

# How Does Arbitron Measure XM Satellite Radio?

## A Guide to Understanding Arbitron's Custom Listening Study

Arbitron has created the XM Satellite Radio Custom Listening Study, which is updated twice each year, in the spring and fall. The study is designed to provide a measure of primary and additional listeners of XM Satellite Radio, 12 years of age and older. As with other Arbitron ratings, the Study provides essential audience information for media sales, planning and buying.

### What is the sample frame?

Arbitron uses a random sample of XM subscribers supplied by XM. The sample includes only subscribers who have had the service for 60 days or more, in order to eliminate the unusual listening behavior that may occur when a subscriber first uses the service.

### How does Arbitron measure the service?

Arbitron uses a telephone interview. Within the structure of our current system, it was not possible to adapt the local market diary service to XM's needs. Instead, we developed a telephone interview system that collects Average Quarter-Hour and Cume information.

### Whom do you talk to in the household?

Arbitron asks for the primary user of the XM service. This may not be the person who actually pays for the service (for example, one spouse may be the subscriber, but the XM radio is in the other spouse's car). The household itself determines which person is the primary user.

## Did You Know?

The XM Satellite Radio Custom Listening Study:

- Provides Average Quarter-Hour and Cume estimates
- Measures 60 commercial-inventory channels across four channel groups
- Covers 24 standard demographics and seven traditional radio dayparts
- Includes a socioeconomic profile of XM primary listeners
- Is based on a sample of more than 2,000 respondents



The primary-user measurement was developed because a large percentage of XM Satellite Radio listening is done in the car. Thus, it makes more sense to define the universe as "primary users" rather than subscribers.

## How is the interview conducted?

The interviewer asks for the primary user in the household (must be age 12 or older). If that person is not available at the time of the call, an appointment is made for a callback. Substitution is not allowed.

After collecting age information, as well as screening for media industry employment (persons connected to the satellite, radio, broadcast television or cable television industry are not eligible to take part in the survey), the interviewer asks for all the XM channels that the respondent has listened to in the past seven days. For each channel mentioned, the respondent is asked whether he/she did any listening on weekdays and weekends.

Average Quarter-Hour is based on previous-day listening. The respondent is asked about three specific dayparts (midnight-10AM on the previous day, 10AM-8PM, and 8PM-6AM on the morning of the interview). Keep in mind that XM Satellite Radio has one national feed and all listening is adjusted to Eastern Time Zone (for example, someone who reported listening to a channel between 8AM and 9AM in Los Angeles will be given credit for listening between 11AM and noon). The net amount of time covered is a 24-hour period beginning at 6AM the day before the interview.

Respondents are asked for all their listening based on each listening event. Start and stop times for each event are recorded, and the respondent then allocates the amount of time spent with each XM channel. If listening to terrestrial radio is included, that time is placed into a "terrestrial" bucket.

Of course, age, gender, race and ethnicity are asked, as well as a series of qualitative questions that can vary from survey to survey, based on XM's requirements.

## What about additional listeners?

Because the survey is projected to *primary* listeners of the XM service, a basically "false assumption" is made. This assumption is that only primary listeners (and by definition, primary can only be one person) listen to XM and no others listen. Projecting to the primary-listener universe, which is equivalent to the subscriber base, would miss out on listening done by others who are not XM primary listeners but do listen to the service. For example, a rider in a car driven by a primary listener would not be counted.

To account for this listening shortfall, we enumerate other listeners to the primary listener's XM radio during the seven-day period. We ask for the age and gender of each of these listeners. This enumeration gives us a base of additional listeners for projection purposes.

When we ask about the previous day's listening episodes, we also ask if any of the enumerated additional listeners were listening with the primary listener at the time or for part of that time. Because we have already enumerated this group, we can use the equivalent of an electronic "checkoff list" during the interview, making it easy for the respondent to tell us which of the additional listeners, if any, also listened at that time.

The result is a projection of additional listeners to the XM additional-listener universe. Typically, an XM primary listener brings in just over one additional listener. In the AQH estimates, the additional listeners typically add 25 percent to 30 percent more audience to the primary-listener estimates, although this varies by demo and channel grouping.

## How do you project audiences?

We have only two universe estimates that we can use for audience projections. One is the number of XM subscribers. We use the most recent quarterly subscriber count that XM publicly reports. XM can update the audience estimates using a

new quarter's count if there has not been a new Arbitron study released. As noted above, we base the additional-listener universe on the ratio of reported additional listeners to the primary listeners as reported to us in the interview.

Beyond that, no weighting is applied, because there is no credible estimate available for the makeup of the XM primary-listener universe. Lacking that information, we assume that the disposition of the Study itself is representative of this group (and the additional listeners) on its face.

### Does Arbitron stand behind these estimates?

Arbitron has been in the media measurement business since 1949 and has measured radio listening in the United States for 40 years. Over that time, we have built a strong reputation for quality measurement and adherence to very high standards. While it is not our role to recommend whether advertisers should buy advertising with a specific company, we do stand behind the custom ratings estimates that we produce for XM Satellite Radio. Arbitron believes that if an advertiser chooses to buy XM, it can use the Arbitron estimates with confidence.

### Are the XM estimates accredited by the Media Rating Council?

No, these estimates are not accredited. The Media Rating Council (MRC®) does not accredit custom studies such as this one. Arbitron does have MRC-accredited services, and as part of that accreditation, the printed XM studies must carry a notice that these estimates are not accredited by the MRC.

### Whom can I call if I need more information?

Specific inquiries should be addressed to your XM account executive. If your question is related to the Arbitron methodology, please contact:

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