



Local Syndicated Services

Description of Methodology

Diary and PPM *Radio Market
Reports*/Arbitron eBooks

Winter 2012

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Table of Contents

Chapter One

The Local Syndicated Services Description of Methodology

Arbitron <i>Radio Market Reports/</i> Arbitron eBooks	1.1
The Local Syndicated Services Description of Methodology	1.1
Publication Schedule and Access	1.1
Naming Convention and Scope	1.1
Copyright	1.1
This DOM and Methodology Disclosure Standards	1.1
What MRC Accreditation Means	1.2

Chapter Two

Arbitron Survey Areas

The Metro	2.1
Total Survey Area	2.1
Custom Survey Area	2.1
Designated Market Area	2.1
Market Name	2.1
Metro Start-Up	2.1
Metro Redefinition	2.1
Metro Cancellation	2.2
Reservation of Rights	2.2

Chapter Three

Sampling and Recruitment

Diary Surveys	3.1
PPM Panels	3.2
Custom Survey Area Reports	3.3
Sample Performance Metrics	3.4
Reservation of Rights	3.4

Chapter Four

Station Information

The Station Relations Team	4.1
Station Information Database	4.1
AM, FM, and HD Radio Station Information	4.1
Internet Stream Information	4.1
FM Translator Information	4.1
Information Collection Process	4.1
Importance of Up-to-Date Station Information	4.1
Online Station Profile	4.1
Unique Marketplace Conditions	4.1
Off-Air Stations	4.2

Chapter Five

Station Encoding

Stations Eligible to Encode	5.1
The Encoding Agreement	5.1
The Encoder	5.1
The Encoding Monitor	5.1
The Unique CBET Policy	5.1
Equipment Audits	5.1
In-Station Encoding Monitoring	5.1
Unencoded Intervals	5.1
“Double Encoding”	5.1
Station Requalification	5.1

Chapter Six

Panelist Equipment and Panel Relations

Panelist Equipment	6.1
Panelist Instructions	6.1
Panel Relations	6.1
Minimum Compliance Standard	6.1
Incentives and Premiums	6.1
Demographics Update	6.1
Panelist Tenure	6.1
Deinstallation	6.1
Operational Status Codes	6.1

Chapter Seven

The Diary and Diary Processing

The Standard Diary	7.1
The Qualitative Diary	7.1
The Bilingual Diary	7.1
Overview of Diary Processing	7.1
Diary Usability	7.1
Diary Edit Procedures	7.2
Quality Assurance	7.3
On-Site Diary Review	7.3
Retention of Survey Materials	7.3

Chapter Eight

PPM Data Processing

Station Edits	8.1
Time Edits	8.1
The “Duration Edit”	8.1
Time-Shifted Media Exposure	8.1
Docked-Meter Edit	8.1
Location Edit	8.1
Quarter-Hour Assembly	8.1
Quality Assurance	8.1
Meter Security	8.1

Chapter Nine

Sample Weighting

Sample Balancing	9.1
Weighting Variables	9.1
Example of Sample Weighting	9.1
Determining Weights	9.2
Maximum Respondent Weight	9.2
Diary Survey Models	9.2
Design Weights	9.3
PPM Sample Balancing Configurations	9.3
Daily and Weekly Weights	9.3
CSAR Sample Weighting	9.3
Reservation of Rights	9.3

Table of Contents

Chapter Ten

Audience Estimates

Demos and Dayparts.....	10.1
Cume.....	10.1
Average Quarter Hour.....	10.1
Time Spent Listening.....	10.1
Composition.....	10.1
Listening Location.....	10.1
Exclusive Listening.....	10.1
Multibook Averages.....	10.1

Chapter Eleven

Station Reporting

Station Reporting Policy.....	11.1
Eligible Stations.....	11.1
Minimum Reporting Standards.....	11.1
FM Translators.....	11.1
Total Line Reporting.....	11.1
Station Labeling.....	11.1
Reporting Sequence.....	11.1
Licensed to Use Arbitron Data.....	11.1
Special Notices.....	11.1
Reissue of the Report.....	11.1
Station Reporting in a Diary Meter Combo DMA.....	11.2

Chapter Twelve

Special Station Activities

Media Affiliation.....	12.1
Rating Distortion.....	12.1
Rating Bias.....	12.1
Estimate Sourcing.....	12.1
Applicable Media.....	12.1
Special Station Activity Violations.....	12.1
Request for Inquiries and Confidential Pre-Review.....	12.1
Reservation of Rights.....	12.2
Additional Detailed Information.....	12.2

Chapter Thirteen

Reliability of Arbitron Estimates

Estimated Reliability.....	13.1
Standard Error.....	13.1
Confidence Interval.....	13.1
Replication Study.....	13.1
Ratings Reliability Estimator.....	13.1

Chapter Fourteen

Arbitron Radio County Coverage

Overview.....	14.1
MRC Accreditation.....	14.1
General Methodology.....	14.1
Survey Area.....	14.1
Survey Instruments.....	14.1
Survey Period.....	14.1
Minimum County In-Tab.....	14.1
County Clustering.....	14.1
Credited Listening.....	14.1
Modeled PPM Media Days.....	14.1
Weighting.....	14.1
Demo.....	14.2
Dayparts.....	14.2
Station Information.....	14.2
Eligible Stations.....	14.2
Stations Reported.....	14.2
Minimum Reporting Standard.....	14.2
Total Line Reporting.....	14.2
Reporting Sequence.....	14.2
Unencoded Interval Notices.....	14.2
Remedial Action and Reissue.....	14.2
Statistical Reliability.....	14.3
Restrictions on Use and Limitations, Disclaimer of Warranties, Warnings.....	14.3
Reservation of Rights.....	14.3

Chapter Fifteen

Restrictions on Use of Reports and Limitations

Restrictions on Use of Reports.....	15.1
Warning.....	15.1
Disclaimer of Warranties.....	15.1
Reservation of Rights.....	15.1
Liabilities and Limitations of Remedies.....	15.2
Special Notices.....	15.2
FTC Guidelines.....	15.2
Limitations.....	15.2

Chapter Sixteen

Glossary of Selected Terms

Important Information.....	16.1
Glossary of Selected Terms.....	16.1
Frequently Used Abbreviations.....	16.5
Sourcing.....	16.5

The Local Syndicated Services Description of Methodology

Arbitron Radio Market Reports/Arbitron eBooks

An Arbitron *Radio Market Report*/Arbitron eBookSM provides authorized users of Arbitron data with information on the size and demographic composition of radio audiences—information essential to sound decision making for advertising sales and radio programming. Each *Radio Market Report*/Arbitron eBook contains audience estimates for the applicable survey or report period in a particular Arbitron-defined market, audience trends based on prior surveys and report periods, and other important information about the marketplace.

The Local Syndicated Services Description of Methodology

This document is entitled the *Local Syndicated Services Description of Methodology*. It provides a detailed, high-level description of the methodology used in the production of Arbitron *Radio Market Reports*/Arbitron eBooks for markets that are home to the 50 United States, the District of Columbia, and Puerto Rico. It includes information about the types of audience estimates included in the reports, the sampling methods used, the survey instruments, the methods of obtaining and processing the data, Arbitron's policies related to the reporting of audience estimates, the statistical reliability of the estimates, important information and warnings regarding the use of Arbitron data, and a glossary of key terms. Arbitron prepared this information to assist users to better understand the methodology by which Arbitron produces audience estimates, what the audience estimates published in the reports represent, and the limitations of the estimates. While comprehensive in scope, this document does not describe the full breadth of all Arbitron methodology or knowledge. There are elements of Arbitron's procedures that are too detailed to be described here, or that must remain confidential.

The methodology described herein is applicable only to Arbitron's syndicated *Radio Market Report*/Arbitron eBook services; methodology for Arbitron's national services, custom studies, special reports, research tests, or reports based upon Arbitron data provided by third parties may differ from the methodology described in this document. Users of such data are cautioned not to presume that any of the methodology described herein also directly applies to that data.

Publication Schedule and Access

Arbitron will publish an updated version of the *Local Syndicated Services Description of Methodology* four times each calendar year. Users of Diary-based audience estimates will have access to an updated DOM with the release of each *Radio Market Report*. Users of PPM-based audience estimates will have access to an updated DOM upon release of the March, June, September, and December *Radio Market Reports*.

Users of Arbitron data may access the DOM via the "Methodology" links in Arbitron eBook. Requests for access to previous editions of the DOM (and/or legacy Diary and PPM DOMs) will be considered on a case-by-case basis. Access to the DOM is a privilege reserved for authorized users of Arbitron data.

Naming Convention and Scope

Each edition of the DOM will be named for the Diary Survey/PPM Reporting Months to which the methodology described was in use. The name of each edition of the DOM will be prominently placed on the DOM's cover, and will be included in the footer of each page.

Users of the DOM are urged to keep in mind that the DOM is, by nature, a "backwards-looking" document in that it describes the state of methodology for a specific time in the *past*. DOM readers are cautioned not to presume that any element of methodology described in a specific edition of the DOM will *also* refer to the methodology that may be in place at present, or at any time in the future.

Each edition of the DOM replaces all previous editions of the DOM, and remains in effect until the DOM is again revised and/or replaced by Arbitron. To the extent that any provision(s) contained in a DOM is inconsistent with, or conflicts with, any provision(s) contained in a previously published DOM, the current DOM is deemed to supersede all others.

To the extent that any provisions contained in a DOM are inconsistent or conflict with any provision published on the "Special Notices" page of a market's most current *Radio Market Report*/Arbitron eBook, the provisions published on the "Special Notices" page are deemed to supersede the DOM.

Any revisions, modifications or amendments in methodology or service that occur subsequent to the publication of the DOM are generally announced on the Arbitron Web site and via the Pre-Survey Bulletin and/or similar publications provided to authorized users of Arbitron data. All such issued revisions, modifications or amendments become integral and incorporated parts of this text by reference.

Copyright

The *Local Syndicated Services Description of Methodology* is copyrighted, and may not be duplicated or redistributed in either a digital or physical format without Arbitron's prior written permission.

This DOM and Methodology Disclosure Standards

One of the metrics upon which Arbitron's conformity with the Media Rating Council's (see below) minimum standards is judged relates to the disclosure of methodology. Research companies such as Arbitron are required to publish a description of methodology once per year. The publication schedule for the *Local Syndicated Services Description of Methodology* exceeds that minimum standard.

The Local Syndicated Services Description of Methodology



Accredited by
Media
Rating Council®

What MRC Accreditation Means

The Diary-based Arbitron *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 Arbitron's Diary service that are located in the 50 United States and the District of Columbia.

The PPM-based Arbitron *Radio Market Report* service has been accredited by the Media Rating Council (MRC) in:

- **Atlanta**
(accredited March 2011)
- **Cincinnati**
(accredited March 2011)
- **Houston-Galveston**
(accredited January 2007)
- **Kansas City**
(accredited March 2011)
- **Milwaukee-Racine**
(accredited March 2011)
- **Minneapolis-St. Paul**
(accredited January 2010)
- **Philadelphia**
(accredited March 2011)
- **Phoenix**
(accredited March 2011)
- **St. Louis**
(accredited March 2011)

Arbitron is not actively seeking accreditation of the Puerto Rico Diary service.

To merit continued MRC accreditation, Arbitron:

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 subscribers and the Council; and
4. Submits to, and pays the cost of, thorough annual audits of accredited Arbitron services by CPA firms engaged by the MRC.

In addition to paying sizable audit charges, Arbitron 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

Arbitron Survey Areas

Arbitron produces audience estimates for radio stations in up to four different survey areas. This chapter provides a broad overview of these areas, the key polices Arbitron uses to determine them, and its approach for managing a market's life cycle. The information in this chapter is for general information purposes only, and does not constitute the full body of Arbitron knowledge, policy, or procedure.

The Metro

The Metro Survey Area or "Metro" is the radio market's primary mercantile area. Generally, an Arbitron Metro includes the market's population center; areas with similar commuting patterns border the Metro; and the FCC licensed a particular group of radio stations to serve the area.

The roster of counties Arbitron includes in a particular Metro may or may not correspond to roster of counties that the U.S. Government Office of Management and Budget includes in its Metropolitan Statistical Area. Arbitron discloses the Metro's conformity with the MSA in the report's Special Notices (as applicable).

To account for topographical or marketplace features that may affect radio listening in one part of the county as compared to another part of that county, Arbitron may elect to subdivide or "geo-split" the county into smaller pieces. Arbitron treats each of the subdivided pieces of a geo-split county as an individual sampling unit. Arbitron generally appends a direction identifier to the county's name to indicate that it geo-split the county (e.g. Howard North and Howard South). Arbitron will geo-split a Diary-measured county as business conditions warrant in Arbitron's judgment. Arbitron suspended additional geo-splitting of PPM measured counties with the debut of "Geo Zones." (See chapter three "Sampling and Recruitment" for additional information).

A "high density area" (HDA) is a zip code-defined area within a Metro county where Arbitron applies special sampling procedures. Generally, Arbitron will establish a Black HDA in any sampling unit where the population is 35 percent Black and a Hispanic HDA in any sampling unit where the population is 40 percent Hispanic. In select areas, Arbitron may elect to establish both Black and Hispanic DST. In other areas,

Arbitron may subdivide a portion of an HDA into an "HDA2."

An *embedded Metro* is a unique area for the buying and selling of radio that is within the boundaries of a larger Metro. Arbitron applies a sample-balancing model in the embedded Metro counties that is different from the model it applies in the Metro's non-embedded counties.

Total Survey Area

A market's Total Survey Area or "TSA" includes all Metro counties and additional non-Metro counties in proximity to the Metro. Arbitron uses an objective set of criteria to determine counties it will include in a new market's TSA; detailed information regarding these criteria is available upon request.

Custom Survey Area

Arbitron may also prepare a report for a customized survey area specified by the party that commissioned the report.

Designated Market Area^{®1}

The Designated Market Area (i.e., "DMA") is a geographic design used by Nielsen Media Research, Inc. for the measurement of television audiences.

Market Name

An Arbitron market name is descriptive of the area surveyed and generally includes the name of a city, multiples cities, or a county in the market. Arbitron may also include a two-letter state abbreviation in a market name to differentiate markets that have the same name, markets that include counties from multiple states, or to indicate a condensed market.

Metro Start-Up

In order for Arbitron to start a new Metro service in an area, the area must have a population of at least 50,000 Persons 12+. In addition, at least 15 percent of commuting in the area must be either intra-county or to another county in the

proposed Metro. Arbitron must also have credited at least 30 percent of all radio listening returned in Diaries from the proposed Metro's counties to stations that would be home to the Metro.

As a practical matter, Arbitron does not survey all possible Metros. For Arbitron to start a Metro service, the service must have a station subscriber or prospect.

Metro Redefinition

To help ensure that a Metro reflects the marketplace that surrounds it, Arbitron may add counties to or remove counties from the Metro (e.g. "redefine" the Metro).

Generally, Arbitron will recommend adding a county to the Metro when the county is contiguous to another Metro county and when Arbitron credited 55 percent (or more) of all listening in that county to Metro stations and when the sum of that percent plus the percent of commuting from the county into the Metro is "70" or more. In very rare instances, additional or alternate criteria may apply.

Arbitron identifies counties that meet these criteria during a set of structured redefinition analyses. Arbitron will prepare a Metro redefinition analysis for a Metro as often as once each calendar year upon subscriber request. Arbitron automatically conducts a redefinition analysis for all Metros following the release of each decennial U.S. census.

After careful review of Arbitron's findings, subscribers may elect to amend their Arbitron 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, subscribers agree to the cost of any sample increase needed to maintain the statistical reliability of the redefined Metro's audience estimates and to a three-year freeze on additional redefinition analyses in that Metro.

Subscribers in Diary and PPM measured Metros may request a redefinition analysis. For additional information on Arbitron's Metro redefinition policy and process, consult your Arbitron sales representative.

¹DMA[®] is a registered service mark of Nielsen Media Research, Inc., and is used pursuant to a license from Nielsen Media Research, Inc.

Arbitron Survey Areas

Metro Cancellation

Arbitron may cancel a Metro service at any time as warranted in Arbitron's judgment. As a practical matter, Arbitron is unlikely to cancel a Metro service to which a station subscribers or to which there is a likely station prospect.

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

Arbitron will place Diaries in a cancelled Metro's counties during future surveys for its Nationwide, RADAR[®], and *Radio County Coverage*[™] services.

In response to *extraordinary* conditions that radically changed the market or disrupted business within it, Arbitron may elect to cancel a Metro's service in order to start a new, different Metro service 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. Additionally, this approach may not be available to all Metros, and may be further limited by the terms and conditions of the subscribers' licensing agreements with Arbitron.

Reservation of Rights

All determinations regarding Arbitron Metro, Custom Survey Areas, and Total Survey Areas remain solely and unilaterally with Arbitron; additionally, Arbitron reserves the right to modify, waive, or suspend any element of its policies as business conditions or research considerations warrant, in Arbitron's judgment.

Sampling and Recruitment

This chapter provides a broad overview of Arbitron's methodology for selecting and recruiting 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 Arbitron knowledge, methodology, or policy.

Diary Surveys

Sample Universe

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

Sample Target

A Metro survey sample target is Arbitron's In-Tab sample size objective for the Metro. In concept, Arbitron's 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 that Arbitron uses to determine a sample target is available upon request.

Arbitron determines a non-Metro target with a mathematical formula based upon 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 an Arbitron survey. Additional information on the algebraic formulae Arbitron uses to determine an ESB is available upon request.

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.

Arbitron's data vendor provides Arbitron 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).

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, Arbitron randomly selects numbers from the hundred blocks and calls the number to attempt to recruit the household to participate in the survey. Arbitron recruits the majority of households that will return In-Tab Diaries from this portion of the sample frame. The proportion of In-Tab recruited from the landline frame varies by market.

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

Arbitron's telephone recruitment procedures consist of a complex set of communications; the mode Arbitron uses on a specific contact attempt depends upon that attempt's position within the recruitment routine and Arbitron's success at securing contact with the household during an earlier attempt. To help ensure that Arbitron applies the same procedures to all households, it manages respondent communications with a centralized computer-assisted system. English-Spanish bilingual interviewers are available to speak with a household as necessary.

Selection from the Address Frame

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

Starting with a list of all addresses in the market, Arbitron (and/or its data vendor) attempts to match the addresses to a landline telephone number. Arbitron discards any address that it can match to a phone number from the address frame because that household is already eligible for selection from the landline frame. Arbitron then randomly selects addresses from those remaining on the list.

Next, Arbitron mails a short questionnaire to the selected addresses. If the household returns a completed questionnaire, Arbitron may select the household for recruitment; the information the household provides will determine the

technique Arbitron will use to attempt to recruit the household to participate in the survey.

If the household indicates that it has cellular telephone and no landline service and provides a contact telephone number, Arbitron calls the household and attempts to recruit the household. If the household does not provide a contact number, Arbitron mails the household Diaries. (Note: Arbitron uses the same approach to recruit households that indicate they have both cellular and landline telephone service but that rarely or never use the landline service.)

If the household indicates that landline telephone service is its primary phone service, Arbitron will mail Diaries to the household if the respondent identifies that a Person aged 18-34 lives in the household, or in markets meeting specific criteria, the respondent indicates that the household is African-American or Hispanic. Arbitron does not attempt to recruit any other 'unmatched-landline' households.

If the household returns the questionnaire and indicates that it does not have any telephone service, Arbitron will attempt to recruit the household via mail.

Incentives

Arbitron uses 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. Arbitron applies special procedures for Persons 18-34 in all markets and for Black, Hispanic, and Black/Hispanic persons in applicable High Density Areas.

Second Chance

In continuously measured sampling units, Arbitron offers households that consented to participate in the survey during a telephone interview but that did not return any Diaries a "second chance" to participate in the survey. Arbitron 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

Sampling and Recruitment

name and address, and to gain consent to send new Diaries. If the household is still eligible to participate, Arbitron will mail the household another set of Diaries.

PPM Panels

Universe

The Universe for Arbitron's PPM Panels is Persons aged 6 and older living in the Metro.

Sample Target

A Metro's PPM target represents the number of different In-Tab Panelists that, in Arbitron's opinion, yield a statistically reliable sample for the Metro's Panel on any given media day. Factors that Arbitron considers when it determines a Metro's target include the Metro's population, additional sample purchased by the Metro's subscribers, and/or other factors. Arbitron reserves the right to adjust a Metro's In-Tab target as business conditions or research considerations warrant, in Arbitron's judgment.

The Sample Frame

The sample frame for Arbitron's PPM Panels is a list of residential addresses. Arbitron's data vendor filters the list to exclude known part-time residences, businesses, and group quarters dwellings (such as barracks, a dormitory, or a prison).

Basics and Alternates

Arbitron randomly designates all addresses on the address list as either a "Basic" or an "Alternate." This classification is important because it determines the approach that Arbitron will use to select the household for recruitment (should Arbitron ever select that household).

Address/Telephone Number Matching

Arbitron attempts to match each address on the list to a telephone number. Arbitron will successfully match a large subset of the addresses to phone numbers. Arbitron immediately calls these "address-matched" phone numbers to collect some demographic information from the household.

When a Basic household answers the call and provides Arbitron with the household's demographic information, Arbitron places that household in the pool of households

from which it may attempt to recruit via a telephone interview.

When an Alternate household answers the call and provides Arbitron with the household's demographic information, Arbitron places that household in the Alternate pool.

Questionnaire

Arbitron mails a short questionnaire to addresses on the address list that it was unable to match to a telephone number. If the household at that address returns the questionnaire and provides a contact telephone number, Arbitron may call the household to collect some demographic information from the household.

As is the case with the address-matched households, when a Basic household answers the call and provides Arbitron with the household's demographic information, Arbitron places that household in the pool of households from which it will attempt to recruit Basic households via a telephone interview.

Arbitron also calls Alternate households that return the questionnaire. When an Alternate household answers the call and provides Arbitron with the household's demographic information, Arbitron places that household in the Alternate pool.

In Person Recruitment Pool

Arbitron places Basic addresses that it cannot match to a telephone number and/or addresses that did not return a questionnaire into the pool of addresses that it might randomly select for an in-person recruitment visit.

Basic Selection and Recruitment

Arbitron randomly selects Basic households from the telephone pool as needed. Arbitron attempts to recruit these households to participate in the Panel via a telephone interview. Arbitron's telephone recruitment procedures include a complex set of scripted communications, premiums, and incentives. The number of Arbitron's communication attempts, the types of premiums, and the amount of incentives Arbitron offers may vary from market to market and from demo to demo.

Arbitron also randomly selects Basic addresses from the in person recruitment pool as needed. Arbitron attempts to recruit the household residing at a selected address by an in-person visit to the household. If the household agrees to

participate, the Arbitron representative collects demographic information about the household members, explains Arbitron's incentive structure, provides the household with PPM equipment, and assists with the installation of the equipment.

Alternate Selection

Arbitron organizes its Alternate pool by placing each Alternate household into one of 32 mutually exclusive demographic categories. If a Basic household refuses to participate in the Panel, Arbitron may attempt to recruit an Alternate household to meet the demographic needs of that market's Panel. Arbitron may elect to recruit an Alternate household via telephone interview or a visit to the household (as applicable).

Arbitron will retire a household from the Alternate pool if it does not select that household within six months of its first contact with the household. Because Arbitron designates and interviews Alternate households on an ongoing basis, there will always be a pool of Alternate households from which Arbitron may select.

Geo Zones

An Arbitron "geo zone" is a group of ZIP codes that are in close proximity to each other that contain clusters of residents with similar demographic and socioeconomic characteristics.

In 2011, Arbitron divided all PPM-measured counties into geo zones; in these counties, Arbitron conducts all sampling activities within the context of the geo zone (rather than in the larger context of the sampling unit). While Arbitron uses the geo zone model for administrative purposes relating to sampling, Arbitron does not use a geo zone model when it weights the In-Tab sample.

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

Arbitron used a structured set of criteria to determine what zip codes to include in a particular geo zone; these criteria take into

Sampling and Recruitment

account such factors as geography, population density, and that sampling unit's In-Tab target. (Note: With the debut of geo-zones, Arbitron suspended establishing any new geo-split counties in PPM Metros.)

Panel Tenure

The maximum amount of time that a household may participate in the Panel is approximately 21 months from the date that household agreed to participate.

However, Arbitron's experience is that most households voluntarily leave the Panel before that term of eligibility expires. Additionally, Arbitron will remove a household from the Panel at any time if the household moves out of the Metro, if the household is not compliant with Arbitron's instructions, or when other changes make the household no longer eligible to participate.

Arbitron recruited all Panel households in the months leading up to a Metro's first currency report around the same fixed point in time. To prevent disruption to the marketplace that would have resulted from the "mass exit" of these households from the Panel also around the same point in time, Arbitron gradually removed these households from the Panel over the course of 18 to 30 months. (Note: In Metros that fully converted to PPM currency prior to calendar year 2009, Arbitron removed households from the Metro's first Panel gradually over an 18- to 39-month period.)

Transition Period

From the debut of the PPM service until December 31, 2011, Arbitron's PPM sample frame also included a random-digit-dial (RDD) frame. As of this writing, there are In-Tab households and other households at various stages of Arbitron's Sampling routine that Arbitron selected from the RDD frame. These households will remain eligible to participate in the Panel for the full duration of each household's PPM Panel lifecycle. Given the maximum possible Panel tenure, Arbitron anticipates that it will have selected all Panelists exclusively from the address frame by the year 2015.

Ascription of Demographic Information

During its sampling and recruitment routine, Arbitron collects a wide range of demographic information from households

and Panelists. Arbitron uses a subset of this information to weight the In-Tab sample for the Radio Market Report. To be eligible to be In-Tab, a Panelist must provide Arbitron with this essential information. Arbitron uses another subset of this information for purposes unrelated to sample weighting. While unlikely, it is possible that Arbitron will recruit a household without having collected the full complement of this non-essential information. To account for missing data in this data set, Arbitron may 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 Arbitron may use these characteristics as weighting variables in other Arbitron services and reports; Arbitron discloses ascription rates in applicable reports.)

The Houston-Galveston Panel

The Houston-Galveston Panel was Arbitron's PPM demonstration Panel. As such, there are procedures that Arbitron uses in its Houston-Galveston service 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 DMA counties. The sample frame for the market is a list of residential addresses.

Arbitron organizes the addresses by census blocks within the address' sampling unit or "cluster." Next, Arbitron 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. Arbitron mails a questionnaire to each Basic address on the list. Via this questionnaire, Arbitron collects some general demographic information about the household residing at that address.

Because Arbitron designates a Basic household and its corresponding Alternate households within the cluster, a particular Alternate is always within close geographic proximity to the Basic that it may some day replace.

Arbitron's first attempt to recruit a Basic household is via telephone interview. If the household refuses to participate in the Panel, Arbitron will attempt to recruit the household with an in-person visit to the household. If Arbitron cannot recruit the Basic household with either a telephone

interview or an in-person visit, Arbitron will attempt to recruit an Alternate household that is demographically similar to the Basic on the Arbitron's pre-determined matching criteria.

Custom Survey Area Reports

Arbitron determines a Custom Survey Area's (CSA) target 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, Arbitron will use the higher of the targets. Arbitron may also elect to add extra sample to the CSA per the customer's specifications, or as business conditions warrant in Arbitron's judgment. In its databases and reports, Arbitron designates 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 which are not eligible for DST as a whole.

Sample Performance Metrics

Arbitron reports sample performance metrics for its Diary surveys and PPM Panels via a wide range of sample performance metrics including consent rate, return rate, response rate, unified sample performance indicator, and designated delivery index.

For a general definition of each metric, see this Description of Methodology's "Glossary." For detailed information on the metrics that apply to a particular market and report, see the sample performance information by clicking the "Market Info" tab of the report.

Reservations of Rights

Arbitron reserves 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 in Arbitron's judgment.

Station Information

The station information Arbitron collects from radio stations is one of the data sources Arbitron uses to prepare audience estimates. The timeliness of this information is a key attribute of the estimates' quality. As such, Arbitron strives to collect and maintain up-to-date facility information for all radio stations.

This chapter provides a broad overview of Arbitron's approach to the collection and maintenance of station information. The overview offered in this chapter is for general information purposes only, and does not constitute the full body of Arbitron policy, knowledge, or procedure.

The Station Relations Team

Arbitron's Station Relations Team manages the collection, input, and storage of station information in Arbitron's databases.

The Station Relations Team is a radio station's primary point of contact for all inquiries pertaining to station information.

Arbitron's Station Relations Team is available during Eastern business hours via telephone at (410) 312-8062, via FAX at (410) 312-8619, or via e-mail at rsimail@arbitron.com.

Station Information Database

The Radio Station Information Database (RSI) is Arbitron's centralized warehouse for station information. Arbitron 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 systems drawing information from the database use information applicable to the survey or report period. Nearly all Arbitron systems and services use information stored in this database.

AM, FM, and HD Radio Station Information

Arbitron collects a wide range of station information from AM, FM, and HD-multicast radio stations. Arbitron uses this information for crediting and reporting in its Diary and PPM services. This information is also latent in the data sets that Arbitron provides to third party processors.

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

Internet Stream Information

Should an AM, FM, or HD-multicast station indicate that the station streams its signal on the Internet, Arbitron collects additional information from the station about its stream, including the stream's Internet address and whether the stream is 100% simulcast with the on-air version of the radio station. Arbitron also integrates this information into its Diary and PPM station crediting and estimates reporting tools. This information is also latent in the data sets that Arbitron provides to its third-party processors; Arbitron recommends that subscribers to those services inquire with the service provider for information regarding how the service accounts for radio station internet streams.

FM Translator Information

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

Information Collection Process

A radio station may update its information by contacting the Station Relations Team. A station may also submit facility information to Arbitron via the Station Information Form (SIF). Arbitron mails the SIF, and additional information pertaining to it, to every station either two times or four times per year depending upon that station's service level.

Importance of Up-to-Date Station Information

Arbitron processes audience information every day. For this reason, it is in a

station's interest for Arbitron to have up-to-date information on file for the station at all times. If a station's information on file with Arbitron is out-of-date, there is risk that Arbitron may use the out-of-date information to process audience estimates. As such, Arbitron encourages stations to notify Arbitron of facility changes—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 Arbitron of impending changes before the changes take place. In such circumstances, Arbitron treats information regarding the upcoming changes as confidential.

Online Station Profile

A subscribing radio station may review any station's information on file for the current survey or report period by accessing the Online Station Information profile via the applicable link on the station's my.arbitron.com 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 identifiers on a particular day. 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 use the same call sign during the survey.

In such instances, Arbitron determines under what call sign to report each station's estimates. Arbitron makes this determination based upon analysis, interpretation, and verification of information provided by the stations and on file with the FCC. Arbitron also takes into account the stations' wishes to the greatest extent possible.

As Arbitron's determination will affect the manner in which it reports audience estimates for the stations in the current survey report, and because it will also affect how trends for the stations are reported, Arbitron reports information related to such unique marketplace conditions in the report's "Special Notices."

Station Information

Off-Air Stations

“Off-air” stations are not eligible for crediting or reporting in any Arbitron service. Arbitron will classify a station as off-air when the station has ceased regular broadcasting and the FCC has terminated the station’s license or the license’s owner has let the license expire. Arbitron will also classify a station as off-air if a licensed station has been dark for a period of six continuous calendar months. (Should that station retain its license and sign back on-air, Arbitron will classify the station as a new station.)

Station Encoding

This chapter provides a broad overview of Arbitron's PPM encoding technology and key policies Arbitron developed to support it. The descriptions in this chapter are for general information purposes only, and do not constitute the full body of Arbitron knowledge or policy.

Stations Eligible to Encode

Radio stations that are FCC-licensed to a county in a PPM Metro's DMA and/or stations that are not licensed to the DMA but that have signal coverage in the PPM Metro are eligible to encode. As of this writing, Arbitron invited all eligible radio stations to encode.

The Encoding Agreement

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

The Encoder

A PPM encoder is the piece of audio equipment that inserts information into a radio station's signal. The information the encoder inserts into the station's signal may include a station identifier, a time stamp, a quality assurance marker, and/or other types of information. As it inserts this information into the station's signal, the encoder continuously analyzes the audio to determine the amplitude at which to insert it so that it will not be audible.

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 monitor does not "hear" the station's encoding, the monitor will alarm.

Arbitron encourages all 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.

The Unique CBET Policy

Because the information that a station's encoder inserts into the station's signal is unique to that station, Arbitron's firm policy is that an encoded radio station may not retransmit the PPM encoding of any other station, nor may it stream its 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 Unique CBET Policy violate the terms of the station's Arbitron Encoding Agreement and may constitute Rating Distortion. Should Arbitron determine that a station violated the Unique CBET Policy, Arbitron reserves the right to take whatever action is warranted in Arbitron's judgment.

[Note: The Unique CBET policy does not apply for periods that include Emergency Alert System (EAS) messages, or to FM translators, boosters, or repeaters.]

Equipment Audits

Arbitron regularly audits the performance of its encoders deployed in the field. Should an equipment audit indicate that an encoder may be operating at a less than optimal level, Arbitron may contact station engineering staff to discuss the encoder's operation and help the station resolve (to the greatest extent possible) any factors adversely affecting the encoder's operation.

In-Station Encoding Monitoring

It is the responsibility of an encoded radio station's staff to monitor the station's encoding. As Arbitron does not adjust a station's PPM audience estimates for periods when the station is not encoding, many stations have made in-station encoding monitoring a priority.

In circumstances where a station is on-air and its encoding monitor has alarmed for three continuous minutes or longer, Arbitron recommends that the station engineer enable the station's backup encoder and contact Arbitron 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.)

Unencoded Intervals

When an encoded radio station is on-air but is not encoded, the station receives no listening credit. Arbitron refers to such a period as an "unencoded interval." Arbitron includes 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 audio. Arbitron will note the details of 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.

Station Requalification

Approximately every two years after a station installs its encoding equipment, Arbitron reaches out to the station for a quality assurance review of the station's encoding installation.

During this "requalification" process, an Arbitron engineer will update the station's signal flow diagram on file with Arbitron and assist station engineers to further optimize installed encoding equipment and/or install additional equipment (as necessary). Requalification concludes with Arbitron verifying that each of the station's signal paths is encoded. Shortly after, Arbitron provides a letter to the station's General Manager indicating that the station's requalification is complete.

During the window that Arbitron contacts a market's stations for requalification, Arbitron also re-invites stations in that market to encode that declined Arbitron's previous invitations to encode.

Panelist Equipment and Panel Relations

This chapter provides an overview of the equipment Arbitron provides to Panelists and the processes by which Arbitron interacts with Panelists. The descriptions included herein are for general purposes only, and do not constitute the full body of Arbitron knowledge, policy, or procedure.

Panelist Equipment

The Portable People Meter is a small electronic instrument that resembles a pager. Inside the Meter are a battery, a microphone, an accelerometer, and data storage technology. The Meter is perpetually “listening” for information that has been encoded into radio station signals. The Meter captures this information, appends additional information to it, and stores it until the Panelist docks the Meter in its recharging base. At the predetermined time each day, the information is pushed to Arbitron.

PPM household equipment is a “plug and play” system; the household needs no special knowledge or tools to install it. Arbitron verifies successful installation of the equipment via a quality assurance test. A household is not eligible to be In-Tab until Arbitron completes this test.

Panelist Instructions

Arbitron instructs a Panelist to wear or carry his or her Meter during waking hours and dock the Meter in its base unit before retiring for the day. The Panelist must comply with these instructions to remain in the Panel. Circumstances such as extended periods of travel or illness may prevent a Panelist from being able to comply with Arbitron’s instructions. Arbitron considers such circumstances when it measures compliance.

The PPM media day begins at 4AM and continues until 4AM the next day. As a practical matter, Panelists who wake up and go to bed according to a standard schedule transfer “one day’s worth” of data to Arbitron each day. Arbitron’s processing software ensures that media exposure captured by Panelists who wake up and go to bed according to a nonstandard schedule that overlaps multiple media days are credited to the appropriate media day.

Panel Relations

Through a set of proprietary and/or patented processes, Arbitron monitors and, to the extent possible, maximizes

Panelists’ compliance with its instructions. These processes and techniques are a key quality control of the end-to-end PPM system; by maintaining a relationship with Panelists, Arbitron helps to improve the representativeness of the Panel.

Minimum Compliance Standard

The term “minimum compliance standard” specifically refers to the number of hours per media day that a Panelist must wear or carry his or her Meter to be eligible to be in that media day’s In-Tab sample. For Panelists 18 years and older, the minimum compliance standard is eight hours; for Panelists six to 17 years of age, the minimum compliance standard is five hours. Arbitron does not disclose any information regarding the minimum compliance standard to Panelists.

Incentives and Premiums

Arbitron compensates Panelists for their cooperation via a complex and multi-tiered set of incentives and premiums. The amount, form, and timing of these distributions may vary from household to household, from demo to demo, and from market to market. In select markets, Arbitron may take other additional steps to increase compliance rates for certain demographic groups. Arbitron bases its incentive and premium structure solely upon the Panelist’s compliance with Arbitron’s instructions; there is no connection between the type or amount of media to which the Panelist is exposed and the incentives and premiums offered to the Panelist. Arbitron provides clear verbal and written communications to Panelists to this effect.

Demographics Update

A Panelist’s demographic characteristics may change during the Panelist’s tenure in the Panel. Arbitron has deployed a set of procedures and processes to help ensure that its record of the Panelist’s demographic information is up-to-date. Arbitron automatically updates the Panelist’s age during his or her birth month. Every 135 days, Arbitron re-confirms each Panelist’s demographic information (excluding gender, birth month, birth year, and Hispanic origin/race). Additionally, Arbitron re-collects *all* of a household’s demographic information approximately one year after the household enters the Panel. Arbitron processes interim updates to the

household’s demographic information upon learning of a change.

Panelist Tenure

For information regarding Arbitron’s policies related to the maximum amount of time a Panelist may be in the Panel, see the “Panel Tenure” section in the “Sampling and Recruitment” chapter of this *Description of Methodology*.

Deinstallation

Arbitron may elect to deinstall (i.e., remove) a household or a Panelist from the Panel at any time as business conditions warrant in Arbitron’s judgment. Examples of circumstances that may result in deinstallation include chronic failure to comply with Arbitron’s instructions, breaches of confidentiality or Meter security, misuse of the PPM equipment, and/or any other circumstance that (in the interest of research quality) requires Arbitron to remove the Panelist or household. Arbitron carefully considers such circumstances on a case-by-case basis, taking into account the nature and extent of the circumstance.

Operational Status Codes

For operational purposes, Arbitron assigns each Panelist a status code used to denote the Panelist’s disposition inside of Arbitron’s data processing systems.

Online Panelists are eligible to be In-Tab. Arbitron counts online Panelists in its count of installed Panelists.

Arbitron classifies a Panelist as *offline* when it is necessary to exclude the Panelist from In-Tab without removing the household from the Panel. For example, Arbitron classifies a Panelist as offline on the media day that the Panelist is waiting for replacement equipment. While it is not possible for an offline Panelist to be In-Tab, Arbitron includes offline Panelists in its count of installed Panelists.

In a very limited set of circumstances, Arbitron may also classify a Panelist as *on hold*. An on-hold Panelist is a “panelist in waiting.” An on-hold Panelist has installed the equipment, is complying with Arbitron’s instructions, is receiving incentives and coaching, but is not eligible to be In-Tab. Arbitron does not include on-hold Panelists in its count of installed Panelists.

The Diary and Diary Processing

This chapter provides an overview of the Arbitron Radio Listening Diary, Arbitron's Diary processing workflow, and key policies and procedures for the editing of information recorded in Diaries. The descriptions provided in this chapter are for general information purposes only and do not constitute the full body of Arbitron knowledge, policy, or procedure.

The Standard Diary

Arbitron's survey instrument is the Radio Listening Diary. The 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. To return the Diary to Arbitron, the respondent must seal his or her Diary and place it in the U.S. Mail.

Instructions Page

On the Diary's instructions page, Arbitron directs 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.

Daypages

The Diary includes seven daypages, one for each day of the survey week. The format of the Diary's daypages allows Diarykeepers 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.

Comments Page

The Diary also includes an open-ended "comments page" that the respondent may use to write comments or additional information regarding his or her radio listening. While Arbitron does not routinely use comments page information to assist in Diary crediting, Arbitron may refer to the comments during quality assurance audits and recrediting. Subscribers may review comments page

information via reports in other Arbitron services.

Demographic and Lifestyle Question Pages

Each Diary includes a set of demographic and lifestyle questions following the daypages. On these pages, Arbitron collects 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 indicate his or her age or gender, Arbitron re-interviews the respondent via telephone to collect the information. If Arbitron is unable to contact the respondent, or if the respondent does not provide the information, Arbitron does not include the Diary in the In-Tab sample. If Arbitron does not have a telephone number on record for a Diary that is missing age or gender information, Arbitron classifies the Diary as Unusable.

Should a respondent return a Diary that does not indicate his or her race, ethnicity, or primary language spoken in the home, Arbitron attempts to collect the information via telephone interview. If Arbitron is not able to collect the information directly from the respondent, Arbitron assigns each missing value in the Diary. In determining what value to assign, Arbitron reviews information returned from other respondents in the household and/or information collected from the household 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

Arbitron produces both standard and qualitative Diaries in a Spanish-English bilingual format. Arbitron mails bilingual Diaries to any household that requests them and to any household in which the respondent indicated that a person of Hispanic origin resides in the household. Arbitron mails bilingual Diaries 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. In some markets, Arbitron uses responses to this question for weighting.

Overview of Diary Processing

Upon receipt of a Diary, Arbitron scans images of the Diary's cover and pages into its Diary processing system. Arbitron staff and/or vendors then key-enter the information represented on the daypages into Arbitron's databases.

Once all of the Diarykeeper responses are key-entered, Arbitron's 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 established policy and protocol. If the chronology of listening events in the Diary is ambiguous to the extent that Arbitron cannot resolve the conflicts, Arbitron will classify the Diary as unusable.

Next, Arbitron's Diary processing system and Diary Creditors assign credit for the listening entries to the appropriate radio station. To assign listening credit, Arbitron uses a complex suite of online tools that cross-reference information contained in the Diaries with information Arbitron collected from radio stations.

Last, Arbitron engages a detailed analysis of a market's crediting. During this analysis, the team identifies crediting anomalies that fall outside of acceptable tolerances. In some instances, Arbitron may re-credit listening entries or take other corrective action as necessary.

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

Diary Usability

Arbitron makes a reasonable effort to use all returned Diaries. There are conditions, however, that will exclude a Diary from the In-Tab sample. Examples of such conditions include if the respondent mailed his or her Diary too early or too late for Arbitron to include it in the In-Tab

The Diary and Diary Processing

sample, if the Diary is not complete, or if the Diary includes amounts of listening in excess of the applicable thresholds.

Arbitron deployed usability checks at various points of the Diary processing workflow to identify such Diaries; each check serves as a “gate” through which a Diary must pass to proceed to the next stage of processing. Arbitron’s system rejects Diaries that do not pass these checks.

To compliment its standard usability checks, Arbitron also deployed procedures to identify Diary tampering; because of their sensitive nature, these procedures remain confidential.

Arbitron provides data pertaining to Unusable Diaries to the Media Rating Council (and to auditors working on behalf of the MRC). Arbitron will not provide this information to any other inquiring parties.

Diary Edit Procedures

Arbitron uses a complex body of highly detailed edit procedures to assign credit for Diary entries to radio stations. Following is a summary of several key Diary edit procedures. Due to their number and complexity, it is not possible to provide a comprehensive overview of all edit procedures in this venue; additional information regarding specific procedures is available upon request.

Station Reach

On-air radio stations are eligible for listening credit in any Arbitron sampling unit where the radio station may be heard. Arbitron and its data vendors estimate the reach of radio stations into Arbitron sampling units based upon the station’s antenna height and effective radiated power plus a mileage allowance (as applicable). When determining a station’s reach, Arbitron may also consider other factors including commuting patterns in the area and the credit results of prior surveys. The Internet streams of radio stations are eligible for credit in all sampling units.

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 to which Arbitron placed the Diary. Through an automated series of sequential and logical steps, Arbitron’s Diary processing system assigns credit to radio stations for such call letter entries.

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 the station’s FM translator. As a practical matter, Arbitron does not assign listening credit to any translator; Arbitron assigns credit for translator entries to the station retransmitted on the translator.

The 1% Rule and Ascription

In circumstances where two or more on-air stations are eligible for credit of the same Diary entry, Arbitron will use the “1% Rule” to assign credit for the entry.

To qualify for credit eligibility via the 1% Rule, Arbitron must have assigned credit to the station in a minimum of 1% of In-Tab Diaries returned from the sampling unit during the previous year.

In the event that only one of the stations eligible for credit of the entry “makes 1%,” Arbitron assigns credit to that station. If multiple of the stations eligible for credit of the entry make 1%, Arbitron assigns credit for the entry via ascription. If none of the stations eligible for credit of the entry make 1%, Arbitron does not credit the entry to any specific radio station.

At this time, Arbitron applies the 1% rule and ascription to entries that may report listening to an HD-multicast station in a small subset of circumstances; Arbitron does not apply the 1% rule or ascription to entries that may report listening to a radio station’s stream under any circumstance.

The “Blank Station” Edit

A “blank station” entry is a Diary entry that does not include a station identifier. In certain circumstances, Arbitron may assign credit for a blank station entry to a radio station based upon patterns of listening entries recorded elsewhere in the Diary.

Special Handling

Localized conditions may arise where, in Arbitron’s judgment, the application of standard edit procedures may not result in the appropriate assignment of credit. When such instances are sustained over multiple surveys, Arbitron conducts a detailed, threshold-based analysis to determine whether special crediting procedures are warranted. Should a special procedure be warranted, Arbitron informs the affected station(s). Arbitron audits all Special Handling rules annually to determine if the rule should be retired.

Unidentified Listening

Should Arbitron be unable to credit a Diary entry to any specific station, Arbitron marks the entry as “Unidentified Listening.” Arbitron includes all Quarter Hours of Unidentified Listening in its Persons Using Radio audience estimates (i.e., “Market Totals”).

Non-Licensed Radio and Other Media

Arbitron deletes listening entries from its databases that report listening to non-licensed (i.e., “pirate”) radio stations and to any media outlet that is not a radio station or the Internet stream of a radio station. Upon an entry’s deletion from Arbitron’s database, Arbitron does not include that entry’s Quarter Hour(s) in any database, service, or report.

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, Arbitron imputes final credit from other days in the Diary to the blank day(s). Arbitron imputes listening based upon a predetermined, empirically derived substitution matrix. Arbitron classifies a Diary with both Saturday and Sunday blank as unusable.

Lifestyle Question Edits

Arbitron will impute a value to any unanswered lifestyle (i.e., “qualitative”) question; to determine what value to assign, Arbitron refers to how other respondents of similar age or gender answered the question.

In instances where the respondent records multiple answers to lifestyle questions with mutually exclusive

The Diary and Diary Processing

categories, Arbitron uses the highest value or the affirmative value.

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

Quality Assurance

Arbitron's 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. Arbitron uses information concerning these errors to identify staff members in need of training and to identify bodies of policy or procedure that may be in need of additional development.

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

On-Site Diary Review

Licensed users of Arbitron data (or their designated representative) may visit Arbitron's Client Services Suite in its Columbia, MD, headquarters to review Diaries. Arbitron provides visitors access to the electronic images of all Usable Diaries and the Diaries' corresponding credited listening information subject to Arbitron's retention policy (see below). Arbitron reminds subscribers that he or she must schedule a visit to Client Services in advance of the day of the visit, and that visitors to Columbia may not photograph, copy, or reproduce daypage images without Arbitron's permission.

Retention of Survey Materials

Arbitron retains the electronic images of Diaries scanned into its system for one year from the date of the release of the last Arbitron syndicated report that includes information contained in the Diaries. Arbitron generally retains paper

Diaries for 60 (sixty) days after the release of the final *Radio Market Report* for which the Diaries were In-Tab. Arbitron destroys all digital and physical survey materials upon expiration of the applicable retention period. Subscribers should be mindful to schedule a review of Diaries or to request a special tabulation that may include a particular Diary in advance of the end of the applicable retention period.

PPM Data Processing

When a Panelist listens to an encoded radio station, the Panelist's Meter captures the station's PPM encoding, appends additional information to it, and stores it. At the predetermined time each day, the Panelist's household collection hub downloads the information from the Panelist's Meter, collates it with information downloaded from additional Meters in the household, and pushes the data to Arbitron. Upon receipt of data, Arbitron's PPM data processing system organizes the data and applies edits to it.

This chapter offers a broad overview of key PPM data organization principles and important PPM data edit procedures; the descriptions included herein are for general purposes only and do not constitute the full body of Arbitron knowledge, policy, or procedure.

Station Edits

While the majority of PPM encoding contains unambiguous station identifiers, some encoding may contain station identifiers that Arbitron cannot match to any encoded radio station. Arbitron developed edit procedures to credit such identifiers to an encoded radio station; which edit is applied to a particular identifier is determined by the degree to which the station identifier does not match/is similar to other station identifiers and by that identifier's proximity to other station identifiers in the Panelist's listening.

Time Edits

While the majority of PPM encoding contains complete, ordered, and unambiguous station and Meter time stamps, some encoding may have been stored that is missing a time stamp, or contains an illogical time stamp. Several edits are in place to account for these illogical or ambiguous values. In the absence of encoding time stamps, Arbitron defaults to the time information the Meter appends to the encoding.

The "Duration Edit"

One may think of a Panelist's exposure to encoded audio as a continuous stream of data capped by a beginning (when the Panelist tunes into the station) and an end (when the Panelist tunes into

another station or turns the radio off). During the course of the Panelist's listening, there may be a momentary loss of signal reception, fleeting pauses in the audio, or other circumstances that could result in a "break" or "blank" in the otherwise continuous data stream. If such a blank precedes a segment of data, Arbitron credits the blank segment to the station that received credit for the subsequent segment. When applying this edit, Arbitron does not assign credit for any break longer than 60 seconds.

Time-Shifted Media Exposure

Arbitron uses the term "time-shifted" to refer to exposure to encoded audio at a time other than the time of the audio's original broadcast. A station receives credit for time-shifted exposure that occurs within one day of the original broadcast, with credit assigned to the station for the quarter-hour(s) of the original broadcast.

Docked-Meter Edit

As a PPM is listening for encoding at all times, a radio station may receive credit for listening that occurs while the Panelist's Meter is in its dock. While the parameters of the docked Meter edit are fixed, variables such as the duration of the docked-Meter's exposure to encoded media and the relationship of the time of Meter docking to the start of the next media day will affect how the edit is applied. Arbitron discards docked-Meter exposures that occur outside of the applicable parameters.

Location Edit

The household's collection hub emits a low-power radio frequency (RF). Arbitron credits media exposure as having taken place "At Home" for all exposures for which the PPM has also captured the RF signal at least once in the quarter-hour.

Quarter-Hour Assembly

After organizing and editing a panelist's data stream, the system assembles quarter-hours of listening credit by grouping blocks of listening to a station within a quarter-hour; Arbitron will credit the station for any quarter-hour during

which the Panelist listened to the station for a cumulative five minutes (or more).

Quality Assurance

Arbitron has built multiple quality assurance checks into each process step and software module of the end-to-end PPM data processing system. These measures help Arbitron to ensure it applied all edits consistently and that it included all applicable data in each report. Additional measures are in place at each stage of data collection, transfer, processing and release to maintain the security of the data and the systems used to process it. Because of their sensitive nature, these measures are proprietary and remain confidential.

Meter Security

Arbitron's Meter security measures help to ensure that its PPM audience estimates do not include inauthentic listening, the listening of fictitious persons, unrealistic amounts of listening, or the listening of a single Panelist represented as the listening of multiple Panelists. The procedures Arbitron uses to identify possible breaches of Meter security are objective and empirical; these measures may include analyses of a Panelist's listening, motion, and/or other factors.

Should Arbitron determine that a potential Meter security breach might have occurred, Arbitron will take action, as warranted in Arbitron's judgment, to protect the quality of the In-Tab sample, including additional Panelist coaching, removal of the Panelist from the In-Tab sample, deinstallation of the Panelist's household, and/or other action. Due to their nature, Arbitron's Meter security measures, and the analyses that support them, are proprietary and remain confidential.

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 Arbitron uses 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 Arbitron knowledge, policy, or procedure.

Sample Balancing

Arbitron's 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).]

Weighting Variables

Arbitron may weight its 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.

Geography

Arbitron weights 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.

Sex/Age

Arbitron weights its 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+

Arbitron weights its 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 Arbitron with his or her exact age, Arbitron asks the respondent to identify his or her age range from a series of mutually exclusive categories. If the respondent selects an age range, Arbitron classifies 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.

Race/Ethnicity

In ethnic-controlled Metros, Arbitron weights its 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. Arbitron classifies 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.

Dominant Language

In Hispanic-controlled Metros where universe estimates are available, Arbitron weights Hispanic In-Tab sample to one of two dominant language classes: English-dominant or Spanish-dominant.

Employment Status

Arbitron weights PPM In-Tab to one of two employment statuses—full-time or not full-time. Arbitron does not weight

Panelists under the age of 18 by employment status.

Presence of Children

Arbitron weights 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 Arbitron weights 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 percent of the population but only 12 percent 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 percent of the population but 88 percent 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 percent of the population but 20 percent 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 percent of the population but only 5 percent 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.

Sample Weighting

It is extremely unlikely that, after the county and sex/age adjustments, the weighted Hispanic In-Tab would still equal 15 percent of the total sample. Because Arbitron 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 percent of the total sample. In this case, Arbitron automatically initiates 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*/Arbitron eBook.

Determining Weights

Arbitron's sample balancing procedures produces weights for each marginal class within a survey area. Because each In-Tab respondent belongs to one class within each marginal category, Arbitron weights 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 nonembedded condensed Metros, data collected during two survey periods are combined in each release of a *Radio Market Report*/Arbitron eBook. For example, data to be included in the Fall 2011 report will include data collected during the Fall 2011 and Spring 2011 surveys. For estimates published in a *Radio Market Report*/Arbitron eBook in these Metros, PPDVs are derived as described above for each individual survey period and then halved, 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. (For releases of *MaxiSer*[®] and *Media Professional*[®] in non-embedded condensed Metros, audience estimates for each survey included in the two-survey reporting period are averaged; additional rounding may occur to ensure that *MaxiSer*/*Media Professional* listening estimates will generally match those found in the *Radio Market Report*.)

When determining final weights, Arbitron rounds to tenths.

Maximum Respondent Weight

During preliminary rounds of sample balancing, should a respondent's weight exceed the pre-determined maximum permitted weight, Arbitron 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, Arbitron redistributes the weight adjusted to other respondents with similar weighting characteristics.

Arbitron determines maximum respondent weight thresholds based upon a detailed analysis of empirical data. Arbitron determines maximum weight thresholds once per year, with the threshold applicable for the subsequent

12 calendar months of audience measurement. A Diary weight threshold applies to all Diarykeepers across markets; similarly, a PPM weight threshold applies to all Panelists.

Due to their sensitive nature, the numeric value of maximum respondent weight thresholds for Diary surveys and PPM Panels is proprietary and remains confidential. Arbitron may prospectively reset these thresholds for a survey as business conditions or research considerations warrant in Arbitron's judgment.

During any particular survey or report period, Arbitron expects 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.

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 Arbitron performs 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 reporting, and presumes that there are no Metro counties that are not also in the DMA, and that there are no DMA counties that are not also in the TSA:

Model 1: Metro/DMA counties—all Diaries

Model 2: Non-Metro TSA/DMA 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, race/ethnic models are used if the theoretical In-Tab target for each

Sample Weighting

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 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, Arbitron applies 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, Arbitron balances the entire PPM In-Tab sample to one set of independent population estimates. In other Metros, Arbitron sample-balances 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 Arbitron uses to balance a Metro’s sample depends upon that Metro’s specifications and service level. Note: For sample balancing purposes, Arbitron combines PPM-measured non-Metro DMA counties

in the Houston-Galveston market with Metro counties.

Daily and Weekly Weights

As Arbitron produces 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 Arbitron uses for that particular service. In general, Arbitron uses 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. The final weekly In-Tab sample for each media week is weighted to produce a weekly weight, which is used in deriving weekly estimates, such as average weekly Cume and TSL.

CSAR Sample Weighting

Arbitron weights In-Tab Diaries for Custom Survey Area Reports by the same sample balancing methodology it uses for the *Radio Market Report*. When weighting Diary CSAR sample, Arbitron combines the county’s “special” CSAR over-sample with the county’s sample for its syndicated reports and weights the aggregated sample as a single unit. If a custom survey area includes a PPM or Diary Metro county (or counties), Arbitron uses the respondents’ weights for the *Radio Market Report* for the CSAR whenever possible.

Reservation of Rights

All determinations regarding Arbitron’s sample weighting policy and procedure, including weighting variables, models, maximum weights, and sample balancing configurations, remain solely with Arbitron; Arbitron reserves the right to waive, suspend, change, or modify any element of its methodology as business conditions warrant.

Audience Estimates

This chapter provides a broad overview of the audience estimates that Arbitron reports in the *Radio Market Report* and information on how Arbitron determines each. This overview is for general information purposes only and does not constitute the full body of Arbitron's knowledge or procedures. Additional information is available from your Arbitron account executive.

Demos and Dayparts

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

Cume

Cume Persons

A station's "Cume Persons" or "Cume" is the number of unique persons that listened to the station during the specified daypart. Arbitron determines 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.

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. Arbitron determines 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.

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. Arbitron determines 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

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.

Arbitron determines 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. Arbitron then sums the products of those equations, divides by the total number of Quarter Hours in the daypart, and rounds to hundreds.

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, Arbitron determines 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, Arbitron determines a station's AQH rating by dividing its Average Daily AQH by the Average Daily Population for the demo and then multiplying by 100.

Average Quarter-Hour Share

A station's Average Quarter-Hour share is the percent of all radio listening represented by that station's audience. To determine a station's AQH share, Arbitron divides the station's AQH Persons by the Market Total AQH Persons for the applicable demo and daypart and then multiplies 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, Arbitron multiplies 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. Arbitron expresses TSL estimates in hours and minutes.

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

Composition

In select reports, Arbitron provides a "Composition Report" that includes station estimates based upon a subset of respondents. Arbitron determines these estimates as described as above for the applicable demos and dayparts.

Listening Location

In select reports, Arbitron provides 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. Arbitron determines 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, Arbitron reports a two-book or four-book average for select station estimates. Arbitron determines these multibook averages by averaging audience estimates for the applicable surveys. Arbitron 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, Arbitron does 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.

Station Reporting

This chapter provides a summary of key Arbitron policies related to station reporting in the *Radio Market Report*. This overview is for general information purposes only, and does not constitute the full body of Arbitron policy. For information about station reporting policies for another Arbitron service, see the methodology information included with that service.

Station Reporting Policy

In the *Radio Market Report*, Arbitron reports audience estimates for eligible stations that met or exceeded the report's minimum reporting standard during the survey or report period.

Eligible Stations

FCC-licensed commercial radio stations and the Internet streams of those stations are eligible for reporting in Diary-based *Radio Market Reports*.

Encoded, FCC-licensed commercial and non-commercial radio stations, and the encoded Internet streams of those stations, are eligible for reporting in PPM-based *Radio Market Reports*.

(Canadian stations licensed by the CRTC and Mexican stations licensed by COFETEL are also eligible for reporting in applicable *Radio Market Reports*.)

Minimum Reporting Standard

Arbitron will report audience estimates for any station in a Diary-based *Radio Market Report* that received credit in a minimum of 10 Metro Diaries, that has a Cume Rating of 0.495, and that has an Average Quarter Hour rating of 0.05 or greater in the Metro among Persons 12+ during the Monday-Sunday 6AM-Midnight daypart for the applicable survey.

Arbitron will report audience estimates for any encoded station in a PPM-based *Radio Market Report* that has a Cume Rating of 0.495 or greater in the Metro among Persons 6+ during the Monday-Sunday 6AM-Midnight daypart for the applicable report period.

FM Translators

FCC regulations require that an FM translator re-transmit the signal of another FCC-licensed radio station. As

such, Arbitron *automatically* includes a station's translator listening in the estimates published for the station. Arbitron does not prepare or report standalone estimates for FM translators.

Total Line Reporting

For stations that request, and are eligible to receive, Total Line Reporting, Arbitron sums the stations' audience and reports that sum as if it were the audience of one station re-transmitted on the translator.

As a matter of policy, to be eligible for Total Line Reporting, the combo's stations must be 100% simulcast, including all programming and commercials, for all 12 measurement weeks corresponding to a Diary survey.

Additional information regarding Total Line Reporting is available from your Arbitron account executive and/or Arbitron's Station Relations Team.

Station Labeling

Arbitron denotes a station's estimates with a label consisting of the station's four-letter FCC-designated call sign that was valid on the last day of the survey or report period followed by a suffix that indicates the station's band or "type" as follows:

Band ID	Station	Example
AM	AM radio station	WAAA-AM
FM	FM radio station	WBBB-FM
IA	Internet stream of an AM station	WAAA-IA
IF	Internet stream of an FM station	WBBB-IF
F2, F3	HD-multicast station	WBBB-F2, WBBB-F3
G2, G3	The Internet stream of an HD-multicast station	WBBB-G2, WBBB-G3

For a station that changed its call sign during the survey or report period, Arbitron labels the station's estimates with both of the call signs that the station used during the survey/report period.

(At the time of this writing, channel 6 analog LPTV stations that operate as radio stations are also eligible for reporting in the *Radio Market Report*. In the rare circumstance that the LPTV station or an LPTM radio station uses the same four-letter call sign as an FM

station, Arbitron will report estimates for the LPTV or LPTM station with an alias call sign.)

Reporting Sequence

Arbitron lists stations and combos in the report alphabetically by call letters with stations and combos that are home to the Metro separated from those that are not by a dashed line. Arbitron classifies any station with an FCC-designated city of license within a Metro county as home to the Metro. In select circumstances, stations that are not home to the Metro can request home Metro status.

Licensed to Use Arbitron Data

Arbitron identifies stations licensed to use Arbitron data as of the last day of the survey or a report period with the indicator "(s)" next to the station's call sign on the Station Information Page(s) of the report.

Special Notices

In the "Special Notices" section of the report, Arbitron includes information to assist users in making evaluations of the data.

Reissue of the Report

If after a report's release, Arbitron determines that a data processing error, the use of invalid data, or violation of Arbitron policy affected a significantly ranked station's audience estimates, Arbitron may elect to reprocess the data and reissue the report.

Arbitron will generally reissue a report if, after analysis of the data, Arbitron estimates that the affected station's AQH Persons rank for the Monday-Sunday 6AM-Midnight daypart in either the Persons 6+, 12+, 18-34, or 25-54 demo changes and if that station's AQH Persons estimate is at least five percent different in the demo/daypart where the station's rank was affected. When applying these guidelines, Arbitron also considers other factors including whether advertisers are likely to buy time on the station, the importance of the demo to the station, the station's performance in other dayparts and demos, marketplace conditions, and other factors. The final decision regarding possible report

Station Reporting

reissue lies solely and unilaterally with Arbitron.

Arbitron will also generally reissue a PPM report if, after analysis of the data, Arbitron estimates that it over or under-reported the station's Average Weekly Cume estimates by 10 percentage points or more in any key demo. When applying this guideline, Arbitron will also consider the extent to which reprocessing the data will affect the line-up of stations that will meet minimum reporting standards for the revised report as compared to the original report and the length of time the marketplace has used the report that includes the error for transactional purposes. The final decision regarding possible reissue lies solely and unilaterally with Arbitron.

Arbitron may elect to take remedial action other than reissue in response to an error that does not affect audience estimates.

plans to seek accreditation for Diary meter DMA audience estimates.

Station Reporting in a Diary Meter Combo DMA

Arbitron reports DMA-level audience estimates two times per year in 100 U.S. markets.

Arbitron refers to a market where it measures the Metro counties via PPM and the non-Metro DMA counties by Diaries as a "Diary Meter Combo DMA."

Arbitron bases a station's Diary Meter Combo DMA audience estimates on information returned from panelists and diarykeepers 12 years of age and older. As such, to determine an encoded station's eligibility for reporting in a combo DMA, Arbitron sums the station's Metro and non-Metro audience and then divides by the DMA's Persons 12+ population. Diary meter DMA audience for a station that is not eligible to encode, or for a station that declined Arbitron invitations to encode, reflects the station's non-Metro audience divided by the DMA's Persons 12+ population. Arbitron will report estimates for any station in the combo DMA that has a Cume Rating of 0.495 or greater in the Monday-Sunday 6AM to Midnight daypart for the applicable survey and report periods.

The MRC has accredited Arbitron DMA audience estimates in all Diary-measured markets, and in the PPM-measured Houston-Galveston market. Arbitron

Special Station Activities

Years ago, Arbitron convened a task force of radio broadcasters, advertisers, and industry representatives to help Arbitron define station activities that have the potential to harm the credibility of Arbitron's audience estimates. Over time, those guidelines have evolved into a dynamic and robust body of policy. This chapter includes an overview of the "Special Station Activity" guidelines that team developed and a summary of the measures Arbitron may take in response to a violation of them. The descriptions included in this chapter are illustrative and for general information purposes only; it is impossible to catalogue all possible activities that violate the special station activity guidelines.

Media Affiliation

A radio or television station employee, and members of the employee's household, may not participate in a Diary survey or PPM Panel.

Similarly, persons employed by a broadcast or cable television network or an advertising agency, and members of the employee's household, are not eligible to participate in a PPM Panel.

Should Arbitron discover that a media-affiliated individual has participated in a Diary survey or PPM Panel, Arbitron will remove that household's listening from the In-Tab sample and (as necessary) reissue the affected report.

Rating Distortion

Arbitron considers any statement or act by or on behalf of a radio station that may prompt a respondent to identify his or her participation in a survey or Panel, or to surrender control of the survey instrument, to be Rating Distortion. Similarly, any statement or act that prompts a respondent to misreport listening, or to capture information in a Meter so that the captured information does not reflect actual listening, or to provide false household information to Arbitron is also Rating Distortion. For encoded radio stations, the unauthorized use of encoding equipment and/or encoded audio may also be Rating Distortion.

Rating Bias

Arbitron may consider any statement or act by or on behalf of a radio station that differentially prompts the station's audience to participate in the survey or on the Panel, or that prompts a listener to report listening to that station differently than to other stations, to be Rating Bias. Similarly, any statement or act that emphasizes the importance of Arbitron surveys, or that alerts the audience to an ongoing or upcoming measurement period, may also be Rating Bias.

Extemporaneous comments that refer to Arbitron, a survey, a Panel, the Diary, PPM, or radio ratings in a way that might sensitize the station's listeners to the survey process or that may affect the way that station's listeners comply with Arbitron's instructions may also be Rating Bias. Extemporaneous Comments are generally one-time-only, spontaneous remarks that may have been intended as humorous. A comment's context will affect Arbitron's decision on whether to cite the comment as Rating Bias.

Arbitron cautions stations that comments with Rating Bias potential do not always include the words "Arbitron," "Diary," or "PPM," and that these comments may urge participants to "keep track of" their listening or to be "honest" or "accurate." Such omissions and instructions do not negate a comment's Rating Bias potential.

Estimate Sourcing

Arbitron does not generally consider a station referring to its audience estimates in previous reports for promotional purposes to be Rating Bias. (Arbitron may, however, consider such a reference in the context of an appeal for support to be Rating Bias.)

Applicable Media

The Rating Distortion and Rating Bias guidelines described above apply to all media to which a station's listeners may be exposed including broadcast, streaming, Internet, mobile, multimedia, and print. Arbitron reminds stations that the use of graphics to suggest or describe the survey process in a visual medium may also constitute Rating Bias, and that the guidelines apply to station

staff *at all times* when using social networking sites.

Special Station Activity Violations

Should Arbitron determine that a station has engaged in a special station activity, Arbitron will take appropriate action, as warranted in Arbitron's judgment. Examples of actions Arbitron has 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.

Arbitron reminds data users that a special station activity may or may not have affected the audience estimates. As it is not possible to either prove or disprove the effect of such activities, Arbitron will not attempt to do so.

It is Arbitron's opinion, however, that special station activities are *inherently* detrimental to broadcasters, advertisers, and media researchers in that such activities may undermine confidence in the audience estimates and may harm radio's reputation as a vibrant and honest medium to potential advertisers.

Request for Inquiries and Confidential Pre-Review

To avoid activities that may have Rating Distortion or Rating Bias potential, a station can submit an overview of planned activities to Arbitron for a confidential Pre-Review. A radio station may also request that Arbitron conduct an inquiry into the activities of another radio station. Additional information regarding pre-reviews and inquiries is available from Arbitron's Special Station Activities Committee. (Arbitron reserves the right to decline any request for inquiry as warranted in Arbitron's judgment.)

Special Station Activities

Reservation of Rights

Arbitron reserves the right to use any available means to draw attention to any station activity that, in Arbitron's opinion, has the potential to undermine the credibility of the audience estimates, including activities not specifically mentioned herein. Arbitron further reserves the right to take other appropriate action depending upon the content, context, frequency, or repetition of the activity.

Additional Detailed Information

For additional detailed information pertaining to Diary-measured markets, please see the *Rating Distortion and Rating Bias Handbook*:
http://www.arbitron.com/downloads/rating_distortionandbias.pdf.

For additional detailed information pertaining to PPM-measured markets, please see the *Rating Distortion and Rating Bias Handbook for PPM Markets*:
http://www.arbitron.com/downloads/rating_distortionandbias_ppm.pdf.

Reliability of Arbitron Estimates

The accuracy of any survey result can be thought of as having two components—**reliability**, which refers specifically to sampling error, and **validity**, which refers to non-sampling aspects of the survey such as the strengths and biases associated with the survey instrument, length of the survey, etc. As is any survey that uses a sample of the universe, Arbitron's estimates are subject to sampling error and nonsampling errors. Due to the limitations described in Chapter 15 of this *Local Syndicated Services Description of Methodology*, the reliability of Arbitron estimates, data, reports and their statistical evaluators cannot be determined to any precise mathematical value or definition.

This chapter provides a broad conceptual overview of the reliability of Arbitron estimates published in Arbitron's syndicated services. The descriptions contained in this chapter are for general information purposes only, and do not constitute a comprehensive overview of the statistics principles upon which they are based, or Arbitron knowledge, 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 methodological standards and data collection procedures. It is important to keep in mind that reliability is not a measure of the validity of the estimate.

Measures of reliability provide information that's important to understanding the role of Arbitron's sampling design and procedures on audience estimates.

There's more to a rating than simply the reported value. That reported value is only an estimate of the actual rating that exists for the entire market population. Reliability measures supplement the information contained in reported ratings.

For example, if Arbitron reports 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 percent 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

As it applies to Arbitron's 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. Because Arbitron bases its radio audience estimates on a sample of the population, they are subject to uncertainty. 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 Arbitron's services, the statistical concept of a "confidence interval" provides a range of plausible values for the actual population average. 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. Arbitron reminds data users to exercise caution when interpreting confidence interval ranges. Confidence intervals by themselves don't 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 confidence interval range contains the population rating.

Replication Study

From 2007 to 2009, Arbitron conducted several replication studies of PPM and Diary radio ratings estimates in a number of markets. 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. The latest set of replication studies formed the basis for the Ratings Reliability Estimator, which replaces the previous Table A/B reliability methodology.

Ratings Reliability Estimator

The Ratings Reliability Estimator (RRE) is a Web-based application that licensed users of Arbitron data can use to determine standard error estimates and confidence intervals for station Cume and AQH estimates in Arbitron's local and national syndicated services. The RRE is available via the link on the user's <https://rre.arbitron.com> page. As the data are now contained in the RRE, it is not necessary for Arbitron to publish "Table A" or "Table B" in any report or service.

Arbitron Radio County Coverage

Overview

Arbitron's *Radio County Coverage* service provides licensed users of the data with audience estimates for radio stations in individual counties. To determine a county's *County Coverage* audience estimates, Arbitron compiles and applies special weighting techniques to that county's In-Tab.

Arbitron organizes *County Coverage* audience estimates in printed state-level books that include a page(s) for each of the state's counties (or county clusters). On these pages, Arbitron reports audience estimates for eligible stations that met the applicable minimum reporting standard.

Arbitron releases one edition of *County Coverage* each calendar year, with printed books mailing to subscribers in mid-April. To complement the printed books, Arbitron also offers "Custom Coverage" software that allows the user to create and print custom reports based on *County Coverage* audience estimates.

MRC Accreditation

The Arbitron *Radio County Coverage* service is an MRC-accredited service. MRC first granted accreditation to the *County Coverage* service in 2003.

General Methodology

Because Arbitron ports data from its local currency Diary and PPM services to *County Coverage*, the methodology, policies, and procedures described in this *Local Syndicated Services Description of Methodology* are latent in *County Coverage*. The balance of this chapter provides an overview of unique elements of *County Coverage*'s methodology.

Survey Area

The survey area for the *County Coverage* service is all Arbitron-measured counties and county equivalents in the 50 United States (and District of Columbia).

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

Survey Instruments

For its local currency services, Arbitron uses either Diaries or PPM to measure radio listening in a county. Arbitron notes a county's survey instrument at the top of that county's page(s) in the report.

Survey Period

The survey period for *County Coverage* is the "fieldwork year." A county's fieldwork year includes all media days of survey or Panel measurement Arbitron conducted in that county during the calendar year. In PPM-measured counties, the "Holiday" report spans New Year's week; as such, a PPM county's fieldwork year includes the first few days of the next calendar year and does not include the first few days of January that it included in the previous fieldwork year.

Minimum County In-Tab

For Arbitron to list a county in a *County Coverage* report, it must have collected data from 30 In-Tab Diarykeepers or Panelists (as applicable) during the fieldwork year.

County Clustering

If a county falls short of the minimum county In-Tab, Arbitron will combine or "cluster" the county with an adjacent county within the same state and time zone that Arbitron measured via the same instrument. Arbitron weights clustered counties and reports audience estimates for them as if the cluster were a single county.

Arbitron will not cluster any county from which it collected "zero" In-Tab. However, due to the nature of random sampling, it is very unlikely that Arbitron will collect zero In-Tab from any county.

When determining the most appropriate counties to cluster, Arbitron conducts an analysis of average weight indexes. In this analysis, Arbitron calculates the average weight for each county under consideration for clustering by dividing the sum of all weights by the total number of respondents in the county. Next, Arbitron compares the average weight for the county to the average weight of other counties considered for clustering. Counties with an average

weight index of less than 2.0 are eligible for clustering. In circumstances where the weight index is equal to or greater than 2.0, Arbitron conducts additional analysis to estimate if the weights are too dissimilar to cluster.

In circumstances where the analysis yields multiple counties equally qualified for clustering, Arbitron may also consider marketplace conditions or broadcaster preference when determining counties to cluster. Determination of all county clustering remains solely with Arbitron. (Arbitron automatically clusters independent cities that do not meet the 30 In-Tab requirement with the county in which the city is physically located.)

Credited Listening

Arbitron builds a station's *County Coverage* audience estimates in a county by aggregating all of Quarter Hours of listening that it credited to the station in a county and weighting it according to the methods described below.

Modeled PPM Media Days

During *County Coverage* processing, Arbitron imputes the final credited results of In-Tab PPM media days to other media days when the Panelist was not In-Tab. Arbitron 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. Arbitron reports the percentage of media days modeled within a county via a report available for view on www.my.arbitron.com. Arbitron reminds users of the *Radio Market Report* that the modeling of PPM media days is not an element of the *Radio Market Report* service's methodology.

Weighting

Arbitron weights In-Tab for its *County Coverage* service with a "cell weighting" methodology that is materially different from the iterative marginal weighting methodology it uses for the *Radio Market Report* service.

In *County Coverage*'s cell weighting methodology, Arbitron assigns each In-Tab Diary or PPM Panelist-week within the county or county cluster a weight. In

Arbitron Radio County Coverage

Diary-measured counties, Arbitron determines this weight by dividing that cell's population by that cell's In-Tab. In PPM-measured counties, Arbitron determines 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). Arbitron uses respondent ethnicity as a weighing variable in all counties to which it applied ethnic controls to all surveys or report periods (as applicable) for the whole of the fieldwork year.

For *County Coverage* weighting, Arbitron uses the county's population estimates for the Fall survey/Oct-Nov-Dec report periods. For split-county population estimates, Arbitron allocates county population estimates to the respective splits based on zip code population estimates provided by a data vendor.

Arbitron applies a weighting factor to *County Coverage*'s PPM In-Tab to normalize it to the format of Diary In-Tab; this type of factoring is necessary to account for the fact that the number of weeks of listening that a single Panelist may contribute to *County Coverage* may range from one to 52.

Demo

Arbitron reports audience estimates for stations in the Persons 12+ demo in *County Coverage*.

Dayparts

Arbitron reports audience estimates for stations in the Monday-Sunday 6AM to Midnight and Monday-Friday 6AM to 7PM dayparts in *County Coverage*.

Station Information

When processing *County Coverage*, Arbitron uses the station information that was valid as of the last day of the Fall survey / December report period; this means that Arbitron applies a station's Fall survey station information to the whole of the survey year.

Eligible Stations

Radio stations eligible to be reported in a particular county within a *County Coverage* report are commercial FCC-

licensed AM and FM radio stations that have signal coverage in that county.

Stations Reported

Arbitron will report estimates for an eligible station in a county that met the applicable minimum reporting standard.

Minimum Reporting Standard

In counties from which Arbitron collected fewer than 350 In-Tab Diaries during the fieldwork year, Arbitron will report estimates for any eligible station that received credit in three or more Diaries.

In counties from which Arbitron collected 350 or more In-Tab Diaries during the fieldwork year, Arbitron will report estimates for any eligible station that received credit in one percent (or more) of the Diaries.

In PPM-measured counties with fewer than 350 different Panelists In-Tab during the fieldwork year, Arbitron will report estimates for any eligible station that received credit from three or more In-Tab Panelists in that county.

In PPM-measured counties with 350 or more different Panelists In-Tab during the fieldwork year, Arbitron will report estimates for any eligible station that received credit from one percent (or more) of In-Tab Panelists in that county.

Total Line Reporting

When eligible stations request Total Line Reporting, Arbitron sums the stations' listening and reports that sum as if it were the audience of a single station. Because the fieldwork year spans a calendar year, and because Arbitron applies a station's Fall survey/December station information for the whole fieldwork year, the Total Line Reporting information Arbitron uses to report a station or combo's estimates may not apply to the whole of the fieldwork year. This means that it will affect a station's or a combo's *County Coverage* audience estimates if the combo starts, ends, adds, or removes a partner during the fieldwork year. It is not possible for Arbitron to map or describe in this venue how it will report estimates in all possible Total Line Reporting scenarios; your Arbitron sales representative will be able to provide

additional information about a particular station or combo's estimates.

Reporting Sequence

Arbitron lists stations on a county's page(s) alphabetically by call sign with stations that are home to a Metro grouped ahead of non-Metro stations.

Following the station estimates, Arbitron reports an estimate labeled as "Others." This estimate is an aggregate of listening credited to eligible stations that did not meet the applicable minimum reporting standard, listening credited to stations that are not eligible for reporting in *County Coverage*, listening to stations that signed off-air during the fieldwork year, and listening reported by Diarykeepers that Arbitron could not credit to any radio station.

Unencoded Interval Notices

An "unencoded interval" is a period where an encoded radio station is on-air but not encoding. Because an unencoded interval may affect a station's PPM-based audience estimates, upon the release of each edition of *County Coverage*, Arbitron will make available a PDF that details stations that confirmed experiencing unencoded intervals that accounted for 5% or more of all broadcast hours of the fieldwork year.

Remedial Action and Reissue

Should Arbitron discover that a data, processing or other error affected a *County Coverage* report, Arbitron may elect to correct the error and issue a revised report. Arbitron will generally reissue a *County Coverage* report in circumstances where correction of the error will substantially change a significantly ranked station's audience estimates. When determining if it will reissue a report, Arbitron 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 Arbitron services. The final decision regarding report reissue lies solely with Arbitron.

Arbitron Radio County Coverage

Statistical Reliability

In 2006, Arbitron conducted a replication study to estimate reliability factors for the *County Coverage* service. Arbitron uses these factors to calculate ESBs for the *County Coverage* service. Authorized users of *County Coverage* data can find the statistical reliability of an estimate and information on how to interpret the confidence interval by using the online *County Coverage* reliability estimate calculator available via the user's my.arbitron.com page.

Restrictions on Use and Limitations, Disclaimer of Warranties, Warnings

See Chapter 15 of this *Local Syndicated Services Description of Methodology* for important information regarding the restrictions on use, limitations, disclaimer of warranties, and other warnings related to data published as a part of the *Radio Market Report/Arbitron eBook* service; these also apply to Arbitron's *County Coverage* service.

Reservation of Rights

Arbitron reserves the right to exercise its judgment in modifying, waiving, or suspending any policy, procedure, or element of its *County Coverage* methodology that would appear to Arbitron to be unreasonable, illogical, or impractical in light of known conditions. Additionally, Arbitron reserves the right not to produce *County Coverage* data and listening estimates in circumstances where there is insufficient data available to meet its minimum research standards or any event has jeopardized the reliability of the data. Additionally, should any information included in this chapter conflict with or contradict information included in the Special Notices section of a *County Coverage* report, the Special Notices supersede and/or amend this chapter.

Restrictions on Use of Reports and Limitations

Restrictions on Use of Reports

All Arbitron *Radio Market Reports*/Arbitron 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 Arbitron. They are provided to properly licensed Arbitron subscribers pursuant to the terms and conditions of their executed license agreement(s) with Arbitron (whom are neither in breach nor default with Arbitron), and in accordance with the restrictions and limitations on use stated herein.

All Arbitron audience data, estimates, reports, software, and Arbitron products related thereto, are for the exclusive use of properly licensed Arbitron subscribers 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 Arbitron and its clients. Any use of Arbitron audience data, estimates, reports, software, and Arbitron 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 a subscriber and Arbitron specifying the permitted uses. For an Arbitron subscriber to divulge or provide any data, estimates, reports and/or software to a non-subscribing party, or, unless expressly authorized by Arbitron in writing, to lend and/or give a copy and/or a reproduction of any part of any report or Arbitron software program(s) to a non-subscriber, including but not limited to print media, advertisers and/or their agencies, constitutes a willful breach of the license agreement between Arbitron and the subscriber, and a violation of Arbitron's intellectual property rights, including but not limited to Arbitron's copyrights. A violation of Arbitron's U.S. federal and state copyright rights can subject an infringer to statutory damages and attorney's fees. Quotations by subscribers of the estimates as allowed by this section for purposes of advertising or promotion must identify Arbitron as the

source and that Arbitron's data, estimates, reports and software are copyrighted by Arbitron. Users of the *Radio Market Report*/Arbitron eBook service shall also mention that the audience estimates are subject to all qualifications and limitations stated in the Arbitron 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 2010, Average Quarter-Hour Estimates, Monday-Friday 6AM-Midnight, Persons 25-54).

A subscriber to any particular *Radio Market Report*/Arbitron 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*/Arbitron eBook to which the subscriber did not subscribe.

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

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 Arbitron audience estimates and maps are proprietary and confidential. Each Arbitron 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 Arbitron 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 Arbitron's intellectual property rights. All users of Arbitron's *Radio Market Report* are referred to "Restrictions on Use of Reports and Limitations," on page 16.1.

DISCLAIMER OF WARRANTIES

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

Reservation of Rights

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

Additionally, Arbitron reserves the right not to produce Arbitron data, and/or listening estimates, and/or any Arbitron 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.

Restrictions on Use of Reports and Limitations

Liabilities and Limitations of Remedies

The sole and exclusive remedy for Arbitron's 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 Arbitron and its subscriber. In no event shall Arbitron be liable for special, incidental, consequential or punitive damages, nor shall Arbitron 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 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/Arbitron eBook*, such Special Notices are deemed to supersede and/or amend this *Local 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 "hyponing." 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 Syndicated Services Description of Methodology*, the user should be aware of the following limitations:

- a. The sample frame for all of Arbitron's Diary surveys includes landline telephone numbers. Known commercial establishments and other known nonresidential facilities listed in directories are specifically excluded from the sample frame. Steps are taken during Diary placement to further exclude: business or other nonresidential telephone numbers inadvertently included in the sample; residents of media-affiliated households; and group quarters residences containing 10 or more individuals 12 years of age and older. Additionally, all possible telephone listings may not be included in the directories available to Survey Sampling International, LLC when Arbitron places its sample order, which may affect the identification of qualifying telephone hundred blocks. Such excluded persons may have listening habits that differ from those of persons included in the survey.
- b. The sample frame for all of Arbitron's panels, other than the Houston-Galveston panel, includes households with landline telephone service and households with cellular telephone service that do not also have landline telephone service. Known commercial establishments and other known nonresidential facilities listed in directories are specifically excluded from the sample frame. Steps are taken during sampling and recruitment to further exclude: business or other nonresidential telephone

Restrictions on Use of Reports and Limitations

- 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 telephone numbers 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.
- c.** 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.
- d.** 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 sample household in response to Arbitron's media affiliation question at the time of recruitment, or anytime thereafter, or from other sources.
- e.** There may be instances where Arbitron instructions are not followed by the interviewer or Panel Relations staff. Also, the interviewer may not be under the direct control of Arbitron, because independent marketing research suppliers are used by Arbitron.
- f.** Non-responding Persons may have listening habits that differ from those of respondents.
- g.** Non-responding Persons and other limitations in the original designated sample prevent the In-Tab sample from being a perfect probability sample.
- h.** 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.
- i.** The dominant language spoken by a Diarykeeper or Panelist may influence his or her listening behavior, and Persons whose dominant language is not English may be differentially represented in the sample. Arbitron currently weights its In-Tab sample based upon the dominant language spoken by respondents only where dominant Spanish-language-usage population estimates are available.
- j.** The limitations in data from Nielsen Claritas, Inc., are inherent in the Arbitron estimates based thereon. 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 overcounts 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.
- k.** The limitations in data provided by Nielsen Claritas, Inc., the third-party vendor that supplies language-usage population estimates to Arbitron, are inherent in the Arbitron estimates based thereon. The language-usage population estimates that Arbitron uses in weighting the sample are based upon this third-party vendor's survey results and, thus, are subject to all of the limitations existing in those results, which may include: sampling errors, methodological errors, processing errors and recording errors. Furthermore, any external data sources that Nielsen Media Research, Inc., may use to update or improve its language-usage population estimates may not include adjustments for known or unknown overcounts or undercounts of various segments of the population or other known data limitations.
- l.** The limitations in data from Third Wave Research, the third-party vendor that supplies Market information for Arbitron's Puerto Rico service, are inherent in the Arbitron estimates based thereon. The population estimates from Third Wave Research 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 Third Wave research 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

Restrictions on Use of Reports and Limitations

- surveys and are subject to their respective limitations.
- m. Zip code information used to produce the *Radio Market Report*/Arbitron eBook is subject to defects and limitations that are inherent in Arbitron estimates based thereon.
 - n. 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.
 - o. 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 by Arbitron, it will be noted in the applicable report.
 - p. 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.
 - q. 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+ (stored in Arbitron's respondent database).
 - r. Human and computer processing errors may occur before or after electronic Meter data are received by Arbitron. Consequently, the degree of variance in the data may be greater than that expected from sampling variance alone.
 - s. The data upon which Arbitron has based its In-Tab sample weighting, including racial or ethnic identification, may not be precise.
 - t. Defects and limitations found in data supplied by others are inherent in Arbitron estimates based thereon.
 - u. Data analysis, preprocessing preparation or ascription of data may affect media exposure data from being modified or excluded from the In-Tab sample.
 - v. 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.
 - w. Arbitron 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.
 - x. 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.
 - y. 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.
 - z. 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.
 - aa. 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; conditions not under Arbitron's control, such as changes in station operations/facilities/special activities; or other factors.
 - bb. Arbitron 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.
 - cc. For radio stations that are 100 percent 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. Examples of these signal routes include backup air chains that are fed by over-the-air reception of other simulcast partner stations, or simulcast partner stations that are fed by satellite. For simulcasting stations where the backup airchain of an individual simulcast partner is fed by one of these methods, the simulcast partner will redistribute previously encoded content. 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

Restrictions on Use of Reports and Limitations

or reported for the simulcasting stations.

- dd.** The digital radio Band ID labels referenced in this report are proprietary to Arbitron and protected under terms of Arbitron's subscriber agreements and/or federal copyright and trademark law. Authorized subscribers and purchasers of Arbitron data may display and use the Band ID labels provided the user clearly states that the labels are proprietary to Arbitron (e.g., "Arbitron 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 subscriber and Arbitron. All other uses, unless Arbitron's prior written approval is obtained, are expressly forbidden, and may subject the user to legal action, damages and recovery of Arbitron's legal expenses incurred in enforcing its intellectual property and proprietary rights.
- ee.** Information on a station's Internet streaming status is generally provided by the station. Since this information may not be timely or accurate, some reported radio station listening may be based on listening to a station's Internet stream that does not contain the same commercials as the broadcast version of the station.
- ff.** Due to methodological considerations in nonembedded condensed markets, MaximiSer and Media Professional audience estimates may differ from those in the applicable *Radio Market Report(s)*/Arbitron eBooks.

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

Glossary of Selected Terms

Important Information

This glossary provides Arbitron's formal business definition for selected terms as they are generally used in the context of Arbitron's services and reports. Most of the terms and definitions in this glossary apply to both Diary surveys and PPM Panels. For terms that have different meanings in the context of Diary and PPM, the service to which the definition applies is noted in bold face type in the definition's header. For terms that apply exclusively to either Diary or PPM, the applicable service is noted in light type enclosed in parentheses.

Glossary of Selected Terms

ABS: Arbitron operational acronym for the address based sample frame.

Alternates: (PPM) Non-Basic households within a sampling unit recruited to participate in the Panel if the Basic household cannot be recruited, refuses to participate in the Panel 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.

Arbitron eBook: (See "Radio Market Report.")

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

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

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). A dashed line is used to distinguish stations that are home to the Metro or DMA (as applicable) from those that are not; a pink line may be used to distinguish stations that Arbitron believes to 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 (CRMR): (Diary) One of two types of the Arbitron Radio Market Reports/Arbitron 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 to Arbitron by Hispanic Panelists. Arbitron determines a Panelist's country of origin based upon the outcome of interviews with the Panelist's household. Arbitron bases its country/region classifications, and the wording of the applicable interview questions, on those used in the U.S. Census Bureau's American Community Survey. Arbitron reports 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 within a specific target demo 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 and estimating 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

Glossary of Selected Terms

universe estimates are available), employment status, the presence of children in the household and telephone service status (e.g., cell phone or landline phone).

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' (Diary and PPM): is a measure of sample delivery in Arbitron's Diary surveys and PPM Panels. Arbitron determines DDI with the following equation: $(\text{Actual In-Tab} / \text{In-Tab Target}) \times 100$. Arbitron may determine DDI for the In-Tab sample as a whole, for particular demos, or for particular geographies.

Designated Market Area (DMA): Nielsen Media Research, Inc.'s geographic market design that defines each television market exclusive of others based on measurable viewing patterns. Every county (or county equivalent) in the United States is assigned exclusively to one DMA.

Design Weight (Diary): Pre-weight that Arbitron applies 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 whom Arbitron determines to be eligible to receive and to whom survey materials are sent.

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 Arbitron's.

Encoder: (PPM) Audio equipment or software that embeds a CBET 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, Diary: Audience estimates for Total, Black and/or Hispanic persons expressed in hundreds (00), ratings and composition percents. Ethnic composition estimates are based on total Metro In-Tab Diaries and are reported for the Metro if at least 30 Black and/or Hispanic Diaries are In-Tab for the Metro, as applicable.

Ethnic Composition, PPM: Audience estimates for Total, Black and/or Hispanic persons, ratings and composition percents in the Metro. Ethnic composition estimates are based on total Metro In-Tab Panelists and are reported for the Metro if at least 30 Black and/or Hispanic 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 Arbitron's 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: Arbitron-coined term that describes when two or simultaneous frequency moves occur in the same area; as the name implies, a frequency move generally indicates station "A" and station "B" exchanged dial positions.

Frequency Move: Arbitron-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: An Arbitron-defined cluster of zip codes within a sampling unit.

Group Quarters, Diary: For Arbitron's 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 Arbitron's PPM Panel 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 Panel if the telephone number is assigned to a private telephone serving fewer than 10 unrelated persons or fewer than 17 related persons.

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 Arbitron radio Metro (or a reported Nielsen Media Research, Inc. DMA). A station that is not

Glossary of Selected Terms

licensed to a city within an Arbitron radio Metro may be granted “home” status if it meets certain criteria.

Hot Call Letter Change: Arbitron-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 has been sent and has successfully installed each household member’s PPM and the household’s collection hub.

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: Arbitron operational pseudonym for the random digit dial frame.

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

Listed Sample: For Arbitron’s sampling purposes, telephone numbers for which names and mailable addresses are published in telephone directories.

Listening Location: A location for which Arbitron reports 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 Totals.”)

Media-Affiliated Household, Diary: A household in which the person being recruited to participate in the survey, or anyone else in the household, or anyone that the contact knows directly, 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 that 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 are not 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 in Arbitron’s panel design 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 as determined by Arbitron.

Metro Totals/DMA Totals, Diary: Total reported listening to radio in the Metro or DMA (could refer to AQH or Cume estimates), which includes listening to reported stations, non-qualifying commercial stations, noncommercial stations, satellite radio, 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 used to determine which stations qualify to be listed in Arbitron *Radio Market Reports*/Arbitron eBooks.

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 one percent In-Tab criterion if the station was mentioned in at least one percent 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 one percent In-Tab criterion, that station receives credit for the entry. If two or more stations meet the one percent In-Tab criterion, credit for the entry is determined via ascription.

Online Status: (PPM) Status indicating that a Panelist is eligible to be In-Tab.

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

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): The numerical 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 target population.

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

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

Glossary of Selected Terms

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 quality, Meter status and motion detection data in order to determine a Panelist’s In-Tab status for a given media day.

Quarter-Hour, Diary: The basic unit, or smallest time period, for which listening is credited. Generally, stations receive 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, or smallest time period, for which exposure is credited to stations. Generally, stations receive 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)/Arbitron eBook: Arbitron’s syndicated report that provides audience estimates and other data for specific markets.

Rating: See “Average Quarter-Hour Rating” and “Cume Rating.”

Ratings Reliability Estimator (RRE): A Web-based application that licensed users of Arbitron data can use to determine standard error estimates and confidence intervals for station Cume and AQH estimates reported in Arbitron’s local and national syndicated 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 returned to Arbitron compared to the number of Diaries Arbitron 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 to Arbitron 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 Station Information Form (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.

Technical Difficulty (TD): Time period(s) of five or more consecutive minutes during a quarter-hour during the survey period for which a station listed in an Arbitron *Radio Market Report*/Arbitron eBook notified Arbitron in writing of: reduced power; intermittent power; signal interference; or times the station was off

the air during the station’s authorized broadcast day.

Time Period: (See “Daypart.”)

Time-Shifted Media Exposure: (PPM) Exposure to encoded media at a time other than the original broadcast time.

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): The reporting of audience estimates for stations that simulcast 100 percent of their broadcast day throughout the report period, including commercials and PSAs, under a single set of call letters (e.g., the “primary” station’s call letters).

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 entered or left the Panel during the report period. Arbitron determines 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: 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): is one of the appropriate metrics with which to measure a Diary survey’s sample performance. Arbitron determines 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

Glossary of Selected Terms

the address frame x (Address frame In-Tab Diaries / Address Frame Estimated Persons in Usable Households)).

Unified Sample Performance Indicator / “USPI” (PPM): is one of the appropriate metrics with which to measure a Panel’s sample performance. Arbitron determines 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 to Arbitron but that are not used in the production of audience estimates. 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 and estimating 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, the presence of children in the household and telephone service status.

Frequently Used Abbreviations

AAAA	American Association of Advertising Agencies
AQH	Average Quarter-Hour
ARAC	Arbitron Radio Advisory Council
COO	Country of Origin
CRMR	Condensed Radio Market Report
CSB	Client Service Bulletin
DOM	Description of Methodology
DST	Differential Survey Treatment
EDSR	Electronic Diary Storage and Retrieval
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
NECMA	New England County Metropolitan Area
OMB	Office of Management and Budget
PMSA	Primary Metropolitan Statistical Area
PPDV	Persons-Per-Diary Value
PPM	Portable People Meter
PSB	Presurvey Bulletin
PUMM	Persons Using Measured Media
PUR	Persons Using Radio
RAB	Radio Advertising Bureau
RDD	Random-Digit Dialing
RMR	Radio Market Report
RRE	Ratings Reliability Estimator
SIP	Station Information Packet
SRMR	Standard Radio Market Report
SSA	Special Station Activities
TD	Technical Difficulty
TLR	Total Line Reporting

TSA	Total Survey Area
TSL	Time Spent Listening
UI	Unencoded Interval

Sourcing

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