

# **RADAR<sup>®</sup>**

# **REFERENCE**

# **GUIDE**

**RADAR SEPTEMBER 2020**  
**R146**

**BASED ON SURVEYS CONDUCTED**  
**JUNE 20, 2019 - JUNE 17, 2020**

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## FOREWORD

These reports are designed to provide estimates of national radio usage and network radio commercial audience during an average week within the United States (excluding Alaska and Hawaii), based on surveys conducted from June 20, 2019, through June 17, 2020. The estimates are derived from listening information from Persons 12 years of age and older (based on Nielsen Radio Market Reports for Diary and PPM methodologies).

Audience estimates provided by this service are intended to furnish network radio, agency, and advertiser clients of Nielsen with an aid in evaluating audience size and composition. All audience estimates are approximations subject to statistical variations and other limitations. The reliability of audience estimates cannot be determined to any precise mathematical value or definition.

A description of Nielsen RADAR methodology can be found in a separate publication titled *Nielsen RADAR Description of Methodology*, available to all RADAR authorized users on Nielsen Answers ([answers.nielsen.com](https://answers.nielsen.com)).

More detailed descriptions of Nielsen PPM and Diary methodology can be found in a separate publication titled *Local Radio Syndicated Services Description of Methodology*, and other associated relevant documents, available on Nielsen Answers ([answers.nielsen.com](https://answers.nielsen.com)).

The RADAR service provides audience estimates electronically in two volumes:

Vol. 1: "National Radio Listening" provides estimated audiences of all radio stations.

Vol. 2: "Network Audiences to All Commercials" provides estimated audiences to all commercials aired on network-affiliated stations (including within and outside of programs).

RADAR service audience estimates provided in Volume 1 include total reported listening. The audience estimates provided in Volume 2 combines reported listening to network-associated stations, defined on the basis of network affiliations for a one-week period, with commercial clearance data supplied by each of the respective networks.

### **THIS REPORT NOT ACCREDITED BY THE MEDIA RATING COUNCIL®**

This service is not part of a regular syndicated rating service accredited by the Media Rating Council. Nielsen has requested accreditation for this service and does provide syndicated services that are accredited.

## WARNING

**All Nielsen audience estimates are proprietary and confidential.**

Each Nielsen audience estimate is copyrighted. The unauthorized use of any Nielsen audience estimate constitutes copyright infringement that could subject the infringer to statutory damages of up to \$150,000 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. All users of this report are referred to "Restrictions on Use of Reports."

These reports are provided subject to the Restrictions on Use and Limitations and the Warning set forth in this *RADAR Reference Guide*. You may not quote, reference, link to, frame, copy, modify, distribute, publicly display, broadcast, transmit, or make any commercial use of any portion of this RADAR Reference Guide without prior written permission from Nielsen.

## SPECIAL NOTICES

Nielsen commercialized its PPM<sup>®</sup> service during the years 2007-2010. During that time, RADAR sample selected from one of the 48 PPM Metros may have reflected information collected by PPM, Diaries, or a combination of the two. Effective with RADAR 111 and for each study thereafter, RADAR sample selected from a PPM Metro will consist exclusively of information collected by PPM. PPM data included in the RADAR 146 release are from Summer 2019, Fall 2019, Winter 2020 and Spring 2020 quarterly surveys for these Metro markets: Houston-Galveston; Philadelphia; New York, which includes the embedded markets of Nassau-Suffolk (Long Island) and Middlesex-Somerset-Union; Los Angeles; Riverside-San Bernardino; Chicago; San Francisco, which includes the embedded market of San Jose; Dallas-Ft. Worth; Washington, DC; Detroit; Atlanta; Boston; Miami-Ft. Lauderdale-Hollywood; Seattle-Tacoma; Phoenix; Minneapolis-St. Paul; San Diego; Tampa-St. Petersburg-Clearwater; St. Louis; Denver-Boulder; Baltimore; Pittsburgh, PA; Portland, OR; Sacramento; Cincinnati; Cleveland; Salt Lake City-Ogden-Provo; San Antonio; Kansas City; Las Vegas; Charlotte-Gastonia-Rock Hill; Orlando; Columbus, OH; Milwaukee-Racine; Austin; Indianapolis; Providence-Warwick- Pawtucket; Norfolk-Virginia Beach- Newport News; Raleigh-Durham; Nashville; Greensboro-Winston-Salem- High Point; Jacksonville, FL; West Palm Beach-Boca Raton; Memphis; and Hartford-New Britain-Middletown.

The symbol "##" is used as a footnote in the Nielsen RADAR Software Suite and RADAR Web denoting the following:

*RADAR estimates based on a combination of PPM and Diary respondents. See the RADAR DOM and Reference Guide for more information.*

In the RADAR service, we produce DMA-based audience estimates for all DMA regions (Designated Market Areas). The *Nielsen Local Radio Syndicated Services Description of Methodology* describes methodology for both accredited and non-accredited markets. During the reporting period of June 20, 2019 - June 17, 2020 included in the RADAR 146 report, Nielsen PPM methodology was accredited for the markets shown below.

## ACCREDITED BY THE MEDIA RATING COUNCIL

Atlanta, GA	Los Angeles, CA
Baltimore, MD	Miami-Ft. Lauderdale-Hollywood, FL
Charlotte-Gastonia-Rock Hill, NC-SC	Milwaukee-Racine, WI
Chicago, IL	Minneapolis-St. Paul, MN
Cincinnati, OH	Nassau- Suffolk (Long Island), NY
Cleveland, OH	Philadelphia, PA
Columbus, OH	Phoenix, AZ
Dallas-Ft. Worth, TX	Pittsburgh, PA
Denver-Boulder, CO	Portland, OR
Detroit, MI	Riverside-San Bernardino, CA
Greensboro- Winston Salem- High Point, NC	Salt Lake City-Ogden-Provo, UT
Houston-Galveston, TX	San Antonio, TX
Indianapolis, IN	San Diego, CA
Jacksonville, FL	St. Louis, MO
Kansas City, MO	Tampa-St. Petersburg-Clearwater, FL

Users of Nielsen PPM data should be mindful that Nielsen initiates the accreditation process for each PPM market well in advance of the release of the market's final currency Diary-based Radio Market Report. The amount of time from the release of a market's first currency PPM-based Radio Market Report to MRC accreditation of that market may vary from market to market, and is dependent upon a host of business, research, and other considerations.

## MARKETS IN THE ACCREDITATION PROCESS

Austin, TX	Providence-Warwick- Pawtucket, RI
Boston, MA	Raleigh-Durham, NC
Hartford-New Britain-Middleton, CT	Sacramento, CA
Las Vegas, NV	San Francisco, CA
Memphis, TN	San Jose, CA ( <i>embedded San Francisco market</i> )
Middlesex-Somerset-Union, NJ ( <i>embedded NY market</i> )	Seattle-Tacoma, WA
Nashville, TN	Washington, DC
New York, NY	West Palm Beach-Boca Raton, FL
Norfolk-Virginia Beach-Newport News, VA	
Orlando, FL	

The In-Tab respondent week sample size for RADAR 146 JUNE 2020 for Persons 12+ is as follows:

Total Respondents: 396,326

Diary Respondents: 182,738

PPM Respondents: 213,588

## IN-PERSON RECRUITING FOR REFUSAL CONVERSION HOUSEHOLDS

Effective September 2011, IPR was utilized in all PPM-measured Metros.

## REPORTED RADIO NETWORKS

### ADLARGE MEDIA

AdLarge ROI Network

### AMERICAN URBAN RADIO NETWORKS

American Urban Epic Network

American Urban Pinnacle Network

### CRYSTAL MEDIA NETWORKS

CMN Prestige Drive

CMN Prestige Weekend

CMN Prestige Weekend Female

### PREMIERE RADIO NETWORKS

Premiere America

Premiere Daytime Adult

Premiere Daytime Youth

Premiere Enterprise

Premiere Female Focus

Premiere Flow

Premiere FOX News

Premiere FOX News Advantage

Premiere Paragon

Premiere Pearl

Premiere Spectrum

Premiere Super Moms

Premiere Top 50 Optimized

Premiere Young Influencers

### SUN BROADCAST GROUP

Sun Select

### UNITED STATIONS RADIO NETWORKS

United Stations Impact Network

### WESTWOOD ONE

WW 24-7 Music

WW Contemporary Connection

WW Female Music

WW Female Prime

WW Female Prime Weekend

WW Female Target

WW Female Target Weekend

WW Market Select

WW News Brand

WW News Net

WW Top Market Prime

WW Top Market Prime Weekend

WW Women's Week

## NETWORK PROGRAMS EXCLUDED FROM DAYPART DATA IN VOLUME 2

### ADLARGE MEDIA

ROI None

### AMERICAN URBAN RADIO NETWORKS

AUP None

AUE None

### CRYSTAL MEDIA NETWORKS

CPD None

PRW None

PWF None

### PREMIERE RADIO NETWORKS

PAM None

PAD None

PYD None

PET None

PFF None

PFA None

PFN None

PPA None

PPL None

PSP None

PSM None

PTO None

PUA None

PYI None

### SUN BROADCAST GROUP

SEL None

### UNITED STATIONS RADIO NETWORKS

USI None

### WESTWOOD ONE

DGN None

FMT None

AFC None

DGJ None

DGK None

FTW None

AGN None

WMT None

WMR None

DGH None

DGM None

DGL None

DGI None

# TABLE 1: DISTRIBUTION OF SAMPLE BY VARIOUS CHARACTERISTICS BEFORE AND AFTER SAMPLE BALANCING

CHARACTERISTICS	BEFORE	AFTER
<b>Census Region</b>		
East	17.4	17.4
South	38.4	38.4
Midwest	20.9	20.9
West	23.3	23.3

<b>County-Sized Group*</b>		
AA	17.6	17.6
A	24.3	24.3
B	29.9	30.0
C	14.6	14.6
D	13.5	13.5

<b>Household-Sized Group*</b>		
1 or 2	38.9	44.8
3 or 4	40.2	37.0
5+	20.9	18.2

<b>Sex/Age Group</b>		
M 12-17	4.4	4.6
M 18-20	2.5	2.5
M 21-24	3.0	3.2
M 25-34	7.9	8.0
M 35-44	7.3	7.4
M 45-49	3.5	3.6
M 50-54	3.7	3.7
M 55-64	7.4	7.3
M 65+	8.9	8.7
F 12-17	4.3	4.4
F 18-20	2.2	2.4
F 21-24	3.0	3.0
F 25-34	7.7	7.8
F 35-44	7.4	7.4
F 45-49	3.7	3.6
F 50-54	3.9	3.8
F 55-64	8.0	7.8
F 65+	11.1	10.8

CHARACTERISTICS	BEFORE	AFTER
<b>Race/Ethnicity</b>		
Hispanic	16.4	17.6
Black Non-Hispanic	12.5	13.0
Other	71.1	69.4

<b>Hispanic-Language Usage**</b>		
Spanish Dominant	41.1	47.2
English Dominant	58.9	52.8

<b>Quarter</b>		
September 2020	25.0	25.0
June 2020	25.0	25.0
March 2020	25.0	25.0
December 2019	25.0	25.0

\*As defined by The Nielsen Company. Nielsen Audio established the distinction between AA and A counties.

\*\* Percents noted for Hispanic-Language Usage are based on Hispanic respondents only, not the total sample.

RADAR sample is a subset of all PPM panelists and Diary respondents in the continental United States for the time period covered by the report. Each record is weighted to a set of population variables for a local market report prior to the RADAR selection process and subsequently weighted for the RADAR report. This pre-selection weighting is not reflected in this table.

# DIARY RESPONSE RATE AND PPM SAMPLE PERFORMANCE INDEX

## RADAR 146, SUMMER 2019 - SPRING 2020

DIARY	RESPONSE RATE	% of SAMPLE
Landline	14.9%	22.9%
Address-Based	11.5%	77.1%
Weighted Unified Response Rate	12.2%	100.0%

PPM	SPI	% of SAMPLE
Weighted RDD SPI Average	25.5%	2.9%
Weighted Unmatched Address-Based	14.7%	63.5%
Weighted Matched Address-Based	23.1%	33.7%
Weighted Unifield SPI	17.3%	100.0%

## SOCIOECONOMIC GROUPS

### HOUSEHOLD-SIZE GROUPS

Respondents are reported in the following household-size groups: "1 or 2 persons," "3 or 4 persons" and "5+ persons."

Diary respondents are asked, "How many persons 12 years of age and older reside in the household?" during the diary placement call. In the back of the diary, one adult person in the household is further asked, "How many children under the age of 12 live in this household?"

Diary respondents not reporting a household size are matched to similar respondents who answer the question, based on one or more predictive respondent characteristics. A given response is then assigned as the likely answer. Approximately 3% of total Diary respondents did not report household size.

PPM panelist household size is monitored from the time of household recruitment and is verified and updated throughout the panel relations management process.

### PRESENCE OF CHILDREN

Based on the aforementioned questions, respondents are reported in the following presence of children classifications: none under 12, any under 12. Approximately 2% of total Diary respondents did not report presence of children.

## HOUSEHOLD INCOME GROUPS

Respondents are reported in four household income groups: Under \$25,000, \$25,000-\$49,999, \$50,000-\$74,999 and \$75,000+.

In the back of the diary, one adult in the household is asked, "Which of the following categories best describes your total household income from all sources (before taxes) for the past year: Less than \$25,000, \$25,000 to \$49,999, \$50,000 to \$74,999 or \$75,000 or more?"

Respondents not reporting household income are matched to similar respondents who answer the question, based on one or more predictive respondent characteristics. A given response is then assigned as the likely answer. Approximately 5% of total Diary respondents did not report household income.

PPM panelist household income is monitored from the time of household recruitment and is verified and updated throughout the panel relations management process.

## EDUCATION GROUPS

Adult respondents are reported in the following education groups: (1) no college, (2) some college, and (3) college graduate. Members of the sample who are under age 18 are not included in this classification.

Diary respondents are asked, "What was the last grade of school that you completed: Less than 12th grade, high school graduate or GED, more than 12th (some college), bachelor's degree, or higher?"

Diary respondents not reporting education are matched to similar respondents who answer the question, based on one or more predictive respondent characteristics. A given response is then assigned as the likely answer. Approximately 1.5% of total Diary respondents did not report education.

PPM panelist educational attainment is monitored from the time of household recruitment and is verified and updated throughout the panel relations management process.

## WORK STATUS CLASSIFICATIONS

Adult respondents are reported in the following work status classifications: full-time only, full or part time.

Diary respondents are asked, "Are you employed either full time or part time?" If yes, "How many hours per week are you usually employed? Less than 35, 35, or more?"

Diary respondents not reporting work status are assumed to be nonworking.

Approximately 2% of total Diary respondents did not report work status.

PPM panelist work status is monitored from the time of household recruitment and is verified and updated throughout the panel relations management process.

## ETHNICITY/RACE

Respondents are reported in the following ethnicity/race groups: Hispanic, Black Non-Hispanic, and Other.

Nielsen's practice in local markets is to classify a respondent Black or Hispanic, but not both. Therefore, in most cases, respondents who are both Black and Hispanic are included as Hispanic for sample balancing and control purposes and are included only in Hispanic estimates.

Every diary includes the following two questions: "Are you Spanish, Hispanic or Latino?" {Yes/No}, and "Are you White, Black, African American, or some other race?" {choose any that apply). In Metros where Nielsen has Black Differential Survey Treatment {DST} but not Hispanic DST, respondents who are both Black and Hispanic are classified as Black, regardless of whether they are also Hispanic. In all other cases, respondents who are both Black and Hispanic are classified as Hispanic, regardless of whether they are also Black.

Respondents not reporting ethnicity/race are allocated proportionately among the following ethnicity/race groups: Hispanic, Black Non-Hispanic, and Other. Approximately less than 1% of total Diary respondents did not report ethnicity/race.

PPM panelist ethnicity/race is monitored from the time of household recruitment and is verified and updated throughout the panel relations management process.

## HISPANIC LANGUAGE USAGE

Hispanic respondents are reported in the following language-usage groups: All Spanish, Mostly Spanish, All English, Mostly English, Spanish Dominant, and English Dominant. Spanish Dominant is a combination of respondents whose language usage is either All Spanish or Mostly Spanish. English Dominant is a combination of respondents whose language usage is either All English or Mostly English.

Language classification is based on the answer to the language question, "Thinking about the language you use in the home, do you speak: only Spanish in the home, mostly Spanish but some English, mostly English but some Spanish, only English or both equally in the home?" If the respondent indicates "Both Equally," he or she is placed in the category "Mostly English."

Hispanic respondents not reporting language usage, and not living in Metros controlled for language usage, are matched to similar respondents who answered the question, based on one or more respondent characteristics. A given response is then assigned as the likely answer.

Approximately less than 1% of Hispanic respondents did not report language usage.

## REPORTING CRITERIA

Any estimate below Minimum Reporting Standards is indicated by an asterisk (\*) in the report tables.  
(See Table 2 below.)

### TABLE 2: MINIMUM REPORTING STANDARDS FOR RADAR ESTIMATES

Minimum sample size ..... 150

Minimum projected audience ..... 37,500

To be reported, an audience estimate must meet both the minimum sample size standard and the minimum projected audience standard.

For the Market-by-Market Analysis in Parts, which provides DMA-based audience estimates for each of the individual markets for the rotation plan, the minimum sample size for the reported sex/age break for each market is 30, and the minimum projected audience for each market is 1,000.

## RESTRICTIONS ON USE OF REPORTS

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

All RADAR audience data, estimates, reports, software, and Nielsen products related thereto, are for the exclusive use of properly licensed authorized users and their authorized representatives, and may be disclosed only to advertisers, prospective advertisers, and their agencies for the purpose of obtaining and retaining advertising, accounts, and through advertising or promotional literature as permitted hereunder or in the license agreements between Nielsen and its clients. Any use of the audience data, estimates, reports, software, and Nielsen products related thereto, for the purpose of selling advertising time or space by or on behalf of broadcast, cable, print, Internet, or any other medium, must be under the terms of a written license agreement between an authorized user and Nielsen specifying the permitted uses. For an authorized user to divulge or provide any data, estimates, reports, and/or software to a non-subscribing party, or, unless expressly authorized by Nielsen in writing, to lend and/or give a copy and/or a reproduction of any part of any report or Nielsen software program(s) to an unauthorized party, including but not limited to print media, advertisers, and/or their agencies, constitutes a willful breach of the license agreement between Nielsen and

the authorized user, and a violation of Nielsen intellectual property rights, including but not limited to Nielsen copyrights. A violation of Nielsen U.S. federal and state copyright rights can subject an infringer to statutory damages and attorney's fees. Quotations by authorized users of the estimates as allowed by this section for purposes of advertising or promotion must identify Nielsen as the source and that Nielsen data, estimates, reports, and software are copyrighted by Nielsen. Users of the RADAR service shall also mention that the audience estimates are subject to all qualifications and limitations stated in the Nielsen report and shall include the appropriate survey period, type of audience estimate, applicable daypart(s), and applicable demographic group(s) (e.g., RADAR 146 September 2020, Audiences to All Commercials, Average Persons, Monday-Sunday 6AM-Midnight, Adults 25-54).

The RADAR service, nor any audience estimate, nor software, or products related thereto, may be used in any manner or for any purpose by unauthorized parties without the express written permission of Nielsen.

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

## WARNING

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

## DISCLAIMER OF WARRANTIES

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

## RESERVATION OF RIGHTS

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

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

## LIABILITIES AND LIMITATIONS OF REMEDIES

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

## SPECIAL NOTICES

To the extent that any provisions contained in the "Special Notices" section of this *RADAR Reference Guide* are directly inconsistent or directly conflict with any provision contained in the *RADAR Description of Methodology*, such Special Notices are deemed to supersede and/or amend the *RADAR 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 the *RADAR Description of Methodology*, the user should be aware of the following limitations:

- a. Known commercial establishments and other known nonresidential facilities are specifically excluded from the sample frames. Reasonable steps are taken during sampling and recruitment to further exclude, to the extent possible: business or other nonresidential telephone numbers inadvertently included in the sample; residents of media-affiliated households; and group quarters residences containing 10 or more unrelated individuals or containing 17 or more individuals regardless of relationship. Additionally, all possible sample units may not be included in the frame employed for sample selection. Persons not included in the sample may have media habits that differ from those of persons included in the sample.
- b. Effort is made to exclude households with media affiliation. The inclusion or exclusion of such households from the sample is dependent upon information revealed by the household in response to the media affiliation question at the time of recruitment, or anytime thereafter, or from other sources.
- c. There may be instances where the interviewer or Panel Relations staff does not follow instructions.
- d. Non-responding Persons may have listening habits that differ from those of respondents.
- e. Non-responding Persons and other limitations in the original designated sample prevent the In-Tab sample from being a perfect probability sample.
- f. 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.
- g. 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. In-Tab sample is weighted upon the dominant language spoken by respondents where dominant Spanish-language-usage population estimates are available.

- h.** 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 historic rates of change that may not be sensitive to current conditions.
- i.** The language-usage population estimates that Nielsen uses in weighting the sample are subject to all of the limitations existing in those results, which may include: sampling errors, methodological errors, processing errors, and recording errors.
- j.** 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.
- k.** Encoding devices placed at media outlets may malfunction and/or be disconnected in such a way as to prevent the media sources from being properly encoded. To the extent this condition is known, it will be noted in the applicable report.
- l.** 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.
- m.** 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+.
- n.** Human and computer processing errors may occur before or after electronic meter data are received by Nielsen. Consequently, the degree of variance in the data may be greater than that expected from sampling variance alone.
- o.** The data upon which Nielsen has based its In-Tab sample weighting, including racial or ethnic identification, may not be precise.
- p.** Defects and limitations found in data supplied by others are inherent in audience estimates based thereon.
- q.** Data analysis, preprocessing preparation, or ascription of data may affect media exposure data from being modified or excluded from the In-Tab sample.
- r.** 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.
- s.** Nielsen conducts research involving new methods of improving panel cooperation and/or securing additional information from panelists. Occasionally, a portion of this research may be

integrated with syndicated data and, if and when so done, may cause the degree of variance in the data to be greater than that expected from sampling variance alone.

- t. 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.
- u. 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.
- v. 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.
- w. Estimates reported for different reporting periods may not be comparable over time due to: methodological or operational changes; changes in survey area definitions or populations; changes in a station's or a combo's Total Line Reporting status; changes in station operations or facilities; special station activities and other factors.
- x. For radio stations that are 100% simulcast, there are methods of signal routing that technically prohibit the installation of PPM encoding equipment into the backup air chains of one or more of the encoded simulcast partners. This method of encoding may affect the way media exposures are credited to individual partner stations and may affect the way audience estimates are credited or reported for the simulcasting stations.
- y. The digital radio Band ID labels referenced in this report are proprietary to Nielsen and protected under terms of Nielsen authorized user agreements and/or federal copyright and trademark law. Authorized users and purchasers of Nielsen data may display and use the Band ID labels provided the user clearly states that the labels are proprietary to Nielsen (e.g., "The Nielsen Company retains all copyrights or other legal rights to the Band ID labels used herein."). The reports may be used in accordance with the applicable license agreement between the authorized user and Nielsen. All other uses, unless Nielsen prior written approval is obtained, are expressly forbidden, and may subject the user to legal action, damages, and recovery of Nielsen legal expenses incurred in enforcing its intellectual property and proprietary rights.
- z. 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 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.
- aa. There may be inaccuracies in network station lists, program lists, or clearance records provided by networks to Nielsen. Further, atypical behavior by networks or network affiliates during the report period may not be reflected in the information provided.

- bb.** Certain use of the following crediting and editing policies and procedures may affect the data and reported audience estimates:
- (i) crediting quarter-hour audience based upon a respondent's report of, or a Meter's exposure to, radio listening to the same station for five or more minutes in the quarter-hour;
  - (ii) crediting diary entries to, at most, three stations within the quarter-hour;
  - (iii) crediting audience only if the respondent reported radio listening during the quarter-hour where a clearance is reported;
  - (iv) using network affiliations only during the most recent survey period with audience data for four survey periods;
  - (v) using one or two weeks of commercial clearances to represent clearances for all survey weeks;
  - (vi) using intended clearances for newly affiliated stations;
  - (vii) crediting audience during a time period in which there was an intended network commercial for a new affiliate;
  - (viii) crediting audience for a commercial block based upon one randomly selected commercial;
  - (ix) final credit results of reported listening on certain days in a diary may be imputed.
- cc.** In response to an event outside of Nielsen's reasonable control, such as power outages, mail disruptions, strikes, an extraordinary weather event, natural disaster, or any other event that precluded respondents in the marketplace from completing the survey, returning diaries, carrying their meters, or from transferring meter data to Nielsen for an extended period, Nielsen reserves the right to publish a report that reflects a special survey area and/or truncated survey period for the affected area. When determining if issue of a standard or special report is warranted, Nielsen will consider a range of factors including (but not limited to) conditions in the marketplace, the utility of the data in light of the marketplace conditions, and Nielsen's estimation of the data's validity and reliability.
- dd.** Data released as a part of the RADAR service is based upon a combination of data that has been accredited and data that has not been accredited by the Media Rating Council.

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

# TABLE 3: DMA-BASED MARKET GROUPS

## DMA MARKET GROUPS IN THE CONTINENTAL UNITED STATES

FOR SEPTEMBER 2020 RADAR TABULATIONS

Markets 1 - 10			Markets 51 - 100	
ATLANTA	##		ALBANY-SCHENECTADY-TROY	
BOSTON (MANCHESTER)	##		BATON ROUGE	
CHICAGO	##		BUFFALO	
DALLAS-FT. WORTH	##		BURLINGTON-PLATTSBURGH	
HOUSTON	##		CEDAR RAPIDS-WTRLO-IWC&DUB	
LOS ANGELES	##		CHAMPAIGN&SPRNGFLD-DECATUR	
NEW YORK	##		CHARLESTON, SC	
PHILADELPHIA	##		CHARLESTON-HUNTINGTON	
SAN FRANCISCO-OAK-SAN JOSE	##		CHATTANOOGA	
WASHINGTON, DC (HAGRSTWN)	##		COLORADO SPRINGS-PUEBLO	
			COLUMBIA, SC	
			DAYTON	
Markets 11 - 25			DES MOINES-AMES	
CHARLOTTE	##		EL PASO (LAS CRUCES)	
CLEVELAND-AKRON (CANTON)	##		FLINT-SAGINAW-BAY CITY	
DENVER	##		FRESNO-VISALIA	
DETROIT	##		FT. MYERS-NAPLES	
INDIANAPOLIS	##		FT. SMITH-FAY-SPRNGDL-RGRS	
MIAMI-FT. LAUDERDALE	##		GREEN BAY-APPLETON	
MINNEAPOLIS-ST. PAUL	##		GREENVILLE-N. BERN-WASHNGTN	
ORLANDO-DAYTONA BCH-MELBRN	##		HARLINGEN-WSLCO-BRNSVL-MCA	
PHOENIX (PRESCOTT)	##		HUNTSVILLE-DECATUR (FLOR)	
PITTSBURGH	##		JACKSON, MS	
PORTLAND, OR	##		KNOXVILLE	
SACRAMNTO-STKTON-MODESTO	##		LEXINGTON	
SEATTLE-TACOMA	##		LITTLE ROCK-PINE BLUFF	
ST. LOUIS	##		MADISON	
TAMPA-ST. PETE (SARASOTA)	##		MEMPHIS	##
Markets 26 - 50			MOBILE-PENSACOLA (FT WALT)	
ALBUQUERQUE-SANTA FE			MYRTLE BEACH-FLORENCE	
AUSTIN	##		OMAHA	
BALTIMORE	##		PADUCAH-CAPE GIRARD-HARSBG	
BIRMINGHAM (ANN AND TUSC)			PORTLAND-AUBURN	
CINCINNATI	##		PROVIDENCE-NEW BEDFORD	##
COLUMBUS, OH	##		RICHMOND-PETERSBURG	
GRAND RAPIDS-KALMZOO-B.CRK			ROANOKE-LYNCHBURG	
GREENSBORO-H.POINT-W.SALEM	##		ROCHESTER, NY	
GREENVLL-SPART-ASHEVLL-AND			SAVANNAH	
HARRISBURG-INCSTR-LEB-YORK			SHREVEPORT	
HARTFORD & NEW HAVEN	##		SOUTH BEND-ELKHART	
JACKSONVILLE	##		SPOKANE	
KANSAS CITY	##		SPRINGFIELD, MO	
LAS VEGAS	##		SYRACUSE	
LOUISVILLE			TOLEDO	
MILWAUKEE	##		TRI-CITIES, TN-VA	
NASHVILLE	##		TUCSON (SIERRA VISTA)	
NEW ORLEANS			TULSA	
NORFOLK-PORTSMTH-NEWPT NWS	##		WACO-TEMPLE-BRYAN	
OKLAHOMA CITY			WICHITA-HUTCHINSON PLUS	
RALEIGH-DURHAM (FAYETVLE)	##		WILKES BARRE-SCRANTON-HZTN	
SALT LAKE CITY	##			
SAN ANTONIO	##			
SAN DIEGO	##			
WEST PALM BEACH-FT. PIERCE	##			

SOURCE -- NIELSEN MEDIA RESEARCH

## RADAR estimates based on a combination of PPM and Diary respondents. See the RADAR DOM and Reference Guide for more information.

# TABLE 4: HISPANIC DMA-BASED MARKET GROUPS

HISPANIC DMA MARKET GROUPS IN THE CONTINENTAL UNITED STATES  
FOR SEPTEMBER 2020 RADAR TABULATIONS

Markets 1 - 10		Markets 51 - 100	
CHICAGO	##	ABILENE-SWEETWATER	
DALLAS-FT. WORTH	##	ALBANY-SCHENECTADY-TROY	
HARLINGEN-WSLCO-BRNSVL-MCA		AMARILLO	
HOUSTON	##	BALTIMORE	##
LOS ANGELES	##	BEAUMONT-PORT ARTHUR	
MIAMI-FT. LAUDERDALE	##	BIRMINGHAM (ANN AND TUSC)	
NEW YORK	##	BOISE	
PHOENIX (PRESCOTT)	##	BUFFALO	
SAN ANTONIO	##	CHATTANOOGA	
SAN FRANCISCO-OAK-SAN JOSE	##	CHICO-REDDING	
		CINCINNATI	##
Markets 11 - 25		CLEVELAND-AKRON (CANTON)	##
ALBUQUERQUE-SANTA FE		COLUMBUS, OH	##
ATLANTA	##	DAVENPORT-R.ISLAND-MOLINE	
AUSTIN	##	DES MOINES-AMES	
BOSTON (MANCHESTER)	##	FT. SMITH-FAY-SPRNGDL-RGRS	
DENVER	##	GRAND RAPIDS-KALMZOO-B.CRK	
EL PASO (LAS CRUCES)		GREENSBORO-H.POINT-W.SALEM	##
FRESNO-VISALIA		GREENVILLE-N.BERN-WASHNGTN	
LAS VEGAS	##	GREENVLL-SPART-ASHEVLL-AND	
ORLANDO-DAYTONA BCH-MELBRN	##	HARRISBURG-LNCSTR-LEB-YORK	
PHILADELPHIA	##	INDIANAPOLIS	##
SACRAMNTO-STKTON-MODESTO	##	JACKSONVILLE	##
SAN DIEGO	##		
SEATTLE-TACOMA	##	LINCOLN & HASTINGS-KRNY	
TAMPA-ST. PETE (SARASOTA)	##	LITTLE ROCK-PINE BLUFF	
WASHINGTON, DC (HAGRSTWN)	##	LOUISVILLE	
		LUBBOCK	
Markets 26 - 50		MEMPHIS	##
BAKERSFIELD		MOBILE-PENSACOLA (FT WALT)	
CHARLOTTE	##	NASHVILLE	##
COLORADO SPRINGS-PUEBLO		NEW ORLEANS	
CORPUS CHRISTI		NORFOLK-PORTSMTH-NEWPT NWS	##
DETROIT	##	OMAHA	
FT. MYERS-NAPLES		PITTSBURGH	##
HARTFORD & NEW HAVEN	##	RENO	
KANSAS CITY	##	RICHMOND-PETERSBURG	
LAREDO		ROCHESTER, NY	
MILWAUKEE	##	SAN ANGELO	
MINNEAPOLIS-ST. PAUL	##	SAVANNAH	
MONTEREY-SALINAS		SHREVEPORT	
ODESSA-MIDLAND		SOUTH BEND-ELKHART	
OKLAHOMA CITY		SPOKANE	
PALM SPRINGS		SPRINGFIELD-HOLYOKE	
PORTLAND, OR	##	ST. LOUIS	##
PROVIDENCE-NEW BEDFORD	##	TOLEDO	
RALEIGH-DURHAM (FAYETVLL)	##	TULSA	
SALT LAKE CITY	##	TYLER-LONGVIEW(LFKN&NCGD)	
SANTABARBRA-SANMAR-SANLUOB		WICHITA FALLS & LAWTON	
TUCSON (SIERRA VISTA)		WICHITA-HUTCHINSON PLUS	
WACO-TEMPLE-BRYAN		WILKES BARRE-SCRANTON-HZTN	
WEST PALM BEACH-FT. PIERCE	##		
YAKIMA-PASCO-RCHLND-KNNWCK			
YUMA-EL CENTRO			

SOURCE -- NIELSEN MEDIA RESEARCH

## RADAR estimates based on a combination of PPM and Diary respondents. See the RADAR DOM and Reference Guide for more information.

# TABLE 5: BLACK DMA-BASED MARKET GROUPS

BLACK DMA MARKET GROUPS IN THE CONTINENTAL UNITED STATES  
FOR SEPTEMBER 2020 RADAR TABULATIONS

Markets 1 - 10		Markets 51 - 100	
ATLANTA	##	ALBANY, GA	
CHICAGO	##	ALBANY-SCHENECTADY-TROY	
DALLAS-FT. WORTH	##	AUSTIN	##
DETROIT	##	BEAUMONT-PORT ARTHUR	
HOUSTON	##	BILOXI-GULFPORT	
LOS ANGELES	##	BUFFALO	
MIAMI-FT. LAUDERDALE	##	CHAMPAIGN&SPRNGFLD-DECATUR	
NEW YORK	##	CHARLESTON, SC	
PHILADELPHIA	##	CHATTANOOGA	
WASHINGTON, DC (HAGRSTWN)	##	COLUMBUS, GA (OPELIKA, AL)	
Markets 11 - 25		COLUMBUS-TUPELO-W PNT-HSTN	
BALTIMORE	##	DAYTON	
BIRMINGHAM (ANN AND TUSC)	##	DENVER	##
BOSTON (MANCHESTER)	##	FLINT-SAGINAW-BAY CITY	
CHARLOTTE	##	FRESNO-VISALIA	
CLEVELAND-AKRON (CANTON)	##	FT. MYERS-NAPLES	
JACKSONVILLE	##	GRAND RAPIDS-KALMZOO-B.CRK	
MEMPHIS	##	GREENVILLE-N.BERN-WASHNGTN	
NEW ORLEANS		GREENWOOD-GREENVILLE	
NORFOLK-PORTSMTH-NEWPT NWS	##	HARRISBURG-LNCSTR-LEB-YORK	
ORLANDO-DAYTONA BCH-MELBRN	##	HATTIESBURG-LAUREL	
RALEIGH-DURHAM (FAYETVLL)	##	HUNTSVILLE-DECATUR (FLOR)	
RICHMOND-PETERSBURG		KNOXVILLE	
SAN FRANCISCO-OAK-SAN JOSE	##	LAFAYETTE, LA	
ST. LOUIS	##	LEXINGTON	
TAMPA-ST. PETE (SARASOTA)	##	LOUISVILLE	
Markets 26 - 50		MACON	
AUGUSTA-AIKEN		MERIDIAN	
BATON ROUGE		MONROE-EL DORADO	
CINCINNATI	##	MYRTLE BEACH-FLORENCE	
COLUMBIA, SC		OKLAHOMA CITY	
COLUMBUS, OH	##	OMAHA	
GREENSBORO-H.POINT-W.SALEM	##	PADUCAH-CAPE GIRARD-HARSBG	
GREENVLL-SPART-ASHEVLL-AND	##	PORTLAND, OR	##
HARTFORD & NEW HAVEN	##	PROVIDENCE-NEW BEDFORD	##
INDIANAPOLIS	##	ROANOKE-LYNCHBURG	
JACKSON, MS		ROCHESTER, NY	
KANSAS CITY	##	SALISBURY	
LAS VEGAS	##	SAN ANTONIO	##
LITTLE ROCK-PINE BLUFF		SAN DIEGO	##
MILWAUKEE	##	SOUTH BEND-ELKHART	
MINNEAPOLIS-ST. PAUL	##	SYRACUSE	
MOBILE-PENSACOLA (FT WALT)		TALLAHASSEE-THOMASVILLE	
MONTGOMERY-SELMA		TOLEDO	
NASHVILLE	##	TULSA	
PHOENIX (PRESCOTT)	##	TYLER-LONGVIEW(LFKN&NCGD)	
PITTSBURGH	##	WACO-TEMPLE-BRYAN	
SACRAMNTO-STKTN-MODESTO	##	WICHITA-HUTCHINSON PLUS	
SAVANNAH		WILMINGTON	
SEATTLE-TACOMA	##	YOUNGSTOWN	
SHREVEPORT			
WEST PALM BEACH-FT. PIERCE	##		

SOURCE -- NIELSEN MEDIA RESEARCH

## RADAR estimates based on a combination of PPM and Diary respondents. See the RADAR DOM and Reference Guide for more information.