The Radio Non-Response Study

ARBITRON RADIO

The Radio Non-Response Study

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from Arbitron Research

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Chapter I

An Elusive Goal: "Perfect" Measurement of the Radio Audience

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Radio audience measurement in an ideal world would involve each and every potential listener being surveyed and a perfect record of his or her listening being gathered. A less than perfect, but quite acceptable and more practical alternative, would be the use of surveys which adequately sample each significant type of listener in proper proportion relative to the universe being measured, capturing listening records that achieve a high level of completeness and accuracy. This must be the continuing goal of any responsible broadcast measurement organization.

Three kinds of bias historically have frustrated audience researchers:

1. Sample frame bias — certain types of people have less chance than others of being selected as the sample is drawn.
2. Non-response bias — a survey fails to capture a listening record from a person who had been included in the designated sample as it was drawn.
3. Response bias — a listening record is captured, but it is faulty. Faults can be traced to the instrument (questionnaire or diary) used, to the way the listener responds to the instrument, or both.

Sample frame bias enters the picture as survey samples are being drawn. Some people, simply because they change their residence often, don't have telephones, live in college, military, or other group quarters — or in some other fashion, have little or no chance of being drawn for a sample in the first place. Yet, such people can represent important segments of the radio audience. Special procedures must be followed when such "hard to sample" people represent major population segments. For example, unlisted telephones have become so prevalent that Arbitron has introduced, in many markets, a special technique called Expanded Sample Frame so that unlisted telephone households will be represented in Radio and Television surveys.

Non-response bias describes a cluster of problems that emerge after a survey sample is drawn and the audience researcher attempts to capture accurate listening records from all members of the sample. Simply stated, if the surveyor fails to capture a listening record for the time span of the survey from even *one* intended survey respondent, the audience estimates produced are subject to possible non-response bias. If even one listening record captured is not complete and accurate, the resulting estimates have been affected by *response* bias. An audience measurement surveyor is unlikely ever to produce a survey in which the entire sample population responds (constituting a 100% "response rate") with an accurate and complete record of listening.

A response rate of less than 100% does not,

by definition, constitute non-response bias. A survey in which one-third or fewer of the intended respondents participated, could be used to produce quite acceptable audience estimates, so long as the group whose listening was captured included all pertinent variations in listening behavior, and sufficient numbers of people were present in the returned sample to produce statistically stable data. However, if certain demographic audience segments are often observed to be under-represented in samples, the suspicion is raised that non-response bias is present and distortions may be present in reported listening estimates.

As Arbitron has learned in its many years of audience measurement, the various segments of a survey sample often do show broad differences in their propensity to participate in surveys. In terms of major population segments, the groups most likely to be under-represented in returned samples include black people, those of Hispanic heritage, and certain sex/age demographic groups. It has been assumed that there is high potential for listening estimate distortions if such imbalances are not corrected.

What does Arbitron do about it? There are two approaches — mathematical weighting, and increasing the incidence of certain types of persons in the sample. In weighting of survey data, the responses of sample segments underrepresented relative to the population are given greater weight than segments whose representation is at or above assumed population levels. This helps, and Arbitron routinely uses weighting in the production of its audience estimates. However, weighting is not a complete answer to the problem. A sample segment consisting of a relatively small proportion of the survey population is less likely to represent properly all of the important shadings of listener behavior. To the extent that persons exhibiting particular behavior are under-represented or missing entirely within a weighting segment, any resulting distortion in estimates is not corrected by weighting.

The other approach aims at improving the proportionate incidence in the sample of those persons whose listening information may be relatively difficult to retrieve. Arbitron's research has shown that different approaches must be used with different types of respondents. The "easy" respondents — non-ethnic, middle-aged people — generally are happy to keep a diary for a week and return it as a reasonably accurate record of their radio listening. With the "problem" segments — certain ethnic groups, certain sex/age groups — it's not that simple.

Arbitron uses special high response techniques to improve the sample representation of these difficult segments. Telephone Retrieval with certain respondents in metro areas with significant black populations and Personal Placement and Retrieval in certain areas that have a high incidence of Hispanic persons aim at the problem of potential ethnic under-representation. Expanded Sample Frame (ESF) is applied in an increasing number of markets to bring unlisted telephone households into samples. It has been found to improve sex/age distribution relative to population estimates.

Differential Survey Treatments, Arbitron's newest technique, is still in the experimental stage. Incentives for potential diarykeepers and the intensity and nature of survey procedures will be varied for different demographic groups in an attempt to achieve the highest practical response rate with a mail diary from each target segment of persons.

There always is a danger, when special procedures are implemented, that they may

alleviate one problem — non-response bias — and aggravate another — response bias. This is one of Arbitrons' principal motivations in attempting to devise procedures that will permit use of a standardized, respondent-kept mail diary with all respondents. When the same instrument is used in the same manner to capture listening from all respondents, response bias is less likely to differentially affect estimates produced for specific audience segments.

During 1977 and 1978, Arbitron completed three landmark studies in the areas of the representativeness of its returned radio samples and the accuracy with which its measurement instruments accurately capture the radio listening of the respondents in those samples. Two of these studied non-response bias and response bias effects in Arbitron's black and Hispanic procedures. The third primarily investigated non-response bias through use of a telephone recall methodology to reach significant numbers of intended sample respondents who had not returned usable listening records in diary surveys. It is this Non-Response Study that is discussed in the balance of this report. Reports of the black and Hispanic investigations will be found in two companion volumes.

The Non-Response Study concerns itself mostly with non-response bias. Response bias enters the picture to a limited extent — "non-responders" in the study included not only those not returning Arbitron diaries, but also included a minority who had returned diaries that could not be used because they had not been kept properly. There were insufficient numbers of these to provide a base for a separate analysis.

The findings of this Non-Response Study are vital, because they provide important clues to the nature and behavior of important audience segments that may be underrepresented in diary samples. As we seek to increase their incidence in our samples we must know who we're looking for and the extent to which they fall short of proper representation.

Before proceeding, let's state a truth — no one, Arbitron included, has designed and implemented a perfect technique for measuring radio audiences. All evaluations of current and proposed methodologies must themselves be judged against imperfect controls. All techniques suffer from both non-response bias and response bias to a greater or lesser extent. Often the two seem inversely related — a stringent data gathering method usually produces listening records of great validity, but may result in a low response rate. Lessening the task for the respondent often produces sharp response rate gains, but produces less accurate listening records.

Over the years, Arbitron has considered a variety of radio audience measurement methodologies, each exhibiting its own set of non-response and response bias problems. Telephone recall, telephone coincidental, and diary lengths of less than seven days have been examined. Always, the conclusion has been that the seven-day personal diary offered the greatest efficiency, within a framework of practical cost and reporting time. It achieves acceptable response levels and captures what appear to be highly accurate listening records. The industry's 1966 All Radio Methodology Study (ARMS), after an examination of a wide range of methodologies, confirmed that the seven-day diary was a highly efficient survey instrument. ARMS particularly noted the instrument's advantage over telephone recall methodologies in possibly reducing reporting error on the part of the listener by "the prior

introduction into the respondent's mind of the structure that makes it easier for him to recall his experience."[1] Can we say the levels reported from mail diaries are the true levels? Certainly not. But Arbitron's experience and the findings of the ARMS study provide reassurance as to the mail diary's efficacy.

The Non-Response Study reached people by telephone who had not returned usable mail diaries. Does this mean that telephone recall methodology is superior to mail diary techniques in curing non-response bias? Again, certainly not. Usable mail diaries were returned from an even larger number of people who could not be contacted and surveyed in the telephone study.

As you read the following pages, bear in mind that there will continue to be disagreement as to measurement methods. The eventual development of a system that results in proper representation of all population segments, and employs measurement instruments that provide nearly perfect capture of listening, still must be subject to acceptance or rejection in terms of economic realities and evaluation against industry audience measurement objectives. It is not the purpose of this paper to celebrate the arrival at the goal, but we hope it does document the care that is being taken as we thread paths along the way.

In the next section we will discuss briefly the way Arbitron now measures radio listening, as an aid in positioning the methodology and findings of the Non-Response Study. Then, we will discuss the objectives, design, and findings of the study. Finally, its implications for the future of radio audience measurement will be treated.

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[1] *All Radio Methodology Study*, Audits & Surveys, Inc., September 1966, Volume One, Chapter 8, p. 8.

Chapter II

The Arbitron Radio Methodology

The Arbitron Radio Methodology

The Survey

Arbitron uses a seven-day personal diary which is placed with a sample of individuals, 12 years old or older, within a local market. Each survey period consists of four consecutive weeks with a separate random sample of individuals participating in each week of the survey period. In general, the diaries are delivered and returned by mail, although in markets with a significant ethnic population, special interviewing techniques are used.

Sample Selection

For each week of each survey, in each county in the survey area, a sample of households is selected from the MetroMail file of telephone households. Each household is sent an introductory letter informing them that an Arbitron interviewer will be telephoning to invite them to participate in the upcoming survey. In certain markets, the sample frame has been expanded to include unlisted as well as listed households.

Placement

Several days after the arrival of the introductory letter, an Arbitron interviewer telephones the households to gain cooperation in the survey, determine the number of persons 12 years old or over in the household, and verify the address. One diary for each person 12 + is mailed from Arbitron's Beltsville, Maryland, offices. Each respondent is sent a small monetary premium (generally 50¢) to encourage participation. Most homes are called by the interviewer to make certain the diaries have arrived, to answer any questions, to clarify the instructions, and to remind them of the start date for the survey. During the survey week, all households are reminded, either by telephone or letter, to mail their completed diaries to Arbitron immediately following the last day of the survey.

Returned Diary Editing

The returned diaries are inspected for overall usability. The diaries must be submitted after the survey ends, be legible, have all days accounted for, and meet a variety of other quality control usability criteria. The "usable" diaries are then edited for time and station identification. Legal call letter files, slogans, personalities and sporting events are used in the editing process. The edited diaries are then keyed into Arbitron's computers which further validate the logic of the listening and identify diaries exhibiting certain extraordinary listening requiring further validation or exclusion.

Returned Sample Weighting

Because no sampling frame is perfect, and because not everyone who is asked to par-

ticipate in the survey actually returns a usable diary, there are imbalances in Arbitron's returned sample relative to the universe it represents. For this reason, Arbitron employs sample balancing to guarantee proportional representation of the returned sample to universe controls updated annually by Market Statistics, Inc. Arbitron weights its returned sample on county, sex, age, and, in certain markets, race/nationality.

The Survey Area

Aribtron Radio measures and reports estimates in terms of the Metropolitan Survey Area (Metro or MSA), the Total Survey Area (TSA), and, in some cases, the Area of Dominant Influence (ADI). The Metro is generally defined as the Standard Metropolitan Statistical Area. The TSA is generally defined by the listening patterns to stations that are "home" (licensed) to the Metro.

The ADI is Arbitron Television's market definition which defines each television market in terms of measurable viewing patterns. ADI estimates are reported for only the top 50 ADI markets.

The Audience Report

The Arbitron Radio Market Report presents radio listening by demographic group and day-part in terms of average quarter-hour and cume estimates. These estimates are presented as projected persons, persons ratings and persons shares for the Metro Survey Area, Total Survey Area and, in some cases, the ADI.

Data are reported for weekday and weekend listening for the following basic day-parts, as well as combinations and components thereof:

6:00 AM — Midnight
6:00 AM — 10:00 AM
10:00 AM — 3:00 PM
3:00 PM — 7:00 PM
7:00 PM — Midnight

Limitations

All Arbitron audience data are estimates and subject to limitations inherent in Arbitron's methodology as stated in each Arbitron local market report. Hence, the accuracy of Arbitron estimates cannot be determined to any precise mathematical value or definition.

Chapter III

The Non-Response Study: Its Objectives

The Non-Response Study: Its Objectives

The Arbitron Radio Non-Response Study was undertaken to meet two objectives. First, to determine if the addition of listening records from non-responding persons in Arbitron's radio samples would result in audience estimates different from those produced only from the records of diary survey respondents. Second, the study sought to identify and delineate any observed differences in demographic characteristics between those who respond and those who do not respond in diary surveys.

Chapter IV

The Non-Response Study: Its Design

The Non-Response Study: Its Design

First, let's define responders and "total test," since we'll be using these terms through the remainder of the report. For this study, we selected the radio metro areas of three markets. Following completion of our standard market report surveys for April/May 1978, we took all usable residential telephone listings that had been used in our diary surveys in those metros and redesignated them as the samples for our Non-Response Study.

Our study gathered listening records by telephone recall methodology instead of by diary. Upon its completion, respondents who had usable diaries in the April/May 1978 market report survey were classified as "responders." All persons from whom we had usable interviews in our telephone test survey, including these diary responders and those for whom we had no April/May diaries, or for whom we had diaries that were incomplete or otherwise unusable, were classified as "total test."

It then became a matter of meeting our objectives through examination of these two groups. Were the people who had returned usable diaries in our April/May survey in those metros a recognizably distinct subsample of the total test sample of people we had interviewed in our telephone Non-Response survey? Throughout this report, comparisons will be made in this fashion: *diary* survey responders will be compared to the total test sample of the telephone survey of which they were a part.

What sort of differences were we seeking to identify and delineate? Broadly speaking, they were two types — demographic and behavioral. Do diary survey responders differ demographically from the general sample we were able to interview by telephone? We will show a number of sample response observations in an attempt to answer this question. Since a key question must be whether any such differences would affect listening estimates, the listening behavior of the telephone study sample with and without the inclusion of non-responders will be treated in detail.

Telephone recall methodology was selected for this study because it allowed the capture of a full day's listening from a respondent in one interview. In the procedure, an effort was made to duplicate the conditions of a diary survey, i.e., sample households were alerted in advance and told which 24-hour period would be designated for measurement of the radio listening of household members.

The sample frame employed was all usable residential telephone listings from the designated samples of the April/May 1978 radio market report surveys in the radio metros of Philadelphia, Cincinnati, and Omaha-Council Bluffs. (These markets were selected to provide geographic and market size

dispersion.) Only listed numbers were involved, as Arbitron had not applied Expanded Sample Frame (ESF) in those markets during that survey. (ESF is Arbitron's technique for inclusion of unlisted telephone numbers in its samples.)

Each household that could be contacted was alerted the day or night prior to a 24-hour period for which that home's listening would be measured. Interviewers attempted to speak to each person, age 12 +, who was home at the time of the alert call. Those at home were asked to relay the alert to those not at home. All contacted were told that the survey period would extend from 6PM the day of the alert to 6PM the following day.

After 6PM the next day, the interviewer attempted to recontact the home and interview each eligible household member to capture listening records for the 24-hour survey period. Extensive call-back attempts were made for both alerts and listening interviews. It was felt that this would result in the highest response rate that would be practical to achieve. Seven alert attempts were required over a five-day period. In addition, three attempts were required to contact individuals to complete listening records. For persons not at home at the time of the first listening-record call, attempts were made with those at home to establish call-back times for missing people. Persons were abandoned if they could not be interviewed by the second day after the end of the survey period. (For example, if a home's designated survey period was 6PM Monday to 6PM Tuesday, only those listening interviews completed by Thursday night were used.) Thus, we controlled the time lag between listening and respondent reporting (and resulting memory decay).

All listening records were gathered through direct interviews with respondents. (Permitting other household members to report for them could have resulted in less valid listening records.) Each household was interviewed for only one 24-hour listening period, a further control for memory decay. Household samples were divided into groups so that all days from 6PM Sunday to 6PM Saturday were represented. This allowed development of average quarter-hour listening estimates for Monday-Friday, 6AM-Midnight, but since only one day was measured for each respondent, cumulative estimates could not be developed.

In addition to capturing times and call letters for a listening record, the listening interview sought demographic classification information. Interviewing was conducted June 4-July 1, 1978, by Arbitron field interviewers. Interviewers were not told which households or members of households had returned diaries in the April/May diary survey, since this knowledge could have caused them to show bias in their treatment of respondents.

Upon return of completed questionnaires, all respondents were classified as "diary survey responders," if they had a usable diary in-tab in the April/May diary survey, or as "non-responders," if they did not. To adjust sample variations to known population estimates, each of the two groups was weighted separately against sex/age distribution and county population estimates. In Philadelphia and Cincinnati, weighting also was done for each group against black vs. other racial groups, as black ethnic procedures were employed to produce market reports in these two markets. In all three markets, day-of-week weighting was used separately for responders and non-responders to adjust for variations in the size of in-tab samples from each designated listening-day survey period.

All identifiable radio stations reported by respondents were classified into six format

groups by type of programming. Average quarter-hour listening estimates then were developed using a specially designed computer routine, for each format group, for each of the major Monday-Friday day-parts, and for each of a variety of demographic groups.

Further information concerning the methodology and a list of stations included in each format group will be found in Appendix B.

Chapter V

The Non-Response Study: Its Findings

The Non-Response Study: Its Findings

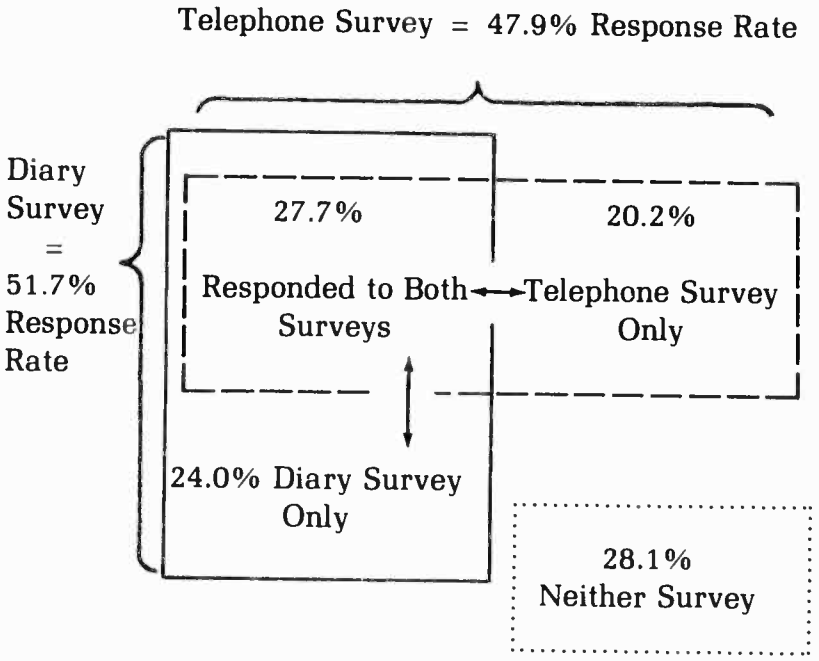
Sample Performance: Reaching for the Universe of Potential Radio Listeners

The universe of potential radio listeners, as Arbitron defines it and seeks to measure it, consists of all persons age 12 or older. It includes persons in the tiny percentage of homes without radios, since even these can be exposed to radio in the homes of others, at work, or in public places. As noted in our first section, it is not practical to think we can represent this entire universe in any survey. Sampling frame bias inevitably can be expected to exclude some. Others, though sampled, will fail to respond in the best survey procedure we can hope to devise. But, as a point of reference, we must judge any survey procedure against the theoretical goal of in-tab sample representation of 100% of the universe of people who can listen to radio.

What proportion of this universe did we reach with our telephone Non-Response Study? How did this compare with the universe we had reached employing the same sample earlier in the April/May diary survey? How many were reached both times, only once, or not at all? To assign numerical answers to these questions, we have to lower our sights a bit. We can't talk of universe; we must talk in terms of sample population. Sample frame bias excluded part of the universe before the first diary was mailed or the first phone interview was conducted.

We used Arbitron's standard listed samples for the study. These samples are drawn from published telephone listings, so people in the universe not living in residences with published telephone numbers had no chance to be measured. Our goal then becomes a sample that properly represents all persons, age 12+, residing in households with usable listed telephone numbers as of the time that Arbitron's designated samples were drawn for April/May 1978 surveys in the radio metro areas of Philadelphia, Cincinnati, and Omaha-Council Bluffs.

Since we have now defined the population our sample is to represent, and have said that, hopefully, our sample draw properly represented that population, we can judge the success of our two attempts to survey that sample. If we captured a usable listening record from every person in the sample, we would have a 100% response rate. Of course, no survey organization does that well. In the telephone Non-Response study, our total response rate across the three markets was 47.9%. In the April/May 1978 diary survey, the rate was 51.7%. What proportions were reached by both surveys, one survey, or neither? Perhaps this diagram will help:



(6,228 estimated persons, age 12 +, in usable samples of three markets = 100%)

As you can see, our intended sample divided itself roughly into quarters. Slightly more than one-fourth (27.7%) were captured twice — they had usable diaries in the diary survey and we gathered a usable listening record from them in the telephone test. Somewhat less than one-fourth (20.2%) were captured in the telephone survey, but had not returned usable diaries. Another fourth (24.0%) were in the opposite position; we had usable diaries from them but were unsuccessful in obtaining a usable telephone listening record. Remaining were the true mystery group — the 28.1% whose listening was captured in neither survey.

It would be reasonable to conclude that neither the telephone study nor the diary survey were successful in reaching more than about half of the intended sample, and that one methodology was about as successful as the other in reaching "difficult" respondents. Here, we define "difficult" respondents as those hard to reach by one methodology, though perhaps readily available to the other procedure.

Our objectives in this study dealt with identifying people we could reach by telephone but who had not returned diaries, and with assessing the effects the addition of the listening records of such people would have on audience estimates produced only from the listening records of diary responders. Consequently, the remainder of this report will concern itself only with an analysis of findings from the telephone Non-Response test sample.

We had estimated that there were 6,228 persons, age 12 +, in residences in the designated samples for the three test markets. Telephone interviewers captured usable listening records from 2,985 of these. Our in-tab samples by market and response category were:

	Three Markets Combined	Philadelphia	Cincinnati	Omaha-Council-Bluffs
In-tab persons	2,985	1,449	1,065	471
Diary Responders	1,728	840	634	254
Non-responders	1,257	609	431	217

Further detail regarding sample performance will be found in Appendix A, Table 1.

Respondent Characteristics

While the sample of telephone survey test respondents was not necessarily more representative of our sample population than the sample that had returned diaries in the earlier diary survey, it did provide us with the opportunity to look at diary survey responders compared to a sample that included people who had not returned a diary.

How did diary responders compare with the total test sample of which they were a subsample? They varied somewhat in sex/age distribution — responders were somewhat less likely to be Men 18-24 or Women 65 or older (see table in left column).

They tended to be more affluent. Significantly* more diary responders reported annual household incomes of $20,000 or more, as this table notes:

Distribution of Respondents by Sex/Age Three Markets Combined

Sex/Age Group		Diary Survey Responder	Total Test	Difference
Boys	12-17	5.8%	6.1%	+ .3
Men	18-24	4.3	5.7	+ 1.4
	25-34	7.1	7.0	– .1
	35-44	5.9	5.7	– .2
	45-49	2.5	2.7	+ .2
	50-54	3.6	2.8	– .8
	55-64	4.1	4.3	+ .2
	65 +	5.0	5.8	+ .8
Girls	12-17	7.6	7.0	– .6
Women	18-24	7.5	7.5	0
	25-34	11.3	10.1	– 1.2
	35-44	8.8	8.6	– .2
	45-49	3.9	3.8	– .1
	50-54	6.1	5.2	– .9
	55-64	7.3	7.2	– .1
	65 +	9.1	10.7	+ 1.6
		100.0%	100.0%	
Men	18 +	32.4	33.9	+ 1.5
Women	18 +	54.2	52.9	– 1.3
Teens	12-17	13.4	13.1	– .3
Total Sample:		100.0% (1,728)	100.0% (2,985)	

Distribution of Respondents by Household Income Three Markets Combined

	Diary Survey Responder	Total Test	Difference
Less than $10,000 yr.	15.9%	17.0%	+ 1.1
$10,000 to $14,999	13.9	14.9	+ 1.0
$15,000 to $19,999	17.0	16.1	– .9
$20000 or more	32.4	28.5	– 3.9*
Refused	12.7	14.2	+ 1.5
Don't Know	6.3	7.3	+ 1.0
No Answer	1.9	1.9	0
Total Sample:	100.0% (1,728)	100.0% (2,985)	

*The use of the term "significant" here, and throughout the report, implies statistical significance at the 95.5% level of confidence.

This greater affluence was accompanied by a tendency toward greater educational attainment. Compared to the test sample as a whole, slightly more diary responders had completed high school or had attended college or technical schools:

Distribution of Respondents by Educational Level Three Markets Combined

	Diary Survey Responder	Total Test	Difference
Less than high school	29.2%	30.4%	+ 1.2
High school graduate	36.9	36.1	– .8
College/Technical school	31.6	30.6	– 1.0
Refused—no answer	2.3	2.9	+ .6
Total Sample:	100.0% (1,728)	100.0% (2,985)	

Household size seemed to be an identifiable difference. Significantly fewer diary responders were found in households consisting of only one person, age 12 + .

Little variation was seen between markets in these patterns of demographic differences. (See Appendix A, Tables 2-6.)

Respondents also were classified by race. In Philadelphia and Cincinnati, where Arbitron had applied its black survey procedures in the April/May diary survey, a significantly larger proportion of diary responders were found to be blacks than was the case in the total test sample, an indication of the efficacy of those procedures. However, in Omaha-Council Bluffs, where Arbitron does not use special procedures to encourage survey participation by blacks, proportionately fewer blacks were found among diary responders than among the test sample as a whole. (See Appendix A, Table 6.) There was little incidence of Hispanic population in any of the markets.

Distribution of Respondents by Household Size Three Markets Combined

	Diary Survey Responder	Total Test	Difference
One-person households	19.0%	21.8%	+ 2.8*
Two-person households	40.3	38.5	– 1.8
Three-person households	18.6	17.6	– 1.0
Four or more person households	22.2	22.0	– 0.2
Total Sample:	100.0% (1,728)	100.0% (2,985)	

*Significant at 95.5% confidence level.

Radio Listening in the Telephone Survey Sample and the Subsample of Diary Responders

Listening Levels

Radio listening reported by respondents in the test sample was developed into average

quarter-hour listening level information for Monday-Friday, 6AM-Midnight, and each of the major Monday-Friday day-parts. Diary responders exhibited slightly but not significantly higher listening levels compared to the total test sample. There was little variation by individual day-parts.

The following table shows these levels for the three markets, combined proportionate to population, and shows breaks for Men, Women, and Teens. Again, none of the differences are significant at the 95.5% level of confidence.

Total Listening Levels
(Average Quarter-Hour Ratings)
Three-Market Weighted Averages

	Total Persons 12 +			Men 18 +		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	16.8	16.4	– .4	16.2	16.0	– .2
M-F, 6AM-10AM	21.5	20.4	– 1.1	19.9	19.3	– .6
M-F, 10AM-3PM	15.0	14.6	– .4	13.4	13.5	+ .1
M-F, 3PM-7PM	18.6	17.8	– .8	19.6	18.5	– 1.1
M-F, 7PM-MID	13.2	13.8	+ .6	13.4	14.0	+ .6
In-Tab:	(1,728)	(2,985)		(560)	(1,013)	

	Women 18 +			Teens 12-17		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	18.4	17.4	– 1.0	13.6	14.5	+ .9
M-F, 6AM-10AM	25.8	23.9	– 1.9	13.0	12.6	– .4
M-F, 10AM-3PM	19.3	17.9	– 1.4	5.8	7.2	+ 1.4
M-F, 3PM-7PM	18.7	17.4	– 1.3	17.4	18.4	+ 1.0
M-F, 7PM-MID	11.4	11.7	+ .3	18.9	20.2	+ 1.3
In-Tab:	(936)	(1,580)		(232)	(392)	

As you will note in the above table, Teens reversed the pattern, with diary survey responders exhibiting a slight tendency to listen less than the total test sample. This same

more responders listened away from home M-F, 7PM-Midnight (35.7%, compared to 33.5% of the total test sample).

No notable differences were observed between markets regarding reach, time spent listening, number of stations tuned, or percent listening away from home.

(Further detail will be found in Appendix A, Tables 9 and 10. For these subsidiary measurements, tables are detailed only for adult Men, adult Women, and Teens, by market, for reach, time spent listening, and number of stations tuned, and for Total Persons 12+, three markets combined, for percent listening away from home.)

Summary of Findings

Findings in the Radio Non-Response Study appeared to produce three principal indications:

1. Neither the telephone study, nor the April/May diary survey which had been based on the same sample, were successful in reaching more than about half of the original sample. However, each methodology was successful in reaching sizable numbers of people not reached by the other procedure.
2. Audience estimates for diary survey responders did differ somewhat from those of the total test sample, which included non-responders. Diary responders were seen to be slightly heavier users of radio — listening levels were a little higher, more of them listened each day, and those who listened spent more time with the medium. Also responders had a slight tendency, relative to the total telephone sample, to prefer "white collar" oriented station formats.
3. Clues to format preference tendencies could be found in the demographic characteristics of diary responders. Compared to the total test sample, they tended to cluster toward the middle age ranges, were more affluent, and were better educated.

Perhaps the biggest surprise from the study was not that the inclusion of non-responders resulted in different audience estimates. We had assumed that might be the case. A more significant finding was the indication of how little difference their addition made.

Chapter VI

Application of What We Have Learned

Application of What We Have Learned

Findings of the Radio Non-Response Study confirmed what we had suspected — that audience estimates produced from the listening records of diary survey responders differed slightly from those produced when we included the records of non-responders. As a result of the study, we are better able to identify the members of audience segments who contribute to this non-response bias. At the same time, however, we are heartened by how little difference the addition of non-responders' listening records made on the audience estimates.

Additional research has been planned to continue the refinement of Arbitron's procedures and processes. As this report is being written, experimental research is underway to test special survey procedures aimed at further increasing mail-diary response among certain sex/age and ethnic groups frequently underrepresented in mail diary samples. (Meanwhile, Telephone Retrieval and Personal Placement and Retrieval continue to be used to enhance ethnic representation.)

Steps have already been taken to further improve the representativeness of Arbitron in-tab samples. Expanded Sample Frame is being implemented in an increasing number of radio markets and will be in all markets by April/May 1982. This special sampling technique has been found to generally improve the distribution of sex/age groups relative to population estimates. The Expanded Sample Frame may even act to mitigate some of the differences found relative to station format.

A judicious application of high-response survey procedures, plus continued use of weighting in the processing of all market report samples, seems to offer the best answer.

For the long term, Arbitron's goal is to maintain its basic mail-diary techniques, but modified (as test results suggest) so the diary can be used among all homes in our sampling frame regardless of demography or location. We feel this represents the future of measurement of Arbitron — a mail-diary methodology, tailored to get maximum return of quality listening records from each segment of the population.

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Appendices

Appendix A

Tables

Table 1
Sample Performance

	Three Markets Combined	Philadelphia	Cincinnati	Omaha-Council Bluffs
Residential listings in designated sample	3048	1483	893	672
Homes contacted	2810	1414	854	542
Agreeing homes	1886	960	637	289
Persons 12 + per home	2.04	1.95	2.14	2.08
Persons 12 + in agreeing homes	3842	1876	1364	602
Projected persons 12 + in usable sample	6228	2892	1911	1398
In-tab persons	2985	1449	1065	471
Diary Responders	1728	840	634	254
Non-responders	1257	609	431	217
Consent rate	61.9%	64.7%	71.3%	43.0%
Return rate	77.7%	77.2%	78.1%	78.2%
Response rate	47.9%	50.1%	55.7%	33.7%

Table 2-T

Unweighted Sample Characteristics-Sex/Age

(Three Markets Combined)

		MSI	Diary Survey Responder	Total Test	Differences: MSI vs. Diary Survey Responder	Differences: MSI vs. Total Test
Boys	12-17	7.2	5.8	6.1	– 1.4	– 1.1
Men	18-24	7.5	4.3	5.7	– 3.2	– 1.8
	25-34	9.0	7.1	7.0	– 1.9	– 2.0
	35-44	6.7	5.9	5.7	– .8	– 1.0
	45-49	3.3	2.5	2.7	– .8	– .6
	50-54	3.4	3.6	2.8	+ .2	– .6
	55-64	5.4	7.6	4.3	+ 2.2	– 1.1
	65 +	4.8	5.0	5.8	+ .2	+ 1.0
Girls	12-17	6.9	7.6	7.0	+ .7	+ .1
Women	18-24	7.9	7.5	7.5	– .4	– .4
	25-34	9.6	11.3	10.1	+ 1.7	+ .5
	35-44	7.1	8.8	8.6	+ 1.7	+ 1.5
	45-49	3.6	3.9	3.8	+ .3	+ .2
	50-54	3.7	6.1	5.2	+ 2.4	+ 1.5
	55-64	6.2	7.3	7.2	+ 1.1	+ 1.0
	65 +	7.7	9.1	10.7	+ 1.4	+ 3.0
Men	18 +	40.2	32.4	33.9	– 7.8	– 6.3
Women	18 +	45.7	54.2	52.9	+ 8.5	+ 7.2
Teens	12-17	14.1	13.4	13.1	– .7	– 1.0
(In-tab)			(1728)	(2985)		
Average Age		38.6	42.1	40.6		

Table 2-P

Unweighted Sample Characteristics-Sex/Age

(Philadelphia)

					Differences	
		MSI	**Diary Survey Responder**	**Total Test**	**MSI vs. Diary Survey Responder**	**MSI vs. Total Test**
Boys	12-17	7.1	5.6	5.8	– 1.5	– 1.3
Men	18-24	7.5	3.6	5.5	– 3.9	– 2.0
	25-34	8.8	8.0	7.1	– .8	– 1.7
	35-44	6.6	5.5	5.6	– 1.1	– 1.0
	45-49	3.5	2.4	3.0	– 1.1	– .5
	50-54	3.6	4.5	3.4	+ .9	– .2
	55-64	5.6	4.0	4.0	– 1.6	– 1.6
	65 +	4.9	6.1	6.4	+ 1.2	+ 1.5
Girls	12-17	6.7	7.0	6.5	+ .3	– .2
Women	18-24	7.6	7.6	7.2	0	– .4
	25-34	9.4	11.3	9.9	+ 1.9	+ .5
	35-44	7.1	7.4	7.8	+ .3	+ .7
	45-49	3.7	4.3	4.0	+ .6	+ .3
	50-54	3.9	6.2	5.4	+ 2.3	+ 1.5
	55-64	6.3	7.0	6.8	+ .7	+ .5
	65 +	7.7	9.5	11.7	+ 1.8	+ 4.0
Men	18 +	40.4	34.1	35.0	– 6.3	– 5.4
Women	18 +	45.8	53.3	52.7	+ 7.5	+ 6.9
Teens	12-17	13.8	12.6	12.3	– 1.2	– 1.5
(In-tab)			(840)	(1449)		
Average Age		38.9	40.8	41.4		

Table 2-C

Unweighted Sample Characteristics-Sex/Age

(Cincinnati)

					Differences	
		MSI	Diary Survey Responder	Total Test	MSI vs. Diary Survey Responder	MSI vs. Total Test
Boys	12-17	7.3	5.4	6.1	– 1.9	– 1.2
Men	18-24	7.5	4.9	5.4	– 2.6	– 2.1
	25-34	9.3	5.5	6.4	– 3.8	– 2.9
	35-44	6.5	6.0	5.9	– .5	– .6
	45-49	3.1	2.4	2.5	– .7	– .6
	50-54	3.1	3.2	2.5	+ .1	– .6
	55-64	5.3	3.9	4.6	– 1.4	– .7
	65 +	4.9	4.3	5.3	– .6	+ .4
Girls	12-17	7.1	7.6	7.2	+ .5	+ .1
Women	18-24	8.1	7.9	7.8	– .2	– .3
	25-34	9.7	10.4	9.6	+ .7	– .1
	35-44	7.0	10.4	9.4	+ 3.4	+ 2.4
	45-49	3.4	3.8	3.7	+ .4	+ .3
	50-54	3.5	6.2	5.0	+ 2.7	+ 1.5
	55-64	6.2	9.3	8.6	+ 3.1	+ 2.4
	65 +	8.0	9.0	10.0	+ 1.0	+ 2.0
Men	18 +	39.6	30.1	32.7	– 9.5	– 6.9
Women	18 +	46.0	57.0	54.0	+ 11.0	+ 8.0
Teens	12-17	14.4	12.9	13.3	– 1.5	– 1.1
(In-Tab)			(634)	(1065)		
Average Age		38.4	40.4	40.5		

Table 2-O
Unweighted Sample Characteristics-Sex/Age
(Omaha-Council Bluffs)

		MSI	Diary Survey Responder	Total Test	Differences: MSI vs. Diary Survey Responder	Differences: MSI vs. Total Test
Boys	12-17	7.6	7.9	7.2	+ .3	– .4
Men	18-24	8.0	5.1	6.6	– 2.9	– 1.4
	25-34	10.5	7.9	7.9	– 2.6	– 2.6
	35-44	7.2	7.1	5.7	– .1	– 1.5
	45-49	3.0	3.1	2.1	+ .1	– .9
	50-54	2.8	1.6	1.9	– 1.2	– .9
	55-64	4.5	4.3	4.5	– .2	0
	65 +	4.3	3.5	4.9	– .8	+ .6
Girls	12-17	7.4	9.4	8.1	+ 2.0	+ .7
Women	18-24	8.9	6.3	7.4	– 2.6	– 1.5
	25-34	10.7	13.8	12.1	+ 3.1	+ 1.4
	35-44	7.2	9.4	9.3	+ 2.2	+ 2.1
	45-49	3.0	3.1	3.2	+ .1	+ .2
	50-54	3.0	5.9	5.1	+ 2.9	+ 2.1
	55-64	5.1	3.5	5.1	– 1.6	0
	65 +	6.8	7.9	8.9	+ 1.1	+ 2.1
Men	18 +	40.2	32.7	33.5	– 7.5	– 6.7
Women	18 +	44.7	50.0	51.2	+ 5.3	+ 6.5
Teens	12-17	15.1	17.3	15.3	+ 2.2	+ .2
(In-Tab)			(254)	(471)		
Average Age		36.8	37.0	38.2		

Table 3-T
Sample Characteristics
Respondent Household Income
Number and Percent of Unweighted Sample
(Three Markets Combined)

	Diary Survey Responder	Total Test	Diff.
Less than $10,000 per year	274	508	
	15.9%	17.0%	+ 1.1
10,000 to 14,999	240	444	
	13.9	14.9	+ 1.0
15,000 to 19,999	293	482	
	17.0	16.1	− .9
20,000 or more	560	852	
	32.4	28.5	− 3.9*
Refused	220	424	
	12.7	14.2	+ 1.5
Don't Know	108	217	
	6.3	7.3	+ 1.0
No Answer	33	58	
	1.9	1.9	0
(In-Tab)	(1728)	(2985)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 3-P
Sample Characteristics
Respondent Household Income
Number and Percent of Unweighted Sample
(Philadelphia)

	Diary Survey Responder	Total Test	Diff.
Less than $10,000 per year	139	236	
	16.5%	16.3%	− .2
10,000 to 14,999	117	211	
	13.9	14.6	+ .7
15,000 to 19,999	117	211	
	13.9	14.6	+ .7
20,000 or more	254	397	
	30.2	27.4	− 2.8
Refused	134	254	
	16.0	17.5	+ 1.5
Don't Know	48	89	
	5.7	6.1	+ .4
No Answer	31	51	
	3.7	3.5	− .2
(In-Tab)	(840)	(1449)	
	100.0	100.0	

Table 3-C
Sample Characteristics
Respondent Household Income
Number and Percent of Unweighted Sample
(Cincinnati)

	Diary Survey Responder	Total Test	Diff.
Less than			
$10,000 per year	115	205	
	18.1%	19.2%	+ 1.1
10,000 to 14,999	87	151	
	13.7	14.2	+ .5
15,000 to 19,999	115	176	
	18.1	16.5	– 1.6
20,000 or more	224	334	
	35.3	31.4	– 3.9
Refused	5.6	116	
	8.8	10.9	+ 2.1
Don't Know	36	81	
	5.7	7.6	+ 1.9
No Answer	1	2	
	.2	.2	0
(In-Tab)	(634)	(1065)	
	100.0	100.0	

Table 3-O
Sample Characteristics
Respondent Household Income
Number and Percent of Unweighted Sample
(Omaha-Council Bluffs)

	Diary Survey Responder	Total Test	Diff.
Less than			
$10,000 per year	20	67	
	7.9%	14.2%	+ 6.3*
10,000 to 14,999	36	82	
	14.2	17.4	+ 3.2
15,000 to 19,999	81	95	
	24.0	20.2	– 3.8
20,000 or more	82	121	
	32.3	25.7	– 6.6*
Refused	30	54	
	11.8	11.5	– .3
Don't Know	24	47	
	9.4	10.0	+ .6
No Answer	1	5	
	.4	1.1	+ .7
(In-Tab)	(254)	(471)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 4-T
Sample Characteristics
Respondent Educational Level
Number and Percent of Unweighted Sample
(Three Markets Combined)

	Diary Survey Responder	Total Test	Diff.
Less than High School	505 29.2%	907 30.4%	+ 1.2
High School Graduate	637 36.9	1077 36.1	– .8
College/Technical School	546 31.6	914 30.6	– 1.0
Refused-No Answer	40 2.3	87 2.9	+ .6
(In-Tab)	(1728) 100.0	(2985) 100.0	

Table 4-C
Sample Characteristics
Respondent Educational Level
Number and Percent of Unweighted Sample
(Cincinnati)

	Diary Survey Responder	Total Test	Diff.
Less than High School	201 31.7%	341 32.0%	+ .3
High School Graduate	234 36.9	393 36.9	0
College/Technical School	189 29.8	308 28.9	– .9
Refused-No Answer	10 1.6	23 2.2	+ .6
(In-Tab)	(634) 100.0	(1065) 100.0	

Table 4-P
Sample Characteristics
Respondent Educational Level
Number and Percent of Unweighted Sample
(Philadelphia)

	Diary Survey Responder	Total Test	Diff.
Less than High School	243 28.9%	439 30.3%	+ 1.4
High School Graduate	303 36.1	497 34.3	– 1.8
College/Technical School	266 31.7	453 31.3	– .4
Refused-No Answer	28 3.3	60 4.1	+ .8
(In-Tab)	(840) 100.0	(1449) 100.0	

Table 4-O
Sample Characteristics
Respondent Educational Level
Number and Percent of Unweighted Sample
(Omaha-Council Bluffs)

	Diary Survey Responder	Total Test	Diff.
Less than High School	61 24.0%	127 27.0%	+ 3.0
High School Graduate	100 39.4	187 39.7	+ .3
College/Technical School	91 35.8	153 32.5	– 3.3
Refused-No Answer	2 .8	4 .8	0
(In-Tab)	(254) 100.0	(471) 100.0	

Table 5-T
Sample Characteristics
Household Size (Persons Age 12 +)
Number and Percent of Unweighted Sample
(Three Markets Combined)

	Diary Survey Responder	Total Test	Diff.
One Person	328	650	
	19.0%	21.8%	+ 2.8*
Two Persons	696	1148	
	40.3	38.5	- 1.8
Three Persons	321	530	
	18.6	17.6	- 1.0
Four or More Persons	383	657	
	22.2	22.0	- .2
(In-Tab)	(1728)	(2985)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 5-C
Sample Characteristics
Household Size (Persons Age 12 +)
Number and Percent of Unweighted Sample
(Cincinnati)

	Diary Survey Responder	Total Test	Diff.
One Person	110	193	
	17.4%	18.1%	+ .7
Two Persons	262	414	
	41.3	38.9	- 2.4
Three Persons	129	216	
	20.3	20.3	0
Four or More Persons	133	242	
	21.0	22.7	+ 1.7
(In-Tab)	(634)	(1065)	
	100.0	100.0	

Table 5-P
Sample Characteristics
Household Size (Persons Age 12 +)
Number and Percent of Unweighted Sample
(Philadelphia)

	Diary Survey Responder	Total Test	Diff.
One Person	183	366	
	21.8%	25.3%	+ 3.5*
Two Persons	325	535	
	38.7	36.9	- 1.8
Three Persons	143	239	
	17.0	16.5	- .5
Four or More Persons	189	309	
	22.5	21.3	- 1.2
(In-Tab)	(840)	(1449)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 5-O
Sample Characteristics
Household Size (Persons Age 12 +)
Number and Percent of Unweighted Sample
(Omaha-Council Bluffs)

	Diary Survey Responder	Total Test	Diff.
One Person	35	91	
	13.3%	19.3%	+ 6.0*
Two Persons	109	199	
	42.9	42.3	- .6
Three Persons	49	75	
	19.3	15.9	- 3.4
Four or More Persons	61	106	
	24.0	22.5	- 1.5
(In-Tab)	(254)	(471)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 6-T
Sample Characteristics
Race of Respondent
Number and Percent of Unweighted Sample
(Three Markets Combined)

	Diary Survey Responder	Total Test	Diff.
Black	257	372	
	14.9%	12.5%	– 2.4*
Other	1446	2543	
	83.7	85.2	+ 1.5
Refused/No Answer	25	70	
	1.4	2.3	+ .9*
(In-Tab)	(1728)	(2985)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 6-C
Sample Characteristics
Race of Respondent
Number and Percent of Unweighted Sample
(Cincinnati)

	Diary Survey Responder	Total Test	Diff.
Black	82	98	
	12.9%	9.2%	– 3.7*
Other	543	954	
	86.0	89.6	+ 3.6*
Refused/No Answer	7	13	
	1.1	1.2	+ .1
(In-Tab)	(634)	(1065)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 6-P
Sample Characteristics
Respondent Educational Level
Number and Percent of Unweighted Sample
(Philadelphia)

	Diary Survey Responder	Total Test	Diff.
Black	166	248	
	19.8%	17.1%	– 2.7
Other	656	1147	
	78.1	79.2	+ 1.1
Refused/No Answer	18	54	
	2.1	3.7	+ 1.6*
(In-Tab)	(840)	(1449)	
	100.0	100.0	

*Significant at 95.5% confidence level.

Table 6-O
Sample Characteristics
Respondent Educational Level
Number and Percent of Unweighted Sample
(Omaha-Council Bluffs)

	Diary Survey Responder	Total Test	Diff.
Black	9	26	
	3.5%	5.5%	+ 2.0
Other	245	442	
	96.5	93.8	– 2.7
Refused/No Answer	0	3	
	0	.6	+ .6
(In-Tab)	(254)	(471)	
	100.0	100.0	

Table 7-T

Total Average Quarter-Hour Ratings
Day-Parts by Sex/Age Groups
(Three Market Weighted Averages[1])

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	16.8	16.4	– .4	16.2	16.0	– .2	18.4	17.4	– 1.0	13.6	14.5	+ .9
M-F, 6AM-10AM	21.5	20.4	– 1.1	19.9	19.3	– .6	25.8	23.9	– 1.9	13.0	12.6	– .4
M-F, 10AM-3PM	15.0	14.6	– .4	13.4	13.5	+ .1	19.3	17.9	– 1.4	5.8	7.2	+ 1.4
M-F, 3PM-7PM	18.6	17.8	– .8	19.6	18.5	– 1.1	18.7	17.4	– 1.3	17.4	18.4	+ 1.0
M-F, 7PM-MID	13.2	13.8	+ .6	13.4	14.0	+ .6	11.4	11.7	+ .3	18.9	20.2	+ 1.3
(In-Tab)	(1728)	(2985)		(560)	(1013)		(936)	(1580)		(232)	(392)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	14.8	18.0	+ 3.2	17.5	17.8	+ .3	17.5	15.8	– 1.7
M-F, 6AM-10AM	16.7	18.2	+ 1.5	21.1	20.4	– .7	17.4	16.3	– 1.1
M-F, 10AM-3PM	9.4	13.7	+ 4.3	13.5	15.1	+ 1.6	16.8	13.4	– 3.4
M-F, 3PM-7PM	22.7	24.7	+ 2.0	20.6	20.3	– .3	18.3	15.9	– 2.4
M-F, 7PM-MID	14.6	17.9	+ 3.3	12.0	13.1	+ 1.1	7.1	8.7	+ 1.6
(In-Tab)	(74)	(169)		(224)	(379)		(175)	(293)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	15.6	17.9	+ 2.3	18.1	16.8	– 1.3	18.6	18.1	– .5
M-F, 6AM-10AM	18.8	19.7	+ .9	26.1	23.1	– 3.0	26.5	27.0	+ .5
M-F, 10AM-3PM	14.0	16.2	+ 2.2	19.4	18.2	– 1.2	19.8	18.6	– 1.2
M-F, 3PM-7PM	17.4	18.9	+ 1.5	16.9	17.0	+ .1	19.2	18.1	– 1.1
M-F, 7PM-MID	13.1	17.4	+ 4.3	10.1	10.1	0	10.6	10.8	+ .2
(In-Tab)	(130)	(223)		(348)	(559)		(301)	(481)	

[1]Each market weighted in proportion to its metro population.

Table 7-P

Total Average Quarter-Hour Ratings
Day-Parts by Sex/Age Groups
(Philadelphia)

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	17.5	17.0	– .5	17.0	16.7	– .3	19.0	17.8	– 1.2	14.1	14.8	+ .7
M-F, 6AM-10AM	22.9	21.5	– 1.4	21.2	20.1	– 1.1	26.9	25.0	– 1.9	13.9	13.7	– .2
M-F, 10AM-3PM	14.4	13.9	– .5	12.6	12.8	+ .2	19.3	17.8	– 1.5	3.3	4.7	+ 1.4
M-F, 3PM-7PM	14.5	15.0	+ .5	14.7	15.4	+ .7	12.5	12.6	+ .1	20.9	21.8	+ .9
M-F, 7PM-MID	19.8	18.7	– 1.1	21.3	20.0	– 1.3	18.8	17.4	– 1.4	19.2	19.8	+ .6
(In-Tab)	(840)	(1449)		(286)	(507)		(448)	(764)		(106)	(178)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	15.3	18.8	+ 3.5	18.8	18.9	+ .1	18.8	16.6	– 2.2
M-F, 6AM-10AM	19.9	20.0	+ .1	22.3	20.7	– 1.6	17.6	16.1	– 1.5
M-F, 10AM-3PM	7.0	12.4	+ 5.4	13.0	14.9	+ 1.9	17.1	12.9	– 4.2
M-F, 3PM-7PM	24.3	26.9	+ 2.6	22.3	21.9	– .4	20.3	17.3	– 3.0
M-F, 7PM-MID	15.6	19.4	+ 3.8	13.3	14.5	+ 1.2	6.1	7.9	+ 1.8
(In-Tab)	(30)	(80)		(113)	(184)		(92)	(150)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	15.5	18.4	+ 2.9	19.4	16.8	– 2.6	18.1	18.5	+ .4
M-F, 6AM-10AM	20.4	21.6	+ 1.2	28.9	24.0	– 4.9	25.6	27.7	+ 2.1
M-F, 10AM-3PM	13.8	16.8	+ 3.0	19.1	16.9	– 2.2	18.9	18.6	– .3
M-F, 3PM-7PM	15.8	18.5	+ 2.7	17.6	16.8	– .8	18.6	18.6	0
M-F, 7PM-MID	13.1	17.4	+ 4.3	11.5	10.9	– .6	11.0	11.3	+ .3
(In-Tab)	(64)	(105)		(157)	(256)		(147)	(234)	

Table 7-C

Total Average Quarter-Hour Ratings Day-Parts by Sex/Age Groups (Cincinnati)

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	15.0	14.6	– .4	14.9	14.4	– .5	16.1	15.1	– 1.0	12.2	13.6	+ 1.4
M-F, 6AM-10AM	16.1	14.8	– 1.3	15.6	15.2	– .4	18.3	16.3	– 2.0	11.1	9.9	– 1.2
M-F, 10AM-3PM	16.7	16.1	– .6	16.3	15.4	– .9	19.3	17.8	– 1.5	10.2	12.7	+ 2.5
M-F, 3PM-7PM	17.2	16.3	– .9	16.7	15.3	– 1.4	18.9	17.6	– 1.3	13.3	14.7	+ 1.4
M-F, 7PM-MID	10.7	11.5	+ .8	11.4	11.9	+ .5	8.9	9.5	+ .6	14.3	16.7	+ 2.4
(In-Tab)	(634)	(1065)		(191)	(348)		(361)	(575)		(82)	(142)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	13.6	13.8	+ .2	16.2	15.4	– .8	13.0	14.1	+ 1.1
M-F, 6AM-10AM	8.7	11.3	+ 2.6	17.6	16.8	– .8	14.9	15.6	+ .7
M-F, 10AM-3PM	11.9	11.1	– .8	18.9	17.8	– 1.1	14.2	15.4	+ 1.2
M-F, 3PM-7PM	19.2	18.1	– 1.1	18.6	16.6	– 2.0	13.3	13.6	+ .3
M-F, 7PM-MID	14.8	14.9	+ .1	10.3	10.9	+ .6	9.9	12.0	+ 2.1
(In-Tab)	(31)	(58)		(73)	(131)		(60)	(103)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	13.8	14.1	+ .3	15.8	16.4	+ .6	19.0	16.3	– 2.7
M-F, 6AM-10AM	10.3	10.5	+ .2	17.7	17.6	– .1	23.4	18.9	– 4.5
M-F, 10AM-3PM	13.4	13.6	+ .2	21.9	22.1	+ .2	21.8	18.3	– 3.5
M-F, 3PM-7PM	20.6	19.0	– 1.6	15.8	17.2	+ 1.4	22.0	18.3	– 3.7
M-F, 7PM-MID	11.5	13.5	+ 2.0	8.3	9.1	+ .8	10.3	10.6	+ .3
(In-Tab)	(50)	(83)		(132)	(202)		(122)	(184)	

Table 7-O

Total Average Quarter-Hour Ratings Day-Parts by Sex/Age Groups (Omaha-Council Bluffs)

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	15.2	16.2	+ 1.0	12.5	14.4	+ 1.9	18.2	18.5	+ .3	13.0	14.2	+ 1.2
M-F, 6AM-10AM	22.8	24.5	+ 1.7	19.0	22.5	+ 3.5	30.0	30.8	+ .8	9.8	10.3	+ .5
M-F, 10AM-3PM	16.5	16.6	+ .5	12.8	14.5	+ 1.7	19.7	18.9	− .8	16.7	15.8	+ .9
M-F, 3PM-7PM	14.8	15.7	+ .9	12.3	14.2	+ 1.9	17.9	17.0	− .9	11.6	14.9	+ 3.3
M-F, 7PM-MID	8.1	9.6	+ 1.5	7.0	7.8	+ .8	7.6	9.3	+ 1.7	13.0	15.2	+ 2.2
(In-Tab)	(254)	(471)		(83)	(158)		(127)	(241)		(44)	(72)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	14.0	21.4	+ 7.4	10.5	14.5	+ 4.0	16.1	12.0	− 4.1
M-F, 6AM-10AM	8.8	19.7	+ 10.9	20.3	26.4	+ 6.1	22.7	19.7	− 3.0
M-F, 10AM-3PM	22.9	30.4	+ 7.5	5.6	10.7	+ 5.1	20.4	13.3	− 7.1
M-F, 3PM-7PM	18.3	22.1	+ 3.8	12.4	16.7	+ 4.3	11.0	8.1	− 2.9
M-F, 7PM-MID	5.7	13.3	+ 7.6	6.2	7.3	+ 1.1	10.7	7.8	− 2.9
(In-Tab)	(13)	(31)		(38)	(64)		(23)	(40)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
M-F, 6AM-MID	19.9	22.7	+ 2.8	13.7	17.2	+ 3.5	22.5	18.8	− 3.7
M-F, 6AM-10AM	25.8	26.4	+ .6	23.6	28.3	+ 4.7	45.2	41.9	− 3.3
M-F, 10AM-3PM	16.3	17.8	+ 1.5	15.7	19.3	+ 3.8	24.1	18.8	− 5.3
M-F, 3PM-7PM	22.3	21.4	− .9	14.3	18.2	+ 3.9	17.2	12.6	− 4.6
M-F, 7PM-MID	17.0	25.7	+ 8.7	3.6	5.6	+ 2.0	7.0	5.4	− 1.6
(In-Tab)	(16)	(35)		(59)	(101)		(32)	(63)	

Table 8-T

Average Quarter-Hour Shares for Program Formats
Monday-Friday, 6AM-Midnight
(Three Market Weighted Averages[1])

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	22.8	21.4	– 1.4	27.4	25.3	– 2.1	25.1	23.3	– 1.8	8.8	8.3	– .5
Contemporary	24.8	27.8	+ 3.0	22.5	24.8	+ 2.3	17.5	21.0	+ 3.5	63.8	62.8	– 1.0
Beautiful Music	14.3	12.4	– 1.9	13.2	11.6	– 1.6	17.4	15.1	– 2.3	4.0	3.2	– .8
Country	3.8	3.8	0	3.7	3.9	+ .2	4.4	5.9	+ 1.5	9.9	7.1	– 2.8
Black	9.2	11.3	+ 2.1	8.1	9.6	+ 1.5	9.3	11.1	+ 1.8	20.4	22.1	+ 1.7
News/Talk	17.2	15.6	– 1.6	19.0	17.4	– 1.6	19.0	17.2	– 1.8	2.6	2.7	+ .1
Specialty Formats	6.1	5.6	– .5	8.1	8.0	– .1	6.0	5.0	– 1.0	.6	.7	+ .1
(In-Tab)	(1728)	(2985)		(560)	(1013)		(936)	(1580)		(232)	(392)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	7.0	12.3	+ 5.3	27.1	27.6	+ .5	29.3	28.6	– .7
Contemporary	61.0	55.6	– 5.4	25.4	23.8	– 1.6	4.1	6.4	+ 2.3
Beautiful Music	0	0	0	9.8	8.1	– 1.7	22.9	23.1	+ .2
Country	1.4	.7	– .7	2.9	3.4	+ .5	5.1	6.9	+ 1.8
Black	14.7	11.7	– 3.0	11.8	14.6	+ 2.8	1.1	2.0	+ .9
News/Talk	5.0	7.6	+ 2.6	13.9	12.9	– 1.0	29.0	26.6	– 2.4
Specialty Formats	10.6	9.2	– 1.4	8.4	9.1	+ .7	7.8	5.8	– 2.0
(In-Tab)	(74)	(169)		(224)	(379)		(175)	(293)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	15.2	14.7	– .5	28.1	18.9	– 9.2	27.6	26.1	– 1.5
Contemporary	50.9	50.4	– .5	20.5	25.8	+ 5.3	4.1	6.3	+ 2.2
Beautiful Music	7.9	4.9	– 3.0	18.8	15.8	– 3.0	25.3	24.3	– 1.0
Country	2.3	2.1	– .2	3.4	3.4	0	6.7	8.7	+ 2.0
Black	19.8	22.8	+ 3.0	10.7	13.7	+ 3.0	5.7	5.4	– .3
News/Talk	1.2	2.9	+ 1.7	9.9	8.1	– 1.7	19.6	19.8	+ .2
Specialty Formats	2.0	1.9	– .1	7.3	5.1	– 2.2	8.8	7.2	– 1.6
(In-Tab)	(130)	(223)		(348)	(559)		(301)	(481)	

[1]Each market weighted in proportion to its metro population.

Table 8-T (Continued)

Average Quarter-Hour Shares for Program Formats
Three Market Weighted Averages[1]

Monday-Friday, 6AM-10AM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	26.3	25.4	– .9	25.7	25.2	– .5	28.8	30.8	+ 2.0	11.8	9.7	– 2.1
Contemporary	24.7	25.2	+ .5	25.5	24.4	– 1.1	18.4	19.6	+ 1.2	61.7	63,4	+ 1.7
Beautiful Music	8.8	8.4	– .4	8.3	8.7	+ .4	10.1	9.3	– .8	3.9	3.0	– .9
Country	2.9	3.1	+ .2	2.8	3.2	+ .4	3.3	3.4	+ .1	0	0	0
Black	8.5	9.3	+ .8	5.5	7.4	+ 1.9	8.7	9.1	+ .4	19.0	18.7	– .3
News/Talk	22.5	21.3	– 1.2	24.6	23.3	– 1.3	24.4	22.8	– 1.6	3.0	3,9	+ .9
Specialty Formats	5.7	5.3	– .4	7.4	7.2	– .2	5.4	4.9	– .5	.4	,4	0
(In-Tab)	(1728)	(2985)		(560)	(1013)		(936)	(1580)		(232)	(392)	

Monday-Friday, 10AM-3PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	24.1	22.1	– 2.0	27.3	24.1	– 3.2	23.8	22.6	– 1.2	8.7	10.5	+ 1.8
Contemporary	18.1	23.6	+ 5.5	20.7	24.3	+ 3.6	13.2	19.3	+ 6.1	52.1	52.2	+ .1
Beautiful Music	20.1	17.9	– 2.2	15.1	13.5	– 1.6	23.8	22.0	– 1.8	13.5	8.8	– 4.7
Country	5.7	5.4	– .3	6.0	5.7	– .3	6.0	5.9	– .1	1.1	.8	– .3
Black	7.9	9.8	+ 1.9	6.9	10.2	+ 3.3	7.3	8.2	+ .9	24.8	24.3	– .5
News/Talk	16.3	12.5	– 3.8	14.5	11.3	– 3.2	18.2	13.7	– 4.5	0	3.3	+ 3.3
Specialty Formats	6.5	6.8	+ .3	8.8	10.1	+ 1.3	6.0	5.6	– .4	0	0	0
(In-Tab)	(1728)	(2985)		(560)	(1013)		(936)	(1580)		(232)	(392)	

[1]Each market weighted in proportion to its metro population.

Table 8-T (Continued)

Average Quarter-Hour Shares for Program Formats
Three Market Weighted Averages[1]

Monday-Friday, 3PM-7PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	21.9	19.1	– 2.8	23.9	21.4	– 2.5	23.9	21.0	– 2.9	9.1	8.3	– .8
Contemporary	27.5	31.2	+ 3.7	26.5	28.4	+ 1.9	18.2	22.4	+ 4.2	68.3	64.6	– 3.7
Beautiful Music	16.2	16.2	0	15.9	14.7	– 1.2	19.3	18.1	– 1.2	5.4	4.9	– .5
Country	3.8	3.2	– .6	4.0	4.3	+ .3	4.4	4.5	+ .1	.7	.4	– .3
Black	10.3	10.5	+ .2	8.3	9.7	+ 1.4	10.5	12.5	+ 2.0	16.4	19.9	+ 3.5
News/Talk	12.4	10.9	– 1.5	14.0	12.2	– 1.8	14.8	13.2	– 1.6	0	.7	+ .7
Specialty Formats	6.6	5.9	– .7	8.0	7.9	– .1	7.3	5.7	– 1.6	0	1.2	+ 1.2
(In-Tab)	(1728)	(2985)		(560)	(1013)		(936)	(1580)		(232)	(392)	

Monday-Friday, 7PM-Midnight

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	17.8	17.9	+ .1	20.7	23.0	+ 2.3	22.4	20.0	– 2.4	4.2	5.3	+ 1.1
Contemporary	29.7	32.2	+ 2.5	18.9	22.3	+ 3.4	22.3	24.7	+ 2.4	63.5	63.4	– .1
Beautiful Music	13.1	9.1	– 4.0	14.6	10.6	– 4.0	17.5	11.7	– 5.8	1.7	1.4	– .3
Country	2.4	3.0	+ .6	1.9	2.6	+ .7	3.3	4.6	+ 1.3	1.9	1.4	– .5
Black	14.6	16.3	+ 1.7	11.9	11.1	– .8	12.3	16.7	+ 4.4	24.1	25.3	+ 1.2
News/Talk	16.3	16.3	0	22.6	22.0	– .6	16.4	17.8	+ 1.4	4.6	3.2	– 1.4
Specialty Formats	5.3	4.3	– 1.0	8.3	7.4	– .9	5.0	3.6	– 1.4	0	0	0
(In-Tab)	(1728)	(2985)		(560)	(1013)		(936)	(1580)		(232)	(392)	

[1]Each market weighted in proportion to its metro population.

Table 8-P

Average Quarter-Hour Shares for Program Formats
Philadelphia
Monday-Friday, 6AM-Midnight

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	13.4	13.1	– .3	12.8	12.5	– .3	16.1	15.5	– .6	3.7	5.5	+ 1.8
Contemporary	24.7	26.7	+ 2.0	23.6	26.1	+ 2.5	16.6	18.5	+ 1.9	64.6	61.3	– 3.3
Beautiful Music	16.3	13.8	– 2.5	15.7	13.5	– 2.2	19.1	16.6	– 2.5	5.4	3.2	– 2.2
Country	1.9	2.6	+ .7	1.9	2.5	+ .6	2.2	3.4	+ 1.2	0	0	0
Black	12.5	15.2	+ 2.7	10.1	12.5	+ 2.4	12.1	14.7	+ 2.6	22.6	25.7	+ 3.1
News/Talk	24.0	21.7	– 2.3	26.6	24.3	– 2.3	26.6	23.9	– 2.7	3.6	3.7	+ .1
Specialty Formats	6.0	5.3	– .7	8.4	7.6	– .8	5.6	4.7	– .9	0	.2	+ .2
(In-Tab)	(840)	(1449)		(286)	(507)		(448)	(764)		(106)	(178)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	2.5	7.6	+ 5.1	17.3	14.6	– 2.7	13.0	14.1	+ 1.1
Contemporary	64.0	58.4	– 5.6	27.7	24.9	– 2.8	3.6	6.9	+ 3.3
Beautiful Music	0	0	0	9.1	7.9	– 1.2	27.9	27.2	– .7
Country	0	0	0	1.1	1.4	+ .3	4.8	6.7	+ 1.9
Black	16.5	14.3	– 2.2	15.7	20.1	+ 4.4	1.2	2.1	+ .9
News/Talk	7.1	10.7	+ 3.6	19.9	18.4	– 1.5	39.3	36.0	– 3.3
Specialty Formats	9.3	8.6	– .7	8.4	8.5	+ .1	9.4	6.2	– 3.2
(In-Tab)	(30)	(80)		(113)	(184)		(92)	(150)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	11.1	10.7	– .4	21.7	19.7	– 2.0	15.9	15.3	– .6
Contemporary	52.3	48.0	– 4.3	19.2	23.6	+ 4.4	3.5	5.1	+ 1.6
Beautiful Music	8.6	5.2	– 3.4	19.1	16.5	– 2.6	29.7	28.1	– 1.6
Country	0	.6	+ .6	1.4	1.8	+ .4	4.9	7.1	+ 2.2
Black	23.7	29.8	+ 6.1	14.9	18.9	+ 4.0	7.6	6.9	– .7
News/Talk	1.7	4.1	+ 2.4	14.0	11.4	– 2.6	26.6	26.9	+ .3
Specialty Formats	1.9	1.2	– .7	7.7	5.3	– 2.4	9.0	6.7	– 2.3
(In-Tab)	(64)	(105)		(157)	(256)		(147)	(234)	

Table 8-P (Continued)

Average Quarter-Hour Shares for Program Formats
Philadelphia

Monday-Friday, 6AM-10AM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	15.6	15.9	+ .3	13.3	13.7	+ .4	18.8	23.4	+ 4.6	4.4	4.1	– .3
Contemporary	25.9	24.8	– 1.1	28.2	25.6	– 3.2	18.5	18.3	– .2	64.4	63.4	– 1.0
Beautiful Music	9.4	8.9	– .5	9.2	9.9	+ .7	10.2	9.2	– 1.0	5.6	3.3	– 2.3
Country	1.0	1.7	+ .7	1.6	1.9	+ .3	.7	1.7	+ 1.0	0	0	0
Black	10.3	11.9	+ 1.6	6.2	9.3	+ 3.1	11.3	12.0	+ .7	21.2	22.3	+ 1.1
News/Talk	31.6	29.7	– 1.9	34.3	32.6	– 1.7	34.1	31.7	– 2.4	4.3	5.6	+ 1.3
Specialty Formats	5.4	4.9	– .5	7.2	6.7	– .5	5.1	4.5	– .6	0	0	0
(In-Tab)	(840)	(1449)		(286)	(507)		(448)	(764)		(106)	(178)	

Monday-Friday, 10AM-3PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	15.6	15.5	– .1	17.4	14.8	– 2.6	15.4	16.5	+ 1.1	1.5	7.8	+ 6.3
Contemporary	16.6	21.2	+ 4.6	21.9	25.1	+ 3.2	12.1	17.3	+ 5.2	48.4	45.0	– 3.4
Beautiful Music	23.8	21.0	– 2.8	18.5	15.7	– 2.8	26.9	25.4	– 1.5	19.2	11.4	– 7.8
Country	3.7	4.0	+ .3	4.3	4.6	+ .3	3.5	3.9	+ .4	0	0	0
Black	9.7	12.4	+ 2.7	7.8	12.9	+ 5.1	9.6	10.4	+ .8	31.0	31.2	+ .2
News/Talk	22.7	17.4	– 5.3	20.0	15.7	– 4.3	25.3	19.0	– 6.3	0	4.7	+ 4.7
Specialty Formats	6.2	6.7	+ .5	9.1	10.1	+ 1.0	5.0	5.2	+ .2	0	0	0
(In-Tab)	(840)	(1449)		(286)	(507)		(448)	(764)		(106)	(178)	

Table 8-P (Continued)

Average Quarter-Hour Shares for Program Formats
Philadelphia

Monday-Friday, 3PM-7PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	14.3	12.1	– 2.2	14.3	11.0	– 3.3	17.2	15.4	– 1.8	5.0	5.5	+ .5
Contemporary	27.8	30.9	+ 3.1	25.5	30.6	+ 5.1	16.5	18.9	+ 2.4	71.8	67.0	– 4.8
Beautiful Music	17.9	15.9	– 2.0	18.9	16.9	– 2.0	20.2	19.0	– 1.2	7.2	4.2	– 3.0
Country	1.5	1.5	0	1.1	2.1	+ 1.0	2.4	3.4	+ 1.0	0	0	0
Black	12.7	16.0	+ 3.3	10.8	13.2	+ 2.4	13.5	16.7	+ 3.2	16.0	21.6	+ 5.6
News/Talk	17.4	15.3	– 2.1	19.6	17.1	– 2.5	20.7	18.4	– 2.3	0	.8	+ .8
Specialty Formats	6.7	5.6	– 1.1	8.2	7.5	– .7	7.5	5.5	– 2.0	0	.8	+ .8
(In-Tab)	(840)	(1449)		(286)	(507)		(448)	(764)		(106)	(178)	

Monday-Friday, 7PM-Midnight

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	7.5	8.6	+ 1.1	6.4	10.3	+ 3.9	11.1	8.5	– 2.6	2.7	5.2	+ 2.5
Contemporary	27.7	29.5	+ 1.8	17.6	23.0	+ 5.4	20.2	20.5	+ .3	62.0	59.7	– 2.3
Beautiful Music	15.6	10.8	– 4.8	16.8	12.2	– 4.6	21.2	14.1	– 7.1	1.9	1.1	– .8
Country	1.5	2.6	+ 1.1	1.1	1.6	+ .5	2.7	5.1	+ 2.4	0	0	0
Black	17.9	20.7	+ 2.8	15.6	15.0	– .6	15.6	22.1	+ 6.5	26.8	29.4	– 2.6
News/Talk	22.9	22.7	– .2	31.6	30.4	– 1.2	22.9	24.7	+ 1.8	6.5	4.5	– 2.0
Specialty Formats	5.8	4.2	– 1.6	9.5	6.6	– 2.9	5.2	3.9	– 1.3	0	0	0
(In-Tab)	(840)	(1449)		(286)	(507)		(448)	(764)		(106)	(178)	

Table 8-C

Average Quarter-Hour Shares for Program Formats
Cincinnati
Monday-Friday, 6AM-Midnight

	Persons 12+			Men 18+			Women 18+			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	49.6	48.1	– 1.5	55.9	60.0	+ 4.1	51.5	48.9	– 2.6	23.9	17.4	– 6.5
Contemporary	18.4	24.0	+ 5.6	15.8	15.8	0	10.9	17.3	+ 6.4	54.4	64.7	+ 10.3
Beautiful Music	10.7	9.9	– .8	8.1	7.7	– .4	15.5	13.3	– 2.2	0	4.3	+ 4.3
Country	10.7	7.9	– 2.8	10.1	7.4	– 2.7	12.7	9.7	– 3.0	4.9	3.0	– 1.9
Black	5.0	3.3	– 1.7	3.8	2.4	– 1.4	2.9	2.0	– .9	16.6	10.3	– 6.3
News/Talk	.2	.2	0	.2	.1	– .1	.2	.4	+ .2	0	0	0
Specialty Formats	5.1	4.5	– .6	5.5	5.7	+ .2	6.0	4.8	– 1.2	0	.2	+ .2
(In-Tab)	(634)	(1065)		(191)	(348)		(361)	(575)		(82)	(142)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	24.0	32.7	+ 8.7	52.7	58.0	+ 5.3	76.6	69.9	– 6.7
Contemporary	58.5	44.9	– 13.6	12.0	14.4	+ 2.4	1.3	2.7	+ 1.4
Beautiful Music	0	0	0	12.2	7.4	– 4.8	10.9	14.9	+ 4.0
Country	6.7	3.6	– 3.1	8.0	7.2	– .8	6.5	6.0	– .5
Black	10.8	5.8	– 5.0	3.9	2.2	– 1.7	1.1	2.4	+ 1.3
News/Talk	0	0	0	0	0	0	0	0	0
Specialty Formats	0	0	0	10.1	9.8	– .3	3.3	4.6	+ 1.3
(In-Tab)	(31)	(58)		(73)	(131)		(60)	(103)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	31.1	31.4	+ .3	50.2	46.9	– 3.3	59.0	57.5	– 1.5
Contemporary	32.8	41.8	+ 9.0	13.7	19.6	+ 5.9	1.7	6.0	+ 4.3
Beautiful Music	9.3	5.6	– 3.7	19.5	15.2	– 4.3	13.6	14.7	+ 1.1
Country	11.1	8.1	– 3.0	9.6	8.6	– 1.0	14.1	10.7	– 3.4
Black	14.7	8.9	– 5.8	.7	.8	+ .1	.6	.4	– .2
News/Talk	0	0	0	0	0	0	0	0	0
Specialty Formats	.7	4.1	+ 3.4	6.2	4.1	– 2.1	10.7	8.1	– 2.6
(In-Tab)	(50)	(83)		(132)	(202)		(122)	(184)	

Table 8-C (Continued)

Average Quarter-Hour Shares for Program Formats
Cincinnati

Monday-Friday, 6AM-10AM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	54.1	53.1	– 1.0	55.1	58.4	+ 3.3	56.3	53.7	– 2.6	40.2	30.0	– 10.2
Contemporary	15.8	19.6	+ 3.8	16.0	16.4	+ .4	9.9	14.7	+ 4.8	43.6	55.5	+ 11.9
Beautiful Music	9.6	9.2	– .4	8.2	7.6	– .6	12.7	11.7	– 1.0	0	3.4	+ 3.4
Country	9.3	7.3	– 2.0	7.7	6.9	– .8	12.4	9.2	– 3.2	0	0	0
Black	5.2	3.4	– 1.8	5.4	3.1	– 2.3	2.7	2.0	– .7	16.2	10.3	– 5.9
News/Talk	0	.4	+ .4	0	0	0	0	.8	+ .8	0	0	0
Specialty Formats	5.5	4.8	– .7	6.4	6.1	– .3	6.0	4.6	– 1.4	0	.9	+ .9
(In-Tab)	(634)	(1065)		(191)	(348)		(361)	(575)		(82)	(142)	

Monday-Friday, 10AM-3PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	48.3	44.7	– 3.6	55.2	56.6	+ 1.4	46.0	42.6	– 3.4	33.2	22.1	– 11.1
Contemporary	16.2	22.9	+ 6.7	14.3	16.5	+ 2.2	11.3	16.8	+ 5.5	50.3	63.7	+ 13.4
Beautiful Music	12.6	10.9	– 1.7	9.0	8.7	– .3	17.5	13.9	– 3.6	0	4.1	+ 4.1
Country	13.9	10.6	– 3.3	12.2	9.0	– 3.2	16.6	13.5	– 3.1	5.2	3.0	– 2.2
Black	2.8	2.3	– .5	3.8	3.3	– .5	.6	.8	+ .2	11.3	6.9	– 4.4
News/Talk	.6	.5	– .1	.7	.4	– .3	.6	.6	0	0	0	0
Specialty Formats	5.5	5.1	– .4	4.7	5.4	+ .7	7.1	6.2	– .9	0	.2	+ .2
(In-Tab)	(634)	(1065)		(191)	(348)		(361)	(575)		(82)	(142)	

Table 8-C (Continued)

Average Quarter-Hour Shares for Program Formats
Cincinnati

Monday-Friday, 3PM-7PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	45.9	44.2	– 1.7	53.3	58.9	+ 5.6	45.8	41.5	– 4.3	23.9	19.8	– 4.1
Contemporary	18.6	24.1	+ 5.5	14.4	15.1	+ .7	13.1	20.4	+ 7.3	54.3	57.9	+ 3.6
Beautiful Music	13.2	13.8	+ .6	9.8	9.2	– .6	18.9	18.3	– .6	0	8.1	+ 8.1
Country	12.2	8.8	– 3.4	15.1	10.8	– 4.3	12.3	9.1	– 3.2	3.1	1.8	– 1.3
Black	5.3	3.4	– 1.9	2.6	1.4	– 1.2	4.3	2.7	– 1.6	18.0	11.8	– 6.2
News/Talk	0	0	0	0	0	0	0	0	0	0	0	0
Specialty Formats	3.9	3.5	– .4	3.9	4.0	+ .1	4.9	4.2	– .7	0	.2	+ .2
(In-Tab)	(634)	(1065)		(191)	(348)		(361)	(575)		(82)	(142)	

Monday-Friday, 7PM-Midnight

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	51.1	51.8	+ .7	60.7	66.7	+ 6.0	65.1	64.4	– .7	7.1	5.4	– 1.7
Contemporary	24.5	29.8	+ 5.3	19.4	15.6	– 3.8	8.0	16.5	+ 8.5	64.1	74.7	+ 10.6
Beautiful Music	5.8	5.1	– .7	4.9	4.9	0	9.9	7.2	– 2.7	0	2.2	+ 2.2
Country	5.6	3.7	– 1.9	3.7	2.0	– 1.7	5.5	4.0	– 1.5	9.2	5.9	– 3.3
Black	7.7	4.7	– 3.0	3.6	2.0	– 1.6	5.7	3.6	– 2.1	19.5	11.7	– 7.8
News/Talk	0	0	0	0	0	0	0	0	0	0	0	0
Specialty Formats	5.3	4.2	– 1.1	7.7	7.5	– .2	5.6	3.5	– 2.1	0	0	0
(In-Tab)	(634)	(1065)		(191)	(348)		(361)	(575)		(82)	(142)	

Table 8-O

Average Quarter-Hour Shares for Program Formats
Omaha-Council Bluffs

Monday-Friday, 6AM-Midnight

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	37.9	26.2	– 11.7	48.7	31.6	– 17.1	38.0	27.2	– 10.8	7.0	4.8	– 2.2
Contemporary	41.6	47.8	+ 6.2	29.2	35.6	+ 6.4	41.0	51.4	+ 10.4	79.4	71.9	– 7.5
Beautiful Music	6.0	5.9	– .1	4.4	5.9	+ 1.5	7.9	7.0	– .9	1.8	1.1	– .7
Country	2.8	4.6	+ 1.8	3.7	7.5	+ 3.8	2.9	3.4	+ .5	0	.9	+ .9
Black	2.6	4.7	+ 2.1	1.8	1.3	– .5	1.3	3.0	+ 1.7	11.0	18.9	+ 7.9
News/Talk	0	.3	+ .3	0	.4	+ .4	0	.2	+ .2	0	0	0
Specialty Formats	9.0	10.7	+ 1.7	12.2	17.5	+ 5.3	8.9	7.8	– 1.1	.8	2.4	+ 1.6
(In-Tab)	(254)	(471)		(83)	(158)		(127)	(241)		(44)	(72)	

	Men 18-24			Men 25-44			Men 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	3.7	3.7	0	43.4	58.2	+ 14.8	72.6	68.9	– 3.7
Contemporary	42.8	57.4	+ 14.6	37.4	36.6	– .8	16.3	11.3	– 5.0
Beautiful Music	0	0	0	9.4	11.1	+ 1.7	2.6	2.3	+ .3
Country	0	0	0	5.3	9.7	+ 4.4	5.1	12.0	+ 6.9
Black	8.8	4.1	– 4.7	0	.4	+ .4	0	0	0
News/Talk	0	0	0	0	.7	+ .7	0	0	0
Specialty Formats	44.7	34.8	– 9.9	4.4	12.2	+ 7.8	3.4	5.0	+ 1.6
(In-Tab)	(13)	(31)		(38)	(64)		(23)	(40)	

	Women 18-24			Women 25-44			Women 45-64		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	10.7	6.8	– 3.9	27.3	17.7	– 9.6	64.5	52.3	– 12.2
Contemporary	81.0	86.6	+ 5.6	46.5	56.9	+ 10.4	17.9	19.8	+ 1.9
Beautiful Music	0	1.1	+ 1.1	14.5	11.4	– 3.1	11.8	10.6	– 1.2
Country	0	.3	+ .3	4.4	4.5	+ .1	5.0	4.5	– .5
Black	2.3	2.3	0	.9	2.9	+ 2.0	0	3.6	+ 3.6
News/Talk	0	0	0	0	.5	+ .5	0	0	0
Specialty Formats	6.0	2.7	– 3.3	6.4	6.2	– .2	.9	9.3	+ 8.4
(In-Tab)	(16)	(35)		(59)	(101)		(32)	(63)	

Table 8-O (Continued)

Average Quarter-Hour Shares for Program Formats
Omaha-Council Bluffs

Monday-Friday, 6AM-10AM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	49.6	38.8	– 10.8	61.2	44.7	– 16.5	47.7	38.4	– 9.3	3.5	5.7	+ 2.2
Contemporary	36.4	41.9	+ 5.5	24.7	32.8	+ 8.1	38.3	43.6	+ 5.3	83.4	81.4	– 2.0
Beautiful Music	1.8	2.6	+ .8	.7	1.5	+ .8	2.6	3.7	+ 1.1	0	0	0
Country	3.1	4.6	+ 1.5	1.8	5.5	+ 3.7	4.0	4.3	+ .3	0	0	0
Black	.9	1.8	+ .9	0	1.1	+ 1.1	.7	1.3	+ .6	8.4	10.0	+ 1.6
News/Talk	0	0	0	0	0	0	0	0	0	0	0	0
Specialty Formats	8.2	10.3	+ 2.1	11.6	14.4	+ 2.8	6.7	8.6	+ 1.9	4.7	2.9	– 1.8
(In-Tab)	(254)	(471)		(83)	(158)		(127)	(241)		(44)	(72)	

Monday-Friday, 10AM-3PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	38.1	23.6	– 14.5	44.9	26.2	– 18.7	41.9	26.6	– 15.3	7.8	4.8	– 3.0
Contemporary	35.2	45.3	+ 10.1	26.0	36.1	+ 10.1	27.9	42.8	+ 14.9	84.9	81.9	– 3.0
Beautiful Music	7.2	8.6	+ 1.4	.4	6.5	+ 6.1	12.9	11.9	– 1.0	0	0	0
Country	2.9	4.8	+ 1.9	6.2	7.1	+ .9	1.8	4.1	+ 2.3	0	2.1	+ 2.1
Black	5.0	6.4	+ 1.4	6.4	3.4	– 3.0	3.6	7.6	+ 4.0	7.4	11.3	+ 3.9
News/Talk	0	0	0	0	0	0	0	0	0	0	0	0
Specialty Formats	11.6	11.2	– .4	16.1	20.8	+ 4.7	12.0	7.1	– 4.9	0	0	0
(In-Tab)	(254)	(471)		(83)	(158)		(127)	(241)		(44)	(72)	

Table 8-O (Continued)

Average Quarter-Hour Shares for Program Formats
Omaha-Council Bluffs

Monday-Friday, 3PM-7PM

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	28.0	17.6	– 10.4	35.2	20.6	– 14.6	28.0	18.9	– 9.1	6.0	3.7	– 2.3
Contemporary	46.7	50.6	+ 3.9	40.4	41.4	+ 1.0	45.2	57.7	+ 12.5	73.7	61.5	– 12.2
Beautiful Music	8.9	8.5	– .4	5.1	9.4	+ 4.3	12.1	9.3	– 2.8	4.0	2.4	– 1.6
Country	2.5	4.2	+ 1.7	2.7	7.7	+ 5.0	2.8	2.8	0	0	0	0
Black	1.7	4.6	+ 2.9	0	0	0	0	.6	+ .6	16.3	25.6	+ 9.3
News/Talk	0	0	0	0	0	0	0	0	0	0	0	0
Specialty Formats	12.2	14.5	+ 2.3	16.6	20.8	+ 4.2	11.9	10.8	– 1.1	0	6.8	+ 6.8
(In-Tab)	(254)	(471)		(83)	(158)		(127)	(241)		(44)	(72)	

Monday-Friday, 7PM-Midnight

	Persons 12 +			Men 18 +			Women 18 +			Teens		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Middle-of-the-Road	25.2	15.1	– 10.1	47.4	27.6	– 19.8	15.8	9.9	– 5.9	8.8	5.4	– 3.4
Contemporary	59.1	61.4	+ 2.3	28.7	32.5	+ 3.8	75.8	81.9	+ 6.1	74.1	66.1	– 8.0
Beautiful Music	8.9	4.8	– 4.1	19.0	10.0	– 9.0	3.6	1.9	– 1.7	3.6	2.2	– 1.4
Country	2.8	4.9	+ 2.1	4.9	12.7	+ 7.8	2.5	1.3	– 1.2	0	1.3	+ 1.3
Black	3.0	7.4	+ 4.4	0	0	0	0	1.7	+ 1.7	13.5	25.0	+ 11.5
News/Talk	0	1.5	+ 1.5	0	3.0	+ 3.0	0	1.5	+ 1.5	0	0	0
Specialty Formats	1.0	4.9	+ 3.9	0	13.8	+ 13.8	2.3	1.8	– .5	0	0	0
(In-Tab)	(254)	(471)		(83)	(158)		(127)	(241)		(44)	(72)	

Table 9

Percent Listening/Time Spent Listening/Number of Stations Tuned Average Day, Monday-Friday, 6AM-Midnight

	Three Market Weighted Averages[1]			Philadelphia			Cincinnati			Omaha-Council Bluffs		
	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.	Diary Survey Rspndr.	Total Test	Diff.
Total Persons 12+												
Percent listening to radio	80.7%	76.8%	– 3.9*	83.2%	79.0%	– 4.2*	74.1%	71.4%	– 2.7	79.6%	77.4%	– 2.2
Time spent in minutes	181	177	– 4	189	183	– 6	161	156	– 5	134	154	+ 20
Avg. # stations tuned	1.3	1.2	– .1	1.3	1.2	– .1	1.2	1.1	– .1	1.3	1.3	0
Men 18+												
Percent listening to radio	83.2%	78.6%	– 4.6*	86.2%	81.0%	– 5.2*	68.7%	65.0%	– 3.7	87.2%	79.5%	– 7.7
Time spent in minutes	175	173	– 2	184	181	– 3	174	163	– 11	197	200	+ 3
Avg. # stations tuned	1.4	1.3	– .1	1.4	1.4	0	1.1	1.0	– .1	1.5	1.4	– .1
Women 18+												
Percent listening to radio	79.4%	74.3%	– 5.1*	81.5%	76.2%	– 5.3*	68.9%	69.5%	+ .6	77.9%	80.0%	+ 2.1
Time spent in minutes	198	187	– 11	205	193	– 12	132	147	+ 15	140	153	+ 13
Avg. # stations tuned	1.3	1.2	– .1	1.3	1.2	– .1	.9	.9	0	1.1	1.1	0
Teens 12-17												
Percent listening to radio	78.1%	79.6%	+ 1.5	80.8%	82.5%	+ 1.7	70.8%	68.1%	– 2.7	82.9%	79.0%	– 3.9
Time spent in minutes	147	158	+ 11	152	160	+ 8	162	157	– 5	164	175	+ 11
Avg. # stations tuned	1.1	1.1	0	1.2	1.2	0	1.1	1.0	– .1	1.4	1.3	– .1
In-tab	(1728)	(2985)		(840)	(1449)		(634)	(1065)		(254)	(471)	

[1]Each market weighted in proportion to its metro population.

*Significant at 95.5% confidence level.

Table 10
Percent of Listening Away from Home
(Three Market Weighted Averages[1])

	Persons 12 +		
	Diary Survey Responder	**Total Test**	**Diff.**
M-F, 6AM-Mid	39.9%	40.2%	+ .3
M-F, 6AM-10AM	41.7	41.2	– .5
M-F, 10AM-3PM	40.3	43.3	+ 3.0*
M-F, 3PM-7PM	41.8	41.9	+ .1
M-F, 7PM-Mid	35.7	33.5	– 2.2
In-tab	(1728)	(2985)	

[1]Each market weighted in proportion to its metro population.
*Significant at 95.5% confidence level.

APPENDIX B

Methodology

Methodology

Radio Non-Response Study

Test Markets and Sample Sizes:	Philadelphia Radio Metro	1,449
	Cincinnati Radio Metro	1,065
	Omaha-Council Bluffs Radio Metro	471
	In-tab: Total test sample	2,985

Test Dates: Sunday, June 4 - Saturday, July 1, 1978.

Sample: The sampling frame consisted of all usable residential telephone listings in Arbitron's April/May 1978 designated samples for the test Metro markets.

Interviewing Procedure: Sample households were first attempted by an alert call the day prior to the day for which we attempted to measure their listening. At approximately the same time the following day, an interview call was made to alerted homes to gather recall of listening during the 24-hour period that had elapsed. Attempts were made to establish a time for a call-back interview with any desired individuals who were not at home at the time of the interview call. Since most sample households had been contacted in the April/May 1978 diary survey, interviewers attributed the telephone survey to a dummy company name instead of Arbitron to avoid possible bias.

Alert Call — This initial contact, usually occurring between 6PM and 9PM, sought the cooperation of all household members in participating in the survey. The interviewer spoke to each available individual, age 12+, and asked him or her to make written or mental note of any radio listening between 6PM that night and 6PM the following night. Respondents were asked to name a time that would be convenient for them to be called the next night for a listening report. Persons not expecting to be home at the time of the planned interview call the next night were asked to name a time when it

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would be convenient for them to be interviewed. A household member, usually the female head, was asked to relay the alert to any individuals not at home at the time of the alert call. Interviewers attempted to determine whether these missing individuals were expected to be home for the interview call, and if not, a day or time when it would be possible to contact them for an interview.

At least seven attempts were made to contact each household for the alert call. These attempts were made over five successive days, with a requirement that at least one attempt be made each night between 6PM and 9PM and that one attempt be made the second and fourth days of the five-day period between 12 Noon and 6PM.

Samples were divided into groups prior to alert calling so that approximately the same number of listening interviews would result for each day of the week.

Interviewing Calls — These contacts recorded recall of listening for the period of 6AM-12 Midnight. Listening was recorded by time period so that average quarter-hour ratings by day-parts could be developed.

The standard procedure was to call alerted households between 6PM and 9PM the night following the night on which the alert contact had been made. Interviews were attempted with each household member, age 12 + . Regardless of whether they were contacted on the first listening interview attempt or later on a call-back, all respondents were asked to recall their listening for a period from 6PM the day of the alert to 6PM of the next day.

Attempts were made on three different days to contact each individual for a recall interview. No hearsay or relayed listening reports from other household members were accepted.

As the analysis was based on listening 6AM-12 Midnight, Monday-Friday, any listening data gathered for Sunday (6PM-12 Midnight) and Saturday (6AM-6PM) or for any day between Midnight and 6AM was discarded.

Additional methodological information is found in text section IV, "The Non-Response Study—its Design."

Radio Station Format Classifications

Definitions:

MOR (Middle-of-the-Road): Stations playing current and past popular music, usually with relatively heavy emphasis on news and service features, and usually having teen audience shares as low or lower than their adult shares.

Contemporary: Album Oriented Rock (AOR) and progressive stations, plus stations playing current and past popular music that show a relatively large proportion of their audiences in the teen age group.

Beautiful Music: Stations programming soft, mostly instrumental music, with a minimum of talk.

Black: Stations targeted primarily at the black audience segment, including "disco" formats.

Country: Stations playing mostly Country music.

News/Talk: Stations whose formats are all or nearly all news and talk features.

Specialty Formats: All other stations, including classical music, religious formats, and foreign language stations.

FORMAT LISTING CLASSIFICATIONS

	Philadelphia		Cincinnati		Omaha-Council Bluffs	
Middle-of-the-Road	WBAL	WPAZ	WCKY	WLW	KCMO	KRFS
	WCOJ	WPEN	WCYN	WLWS	KFAB	WHO
	WDEL	WUSL	WHAS	WLYK	KJAN	
	WIP		WHIO	WNKR	KJAN-FM	
	WMGK		WKFI	WPFB	KMA	
	WOND		WKRC	WSAI-FM	KRCB	
Contemporary	WABC	WMMR	WEBM	WLAP	KCIM-FM	KQKQ
	WBCB	WNBC	WING	WMOH	KGOR	WLS
	WBZ	WPST	WKQQ	WSAI	KLMS	WOW
	WFIL	WSAN	WKRQ	WVUD	KOIL	
	WIFI	WTTM				
	WIOQ	WYSP				
	WLEV	WZZD				
	WMGM					
Beautiful Music	WDVR	WQQQ	WHIO-FM	WWEZ	KEFM	
	WJBR	WWSH	WLQA		KEZO	
	WNAR		WLVV		KFOR-FM	
Black	WCAU-FM	WHAT	WCIN		KOWH-FM	
	WDAS	WKDU	WDAO			
	WDAS-FM					
Country	WHOL	WRCP	WCLW	WUBE	KOOO	KWMT
	WIOV	WSNI	WONE	WUBE-FM	KOOO-FM	KYNN
	WJJZ		WSCH	WURD	KOTD	
News/Talk	KYW	WOR	WAVI		WBBM	
	WCAU	WWDB				
	WILM					
Specialty Formats	WBYO	WKDN	WAIF	WNOP	KGBI	
	WCAM	WRTI	WAKW	WPBF	KIOS	
	WDVL	WTEL	WGUC	WZIP	KOWH	
	WFLN	WTMR	WHKK		KVNO	
	WFLN-FM	WUHY	WKCJ			
	WIBF	WVCH	WMUB			

APPENDIX C

Glossary

defined by the U.S. government's Office of Management and Budget (OMB), subject to exceptions dictated by historical industry usage and other marketing considerations.

MSI — The estimates, updated each year, of the **populations** of various sex/age and ethnic groups in specific geographic areas supplied to Arbitron by Market Statistics, Inc.

Non-response bias — The condition in which a returned sample does not match the population on one or more characteristics as a result of not obtaining records from every respondent in the sample.

Population — The actual group of persons, households, etc. from which a sample is drawn. See **universe.**

Personal Placement and Retrieval (PPR) — A special survey technique used by Arbitron in heavily Hispanic areas to assure an adequate response. In brief, the procedure provides for personal delivery and pick-up of the diaries.

Rating — The listening audience expressed as a percentage of the universe.

Response bias — The condition in which a returned sample does not match the population on one or more characteristics because the survey instrument does not properly measure those characteristics.

Response rate — The percent of all persons in the original sample who returned a usable diary.

Return rate — The percent of all persons consenting to participate in the survey who actually returned a usable diary.

Sample frame — A list of persons, households, etc. from which a sample is drawn.

Sample frame bias — a distortion in a sample frame causing it to be unrepresentative of the population.

Sampling error — A numerical range around a survey estimate within which one can be confident (at a specified percentage level) that the true population value would fall if a complete census of the survey area had been taken.

Share — The percent of the total average quarter-hour audience listening to a specific station.

Statistical significance — A term meaning that a difference between measurements taken from two samples is not likely to have occurred as a result of sampling error. The likelihood that the difference did not result from sampling error (the "confidence level") is always specified — in this study, 95.5%.

Telephone Retrieval (TR) — A special survey technique used by Arbitron in heavily black areas to assure an adequate response. In brief, the procedure consists of daily telephone calls placed by an interviewer to the respondent to obtain each day's radio listening activity. The interviewer completes and returns the diary.

Total Survey Area (TSA) — A geographic area that includes the Metro Survey Area plus certain counties outside the MSA.

Total Test — All persons from whom usable listening records were captured in the Non-Response telephone study.

Universe — A theoretically specified group of persons, households, etc.

Weighting — The statistical adjustment of sample-obtained data, performed so that an unrepresentative returned sample is made to more nearly represent the population from which it was drawn.

2M 8/79

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