relief with respect to the data and estimates provided by any service.

SPECIAL NOTICES

To the extent that any provisions contained in this *Local Radio Syndicated Services Description of Methodology* are directly inconsistent or directly conflict with any provision contained in the “Special Notices” section of the *Radio Market Report/eBook*, such Special Notices are deemed to supersede and/or amend this *Local Radio Syndicated Services Description of Methodology*.

FTC GUIDELINES

The FTC has issued Guidelines regarding deceptive claims of Broadcasting Audience Coverage (issued July 8, 1965). These Guidelines are still in effect and are reprinted in full here:

The Commission believes that...television and radio broadcasters, other persons selling advertising or broadcasting time or programs, advertising agencies, and advertisers should, in making claims based on survey results, or data, observe the following basic Guidelines:

1. A person (or firm) making a claim concerning the size, composition, or other important characteristics of a listening or viewing audience is responsible for seeing to it that the claim is truthful and not deceptive. If he bases his claim on the results of an audience survey, he assumes responsibility for interpreting the data accurately. Thus, he should not engage in activities calculated to distort or to inflate such data—for example, by conducting a special contest—or otherwise varying his usual programming, or instituting unusual advertising or other promotion efforts, designed to increase audiences only during the survey period. Such variation from normal practices is known as “hypoing.” It is also improper to cite or quote from a survey report or survey data in such a way as to create a misleading impression of the results of the survey, as by unfairly basing audience claims on results achieved only during certain periods of the broadcast day or on a survey of only a segment of the total potential audience.
2. Audience data are based on sample surveys not derived from complete measurements of audiences. As such, they are statistical estimates, and, at best, are of only limited reliability due to errors and distortions inherent in the statistical methods yielding such data. Claims as to audience coverage based on audience surveys should therefore be qualified in recognition of the fact that survey data are inherently imperfect. Any such claim should be accompanied by a disclosure that any figures cited or quoted are estimates only or are based upon estimates, and

are not accurate to any precise mathematical degree unless based upon a true probability sample. Audience surveys are not in practice based upon true probability samples.

3. Such claims should not be based on data obtained in a survey that the person (or firm) making the claim knows or has reason to know was not designed, conducted, and analyzed in accordance with accepted statistical principles and procedures, reasonably free from avoidable bias and based on a properly selected sample of adequate size. Such claims should not be based on survey reports or data that do not reasonably reflect current audience coverage, either because the passage of time has made the data outdated, or because a later survey report encompassing essentially the same area has been published, or because of the entry or departure of a competitor, or for any other reason.

These Guidelines are offered to broadcasters and others concerned for consideration in avoiding possible violation of the Federal Trade Commission Act.

LIMITATIONS

In addition to sources of possible error described elsewhere in this *Local Radio Syndicated Services Description of Methodology*, the user should be aware of the following limitations:

- a. Known commercial establishments and other known nonresidential facilities are specifically excluded from the sample frames. Reasonable steps are taken during sampling and recruitment to further exclude, to the extent possible: business or other nonresidential telephone numbers inadvertently included in the sample; residents of media-affiliated households; and group quarters residences containing 10 or more unrelated individuals or containing 17 or more individuals regardless of relationship. Additionally, all possible sample units may not be included in the frame employed for sample selection. Persons not included in the sample may have media habits that differ from those of persons included in the sample.
- b. The sample for the Houston-Galveston panel contains residential addresses only. Known commercial establishments and other known nonresidential facilities listed in address sources are specifically excluded from the sample frame. Steps are taken during recruitment to further exclude: business or other nonresidential addresses inadvertently included in the sample; residents of media-affiliated households; and group quarters residences containing 10 or more unrelated individuals or containing 17 or more individuals regardless of relationship. Additionally, all possible residential addresses may not be included in the frame employed for sample selection. Persons not included in the sample may have media habits that differ from those persons included in the sample.
- c. Effort is made to exclude households with media affiliation. The inclusion or exclusion of such households from the sample is dependent upon information revealed by the household in response to the media affiliation question at the time of recruitment, or anytime thereafter, or from other sources.
- d. There may be instances where the interviewer or Panel Relations staff does not follow instructions.
- e. Non-responding Persons may have listening habits that differ from those of respondents.

- f. Non-responding Persons and other limitations in the original designated sample prevent the In-Tab sample from being a perfect probability sample.
- g. The sample design and/or response patterns may preclude proportional representation of certain groups within the population, such as ethnic groups, racial groups, or persons in certain income or education groups. Such persons may have radio listening habits that differ from those of other persons.
- h. The dominant language spoken by a Diary keeper or panelist may influence his or her listening behavior, and Persons whose dominant language is not English may be differentially represented in the sample. In-Tab sample is weighted upon the dominant language spoken by respondents where dominant Spanish-language-usage population estimates are available.
- i. The population estimates used in designing and weighting the sample are based on the decennial U.S. Census and are subject to all the limitations inherent therein. In addition, population estimates are subject to limitations such as sampling errors, errors in locating undocumented populations, and processing and recording errors. Furthermore, the sources used to update populations between decennial Census dates may not include adjustments for known or unknown over counts or undercounts of various segments of the population, including undocumented population groups. In addition, annual population updates may be based historic rates of change that may not be sensitive to current conditions.
- j. The language-usage population estimates that Nielsen uses in weighting the sample are subject to all of the limitations existing in those results, which may include: sampling errors, methodological errors, processing errors, and recording errors.
- k. The limitations in data from Customer Analytics, the third-party vendor that supplies market information for Puerto Rico, are inherent in the Nielsen estimates based thereon. The population estimates from Custom Analytics used in designing and weighting the sample are based upon the decennial U.S. Census and are subject to all of the limitations inherent therein. In addition, population estimates are subject to limitations such as sampling errors, errors in locating undocumented populations, and processing and recording errors. Furthermore, the sources used by Customer Analytics to update populations between decennial census dates may not include adjustments for known or unknown over- or undercounts of various segments of the population, including undocumented population groups. In addition, annual population updates may be based on the results of sample surveys and are subject to their respective limitations.
- l. Zip code information used to produce the *Radio Market Report/eBook* is subject to defects and limitations that are inherent in the estimates based thereon.
- m. Panelists may not wear or carry their meters from rise to retire as instructed, and to the extent this occurs, the media exposure data collected may be incomplete.
- n. Encoding devices placed at media outlets may malfunction and/or be disconnected in such a way as to prevent the media sources from being properly encoded. To the extent this condition is known, it will be noted in the applicable report.
- o. Diaries, or portions thereof, may be completed improperly if the diary instructions are not followed by Diarykeepers. Such diaries may be unusable and excluded from the survey. Some diary entries may have been made on the basis of hearsay, recall, Diarykeeper approximations, or could have been influenced by comments made by the interviewer or others to Diarykeepers.

- p. In addition to direct responses to the qualitative questions at the back of the qualitative diary, the final qualitative database may contain derived responses to qualitative questions. For example, the qualitative database contains information on Household Size. Household Size can be determined by combining a response to the qualitative question for Number of Children less than 12 years of age with placement diary information for Number of Persons 12+.
- q. Human and computer processing errors may occur before or after electronic meter data are received by Nielsen. Consequently, the degree of variance in the data may be greater than that expected from sampling variance alone.
- r. The data upon which Nielsen has based its In-Tab sample weighting, including racial or ethnic identification, may not be precise.
- s. Defects and limitations found in data supplied by others are inherent in audience estimates based thereon.
- t. Data analysis, preprocessing preparation, or ascription of data may affect media exposure data from being modified or excluded from the In-Tab sample.
- u. Data analysis, preprocessing preparation, ascription of the data, or post-survey week telephone validation calls may affect diary listening entries before the data are projected. Diaries, or portions thereof, may thereby be modified or excluded from the survey. These procedures may affect the audience estimates or the station's ability to meet MRS.
- v. Nielsen conducts research involving new methods of improving panel cooperation and/or securing additional information from panelists. Occasionally, a portion of this research may be integrated with syndicated data and, if and when so done, may cause the degree of variance in the data to be greater than that expected from sampling variance alone.
- w. Certain data, such as call letters in effect, format, or programming, are based on data supplied by stations, the FCC, industry publications or notices, and/or other sources. These data may not be accurate or timely. Some of the data may affect the way certain audience estimates are reported.
- x. Rounding occurs at various stages in the determination of audience estimates, at demographic and daypart summation levels. Due to rounding, mathematical manipulation by the user of estimates for narrow dayparts and/or demographic groups may produce a result that may be incongruent with estimates for broader dayparts and/or demographic groups.
- y. Situations in which stations use or have used the same call letters or frequency, or have changed call letters or frequency, may result in Diarykeeper confusion in correctly identifying the station to which the listening occurred.
- z. Estimates reported for different reporting periods may not be comparable over time due to: methodological or operational changes; changes in survey area definitions or populations; changes in a station's or a combo's Total Line Reporting status; changes in station operations or facilities; special station activities and other factors.
- aa. Nielsen places sample at the county (or county equivalent) level, not the zip code level. From reporting period to reporting period, there may be greater variation in the number of panelists at the zip code level than at the county (or county equivalent) level.
- bb. For radio stations that are 100% simulcast, there are methods of signal routing that technically prohibit the installation of PPM encoding equipment into the backup air chains of one or more of the encoded simulcast partners. This method of encoding may affect the way media

exposures are credited to individual partner stations and may affect the way audience estimates are credited or reported for the simulcasting stations.

- cc. The digital radio Band ID labels referenced in this report are proprietary to Nielsen and protected under terms of Nielsen authorized user agreements and/or federal copyright and trademark law. Authorized users and purchasers of Nielsen data may display and use the Band ID labels provided the user clearly states that the labels are proprietary to Nielsen (e.g., “Nielsen Inc. retains all copyrights or other legal rights to the Band ID labels used herein.”). The reports may be used in accordance with the applicable license agreement between the authorized user and Nielsen. All other uses, unless Nielsen prior written approval is obtained, are expressly forbidden, and may subject the user to legal action, damages, and recovery of Nielsen legal expenses incurred in enforcing its intellectual property and proprietary rights.
- dd. Due to methodological considerations in non-embedded condensed markets, MaximiSer and Media Professional audience estimates may differ from those in the applicable Radio Market Report(s)/eBooks.
- ee. In response to an event outside of Nielsen’s reasonable control, such as power outages, mail disruptions, strikes, an extraordinary weather event, natural disaster, or any other event that precluded respondents in the marketplace from completing the survey, returning diaries, carrying their meters, or from transferring meter data to Nielsen for an extended period, Nielsen reserves the right to publish a report for the Metro that reflects a special survey area and/or truncated survey period. When determining if issue of a standard or special report is warranted, Nielsen will consider a range of factors including (but not limited to) conditions in the marketplace, the utility of the data in light of the marketplace conditions, and Nielsen’s estimation of the data’s validity and reliability.

PPM ratings are based on audience estimates and are the opinion of Nielsen and should not be relied on for precise accuracy or precise representativeness of a demographic or radio market.

CHAPTER SEVENTEEN

GLOSSARY OF SELECTED TERMS

IMPORTANT INFORMATION

In this glossary we provide the formal business definition for selected terms as they are generally used in the context of the local radio syndicated services. The reader should assume that a term applies to both PPM Panels and Diary Surveys unless we note otherwise. If a term has a different meaning in PPM and Diary, we note the applicable survey instrument in the entry's header. If a term applies exclusively to PPM or Diary, we indicate the applicable survey instrument in parenthesis.

GLOSSARY OF SELECTED TERMS

ABS: Operational acronym for the address-based sample frame.

Alternates (PPM): Non-Basic households recruited to participate in the panel if the Basic household cannot be recruited, refuses to participate, or cannot be maintained in the panel.

Alternate City of Identification: A city other than its legally authorized city of license with which a station may regularly identify on-air.

Alternate Response Rate "ARR" (PPM): A metric which measures the performance of Alternate (non-Basic) sample within a Panel. This metric includes all address-based sample including sample that can be matched to a telephone number and sample that cannot and it reflects the aggregate performance accounting for all stages of the process including enumeration, recruitment, daily compliance, and panel tenure.

Ascription: A probabilistic statistical procedure that assigns values for missing or incomplete data.

Average Daily Cume Persons (PPM): The estimated number of different (unduplicated) persons exposed to an encoded station for at least five minutes in a quarter-hour within a specified time period during an average day.

Average Weekly Cume Rating (PPM): The estimated number of different (unduplicated) persons exposed to an encoded station for at least five minutes within a quarter-hour within a specified time period expressed as a percentage of the appropriate estimated population.

Average Daily Time Exposed (ADTE): (See "Time Spent Listening.")

Average Quarter-Hour Persons, Diary: The estimated average number of persons who listened to a station for a minimum of five minutes within a reported daypart.

Average Quarter-Hour Persons, PPM: The estimated average number of persons exposed to an encoded station for at least five minutes within a quarter-hour during a daypart.

Average Quarter-Hour Rating: A station's Average Quarter-Hour Persons estimate expressed as a percentage of the appropriate estimated population.

Average Quarter-Hour Share: A station's Average Quarter-Hour Persons estimate expressed as a percentage of the Metro Total Average Quarter-Hour Persons estimate within a reported daypart.

Average Quarter-Hour Composition (PPM): An encoded station's Target AQH Persons divided by its Total Persons 6+ AQH audience.

Average Time Exposed (ATE): (See "Time Spent Listening.")

Average Weekly Cume Rating: The number of different (unduplicated) persons exposed to an encoded station for at least five minutes within a quarter-hour within a specified time period expressed as a percentage of the population.

Basics (PPM): A randomly selected household(s) chosen to represent a sampling unit in the panel.

Below the Line: Describes where in the report a station's audience estimates may be listed (e.g., below a special distinguishing line). We use a dashed line to distinguish stations that are home to the Metro or DMA region (as applicable) from those that are not; we may use a pink line to distinguish stations that have engaged in activities with Rating Bias or Rating Distortion potential.

Compliance Rate (PPM): The number of In-Tab panelists divided by the number of Compliance-Capable Persons.

Compliance-Capable Person (PPM): An online panelist that is not prevented from being In-Tab on a given media day due to travel away from home or due to a technical problem with his or her meter or household equipment.

Compliance Rate (PPM): The proportion of all Compliance-Capable Persons that were In-Tab.

Condensed Radio Market Report (Diary): One of two types of *Radio Market Reports*/ eBook. Condensed Reports have smaller sample objectives for the Metro and TSA, and contain fewer dayparts and demographics than standard *Radio Market Reports*. Estimates published in *Radio Market Reports* for non-embedded condensed radio markets consist of averages from the two most recent survey periods.

Consent Rate (Diary): The proportion of sampled households that agree to participate in the survey.

Country of Origin: Country or region of origin as reported by Hispanic panelists. We determine a panelist's country of origin based upon the outcome of interviews with the panelist's household. We based our country/region classifications, and the wording of the applicable interview questions, on the U.S. Census Bureau's American Community Survey. We report country of origin within select services and reports.

Cume Composition (PPM): An encoded station's Weekly Cume Persons divided by its Total Persons 6+ Weekly Cume audience.

Cume Duplication: The percentage of estimated Cume Persons for one station who also listened to another specific station.

Cume Persons, Diary: The estimated number of different persons who listened to a station for a minimum of five minutes in a quarter-hour within a reported daypart.

Cume Persons, PPM: The estimated number of different persons exposed to an encoded station for at least five minutes in a quarter-hour within a specified time period during an average week.

Cume Rating: The estimated number of Cume Persons expressed as a percentage of the appropriate estimated population.

Daily Weight (PPM): Numeric value assigned to an In-Tab panelist for the given media day for the purpose of projecting audience estimates to the population. The daily weight reflects the number of persons in the panelist's geographic, sex, and age group, and (if applicable) other groups, including dominant language (Spanish/English in Metros where Spanish-dominant language usage universe estimates are available), employment status, and the presence of children in the household.

Daypart: A time period for which audience estimates are reported (e.g., Monday-Sunday 6AM-Mid, Monday-Friday 6AM-10AM, Weekend 6AM-Mid).

Deinstalled Household (PPM): A household that was at one time, but is not currently, participating in the panel.

Demographic Groups (Demos): Classifications of populations according to sex, age, race, ethnicity, income, etc.

Designated Delivery Index/"DDI": A measure of sample delivery in Diary surveys and PPM panels. We determine DDI with the following equation: $(\text{Actual In-Tab}/\text{In-Tab Target}) \times 100$. DDI may be determined for the In-Tab sample as a whole, for particular demos, or for particular geographies.

Designated Market Area (DMA Region): A geographic market design used to measure television audiences. Every county in the United States is assigned exclusively to one DMA Region.

Design Weight (Diary): Pre-weight applied to In-Tab diaries returned from households that have a dual probability of selection.

Diary Mentions: The number of different In-Tab diaries in which a station received credit for at least one quarter-hour of listening.

Diarykeeper: Any individual to whom we send Diaries.

Differential Survey Treatment (DST): Special survey procedures used to increase participation rates of targeted demographic groups (e.g., Black, Hispanic, young males) that tend to be underrepresented in surveys.

Digital Radio Station: Term used to refer to radio stations that broadcast in digital format rather than an analog format. Types of digital stations include digital AM, digital FM, HD-multicast, and the Internet streams of radio stations. The term is also used as a noun to refer to the group of all digital stations.

Double Encoding (PPM): A period when more than one of the station's encoders is simultaneously encoding the station's signal.

Effective Sample Base (ESB): An estimate of the size of a simple random sample that would be required to produce the same degree of reliability (amount of sampling error) as the sample for a complex survey such as a radio Diary survey.

Encoder (PPM): Audio equipment or software that embeds a PPM code into an audio signal of a broadcast.

Encoder Time Stamp (PPM): Characters within a length of encoding that indicates the time when the encoded audio was broadcast.

Encoding Monitor (PPM): Piece of audio equipment provided to an encoded station that is perpetually listening to the encoded station's audio to ensure that the audio contains encoding.

Ethnic Composition: Audience estimates for Total, Black, and/or Hispanic persons, ratings, and composition percents. Ethnic composition estimates are based on total Metro In-Tab and are reported for the Metro if at least 30 Black and/or Hispanic Diaries or panelists are In-Tab for the Metro, as applicable.

Ethnic Controls: The collective term for procedures designed to improve the representation of Black and Hispanic populations in our services. These procedures include Black and Hispanic Differential Survey Treatments, Black and Hispanic weighting of the In-Tab sample, High-Density Black and Hispanic Areas, and bilingual (Spanish-English) survey materials for Hispanics.

Frequency Exchange: Coined term that describes when two or more simultaneous frequency moves occur in the same area; as the name implies, a frequency exchange generally indicates station "A" and station "B" exchanged dial positions.

Frequency Move: Coined term that describes when the FCC reassigned a call sign from one channel to another channel, and when the broadcaster elected to "move" the station's programming from the old dial position to the new dial position. To qualify for frequency move processing, the broadcaster must also have positioned the call letter reassignment as a "move" that incentivized the station's listeners to tune into the programming at the new dial position.

Geo Zone: A cluster of zip codes within a sampling unit.

Group Quarters, Diary: For Diary survey sampling purposes, group quarters refers to living arrangements such as college dormitories, military barracks, nursing homes, and prisons, plus dwelling units of 10 or more individuals. However, residents of college dorms, military housing, etc., are considered eligible to participate in the survey if the telephone number is assigned to a private telephone serving fewer than 10 individuals.

Group Quarters, PPM: For PPM panel sampling purposes, group quarters is defined as more than nine unrelated persons or more than 16 related persons living at the same address.

High-Density Area (HDA): A zip code-defined sampling unit—either a High-Density Black Area (HDBA) or High-Density Hispanic Area (HDHA)—that may be established in a county within the Metro of an ethnically controlled market.

Home Station: A station licensed to a city located within a particular radio Metro (or a reported DMA Region). A station that is not licensed to a city within a radio Metro may be granted “home” status if it meets certain criteria.

Hot Call Letter Change: Coined term that describes when the FCC licenses more than one radio station in the same area to identify with the same four letter call sign during a survey or report period.

Installed Household (PPM): a household that includes online Panelists.

In-Tab/Usable Sample: Sample that is in-tabulation; sample that is used in the production of audience estimates.

In-Tab Rate (PPM): The number of In-Tab panelists divided by the total number of installed panelists.

Landline Frame: Operational pseudonym for the random digit dial frame.

Layering: The embedding of multiple CBET codes into an audio broadcast.

Listed Sample: Telephone numbers for which names and mailable addresses are published in telephone directories.

Listening Location: A location for which we report audience estimates. In Diary-based reports, listening locations include: “At Home,” “In a Car,” “At Work,” “Other Place.” In PPM-based reports, listening locations include: “At Home” and “Away From Home.”

Market Totals: (See “Metro Totals/DMA Region Totals.”)

Media-Affiliated Household, Diary: A household in which the person being recruited to participate in the survey, or anyone else in the household, is employed by a radio station or television station. Media-affiliated households are not eligible to participate in the survey.

Media-Affiliated Household, PPM: A household in which the person being recruited to participate in the panel, or anyone else in the household, or anyone the contact knows directly, is employed by a radio station or network, a television station or network, a cable or satellite station or network, or an advertising agency. Media-affiliated households may not be eligible to participate in the panel.

Media Day (PPM): Time periods corresponding to individual days of the week used to organize panelist exposure data. The media day begins at 4AM and ends at 4AM the next day.

Media Rating Council® (MRC): An organization that accredits media ratings services. The MRC mandates and performs annual audits of the compliance of a service with certain minimum standards.

Meter Time Stamp (PPM): Information appended to CBET encoding that indicates the time when the panelist's meter was exposed to the encoding.

Metro In-Tab Target Index, Diary: The ratio of the number of Metro In-Tab diaries to the Metro sample target, generally expressed as a whole number.

Metro In-Tab Target Index, PPM: The ratio of the Metro's Average Daily In-Tab panelists to the Metro sample target, generally expressed as a whole number.

Metro Survey Area (Metro): The primary reporting area for local radio audience estimates. Metro Survey Area definitions may correspond to the federal government's Office of Management and Budget's (OMB) Metropolitan Statistical Area, subject to exceptions dictated by historical industry usage or other marketing considerations.

Metro Totals/DMA Region Totals, Diary: Total reported listening to radio in the Metro or DMA Region (could refer to AQH or Cume estimates), which includes listening to reported stations, non-qualifying commercial stations, noncommercial stations, satellite radio, the Internet streams of AM, FM, and HD radio stations and unidentified listening. This is also referred to as Persons Using Radio (PUR).

Metro Totals PPM: Total reported exposure to encoded media in the Metro (could refer to AQH or Cume estimates). This is also referred to as Persons Using Measured Media (PUMM).

Minimum Reporting Standards (MRS): Criteria we use to determine which stations to list in a report.

Offline Status (PPM): Status indicating that a panelist is not eligible to be In-Tab.

One Percent (1%) In-Tab Criterion (Diary): A radio station meets the 1% In-Tab criterion if the station was mentioned in at least 1% of the In-Tab diaries returned from a given county during the previous available survey year. If two or more stations are eligible for credit of the same diary entry, and only one of the eligible stations meets the 1% In-Tab criterion, that station receives credit for the entry. If two or more stations meet the 1% In-Tab criterion, credit for the entry is determined via ascription.

Online Status (PPM): Status indicating that a Panelist is eligible to have his or her listening data included in the In-Tab sample (subject to applicable minimum compliance standard).

Outside Station: A station that is not “home” to a particular Metro and/or DMA Region.

Panel: A research methodology in which similar measurements are made on the same sample at different points in time. “Panel” may also be used as a singular noun to refer to the group of all panelists.

Panelist (PPM): A person who has been sent and has installed his or her PPM.

Panel Management (PPM): The processes by which installed panelists are encouraged to wear or carry their meters and panelist compliance with this instruction is monitored.

Persons-Per-Diary Value (PPDV): Numeric value assigned to each In-Tab diary for the purpose of projecting audience estimates to the population. The PPDV reflects the number of persons in the geographic, sex, age, and (if applicable) ethnic and/or language usage (English/Spanish) group represented by each In-Tab diary after sample balancing has been performed.

Persons Using Measured Media (PUMM): (See “Metro Totals.”)

Persons Using Measured Media Percent (PUMM %): Persons Using Measured Media expressed as a percentage of the appropriate estimated population.

Persons Using Radio (PUR): (See “Metro Totals/DMA Region Totals.”)

Portable People Meter (PPM): An electronic measurement device that detects and stores CBET codes as it is exposed to encoded audio.

Pre-Alerted Survey: A survey in which survey respondents are notified of their selection to participate in the survey before the survey takes place. This pre-notification to the sampled person or household is usually made by telephone or mail contact. It has been shown to increase both response and data quality relative to similar surveys having no pre-notification of respondents.

Premium: An incentive intended to encourage participation in the survey or panel, or offered as a “thank you” for participation.

Qualification Edit (PPM): Process that screens data collected from PPM equipment to evaluate motion detection, equipment functionality, and data collection results. Qualification Edits identify potential equipment faults, data issues, and panelist compliance.

Quarter-Hour, Diary: The basic unit of listening credit. Generally, a station receives credit for a quarter-hour of listening if the Diarykeeper reported five or more minutes of continuous listening to the station during a quarter-hour.

Quarter-Hour, PPM: The basic unit of listening credit. Generally, a station receives credit for a quarter-hour of credit if the panelist is exposed to the station for five or more minutes during a quarter-hour.

(Note: The minutes of exposure need not be continuous.)

Radio Market Report (RMR)/eBook: The syndicated report that provides audience estimates and other data for specific markets.

Radio Video Stream: Streaming media that synchronizes an on-air radio station's audio to visual images related to the station (such as the view from an in-studio camera).

Rating: See "Average Quarter-Hour Rating" and "Cume Rating."

Ratings Reliability Estimator (RRE): A web-based application that a client may use to determine standard error and confidence intervals for the Cume and AQH estimates reported in our local and national syndicated radio services.

Respondents: Sampled persons who provide information in response to survey questions.

Response Rate (Diary): The ratio of In-Tab diaries to the Estimated Persons in Usable Households, generally expressed as a percentage.

Return Rate, Diary: The proportion of In-Tab diaries compared to the number of diaries we mailed to consenting households.

Sample Target: The In-Tab sample size objective for a particular survey area.

Sampling Unit: A geographic area consisting of a county or county equivalent, for which sample is separately selected and monitored.

Second Chance Diary: A sampling methodology in which households that did not return any diaries are re-contacted and asked to participate in the survey a second time.

Second Chance Diary Household: A household that has been sampled via second chance diary procedures.

Share: (See "Average Quarter-Hour Share.")

Split County: A portion of a county, consisting of one or more zip codes, that is recognized as a separate sampling unit for purposes of survey area definition or more discrete sample control.

Station Information Form (SIF): A computer-generated form used to capture radio station information. The information collected via the Station Information Form is used to credit diary entries and serves as a basis for computing and reporting audience estimates in the Diary and PPM services.

Station Information Packet (SIP): The package mailed to radio stations prior to the start of a survey containing a letter of introduction, the SIF, directions on how to complete the SIF, and other information relevant to the survey for which station information is being collected.

Station Name: A station's most frequently used on-air identifier other than call letters or lone exact frequencies.

Streaming Program Loop (SPL): An Internet stream that broadcasts one of a radio station's programs live each day, then replays that program from beginning to end during the remaining hours of the day. In the PPM service, an SPL that replays all of the program's content and commercials is eligible to have its audience included in the estimates reported for the originating station.

Technical Difficulty (TD): Period when a station notified us that it was broadcasting at reduced or intermittent power, experiencing signal interference, or was off-air during the station's authorized broadcast day.

Time Spent Listening (TSL) PPM: An estimate of the average amount of time the average panelist was exposed to an encoded station (or all encoded media) during a particular daypart.

Time Spent Listening (TSL) Diary: An estimate of the average amount of time the average listener reported listening to a station (or total radio) during a particular daypart.

Total Line Reporting (TLR): A reporting option available to stations that simulcast.

Total Survey Area (TSA): A geographic area that includes the Metro Survey Area and may include additional counties (or county equivalents).

Turnover Rate, PPM: The proportion of panelists that left the panel during the report period. We determine turnover rate by dividing the number of panelists installed on the first day of the report period but not on the last day of the report period by the number of panelists installed on the first day of the report period.

Unencoded Interval (PPM): A period of at least five minutes within a quarter-hour during which the station was on-air but not encoded that has been confirmed as having occurred by the station.

Unidentified Listening (Diary): Listening that is included in Persons Using Radio that could not be credited to a specific station.

Unified Response Rate, Diary: One of the appropriate metrics with which to measure a Diary survey's sample performance. We determine unified response rate with the following equation: (Percent of In-Tab from RDD Frame x [RDD Frame In-Tab diaries / RDD Frame Estimated Persons in Usable Households]) + (Percent of In-Tab from the address frame x (Address frame In-Tab diaries / Address Frame Estimated Persons in Usable Households)).

Unified Sample Performance Indicator/ "USPI," PPM: One of the appropriate metrics with which to measure a panel's sample performance. We determine USPI with the following equation: (RDD Persons SPI X RDD Installed Sample Percentage) + (Matched AB Persons SPI x Matched AB Installed Sample Percentage) + (Unmatched AB Persons SPI x Unmatched AB Installed Sample Percentage).

Universe Estimate (or Population): The estimated total number of persons in a particular sex/age group and geographic area.

Unlisted Sample: Sample telephone numbers for which names and mailable addresses are not published in telephone directories and may or may not be known prior to placement calling.

Unusable Diaries: Diaries returned that we cannot include in the In-Tab sample. Generally, unusable diaries do not pass established quality criteria.

Weekly Weight: (PPM) Numeric value assigned to an In-Tab panelist for the given week for the purpose of projecting audience estimates to the population. The weekly weight reflects the number of persons in the panelist's geographic, sex, and age group, and (if applicable) other groups including dominant language (Spanish/English in Metros where Spanish-dominant language usage universe estimates are available), employment status, and the presence of children in the household.

FREQUENTLY USED ABBREVIATIONS

AQH	Average Quarter-Hour
COO	Country of Origin
DOM	Description of Methodology
DST	Differential Survey Treatment
ESB	Effective Sample Base
HDBA	High-Density Black Area
HDHA	High-Density Hispanic Area
MRC	Media Rating Council
MRS	Minimum Reporting Standards
MSA	Metropolitan Statistical Area
NAB	National Association of Broadcasters
OMB	Office of Management and Budget
PPDV	Persons-Per-Diary Value
PPM	Portable People Meter
PSB	Presurvey Bulletin
PUMM	Persons Using Measured Media
PUR	Persons Using Radio
RDD	Random-Digit Dialing
RMR	Radio Market Report
RRE	Ratings Reliability Estimator
SIP	Station Information Packet
SSA	Special Station Activities
TD	Technical Difficulty
TLR	Total Line Reporting
TSA	Total Survey Area
TSL	Time Spent Listening
UI	Unencoded Interval

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