

## Appendix

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### About AUDIENCE 98

AUDIENCE 98 is the most comprehensive research project undertaken to date for public radio. It's based on a powerful research method called a **recontact survey**, which is the most efficient way to determine linkages between listening to public radio and the attitudes that motivate listeners to support public radio.

The Public Radio Recontact Survey measured over 200 characteristics of public radio listeners. We learned, among many other things, which programming they listen to; how much they value national and local programming respectively; who gives and who doesn't; how much they give; their use of the Internet; their perception of on-air fundraising and underwriting credits; and the qualities that define their lifestyles and values.

David Giovannoni of Audience Research Analysis in Derwood, Maryland led AUDIENCE 98's Core Team. Team members included editor and writer Leslie Peters and statistical analyst Jay Youngclaus.

From September 1997 through February 1999, AUDIENCE 98's Core Team analyzed the Recontact Survey responses and issued reports via the Internet at the ARAnet website (ARAnet.com). Some edited versions of reports also appeared in the public broadcasting newspaper Current.

**All the information published by AUDIENCE 98, including statistical analyses and other materials that do not appear in this book, continue to be freely available at ARAnet.** The site also offers an extensive Research Library of past public radio research, including many seminal studies and reports.

Major funding for the project was supplied by the Corporation for Public Broadcasting, with additional support from Audience Research Analysis and 91 public radio stations.

### About the Public Radio Recontact Survey

In Fall 1996, across America, approximately 33,000 public radio listeners kept Arbitron diaries. In early Spring 1997 Arbitron randomly selected 15,000 of these listeners and sent them a questionnaire designed to ascertain their pledging behaviors, personal beliefs and attitudes toward public radio. This is a key element in what is known as the Public Radio Recontact Survey.

The questionnaire was designed by David Giovannoni of Audience Research Analysis (ARA); Tom Thomas and Terry Clifford of Thomas & Clifford; and George Bailey of Walrus Research. Giovannoni, Thomas and Clifford had collaborated on public radio's first recontact survey, AUDIENCE 88, 10 years earlier.

A recontact survey is not only a powerful research method, it's also time and cost efficient. Here's why: Arbitron **already** takes a random sample of radio listeners in America and that includes a random sample of people who tune to public radio. It already measures seven days of listening in 15-minute increments. In short, Arbitron collects most of the data needed. Although Arbitron is not in the recontact survey business, it did this project for public radio.

The Recontact Survey draws its information from various sources: the questionnaire mailed to listeners; Arbitron diaries (which offer information for each diary keeper about his/her listening to public and commercial radio); AudiGraphics and National AudiGraphics; and the system that analyzes and categorizes listeners' values and lifestyles, VALS.

Nearly 8,000 listeners returned usable questionnaires. These 8,000 respondents comprise "the national sample."

The national sample was commissioned by the Corporation for Public Broadcasting (CPB) as a resource for all of public radio. It represents the national norms and the big picture for public radio.

The national sample data is available on ARAnet. Instructions on how to use it can be found in an area called "The Database Toolkit."

Access to the data requires a password from CPB.

In addition to the national sample, 91 public radio stations paid Arbitron to recontact all the diary keepers who listened to them. They are called the "Piggy-Back" stations because their surveys piggy-backed on the national Recontact Survey.

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# How AUDIENCE 98 Links Listener Income to Listening

Listener income is a ready number at most public stations. But knowledge of listener income is most useful when tied to the programming inspiring it. This is a much more demanding task.

On first thought it seems reasonable to link an on-air drive's pledges to the programming on the air at that time. However, not only is pledge tracking insufficient for this purpose, it also provides misleading and just plain wrong information.

There are three problems with the pledge-tracking method. **Although many public broadcasters understand these drawbacks, they continue to track pledges, because they assume it is still a valid form of feedback. Unfortunately, it is not.**

The first problem is that listeners can pledge only when at a phone, and only then when the situation allows – typically when they are at home and not otherwise occupied. For this reason true listener income from *Morning Edition* and *All Things Considered*, which play in morning and afternoon “drive-times” is probably under-represented, while income from *A Prairie Home Companion*, *Car Talk* and other evening and weekend programming is probably over-represented.

Many professionals try to work around this problem by administering a simple survey to givers. The survey asks givers to report their favorite programming – presumably the programming that causes them to support the station. but such self-evaluated preference reports inaccurately represent listeners' motives.

AUDIENCE 88, like the “Cheap 90” study before it, showed clearly that **use of the station's total service is the best single predictor of support.** The more frequently people tune in, and the more types of programming they listen to, the more likely they are to support public radio.

Clearly, listener support must be apportioned across all programming used – not just a listener's reported favorites.

In addition, as the most advanced stations in the system generate more income through off-air renewals, the links between specific programming and listener support becomes even less apparent.

The key point is this: **Listeners' willingness to give is tied directly to the personal importance of the programming in their lives.** The on-air appeal, the direct mail solicitation, and other fundraising methods are merely the catalysts – not the cause – of the giving.

Done well, they can accelerate the act of giving but they cannot make givers out of listeners who do not already experience deep satisfaction with a station's programming service.

## Technical Details

In order to link listener income to specific services on your station, you must

- Recontact your station's Arbitron diary keepers,
- Identify givers and their giving levels, and
- Merge the required programming, listening and listener support data into the variables called for by the programming economics system.

You do this by **apportioning each giver's financial contribution across programming, based on the amount of time each giver listens to each service.**

That is exactly what AUDIENCE 98 accomplishes nationally and the Local Programming Economics Reports achieve specifically. The Public Radio Recontact Survey updates systemwide data from AUDIENCE 88 and provides, for the first time, local information to a limited list of “Piggy-Back” stations.

At the micro level of the individual listener, this method of apportioning listener income across the programming that generates it assumes a generally linear relationship between listener income and programming use, and between listener income and personal importance.

A decade after we first learned to make this connection its constancy is confirmed by AUDIENCE 98.

– John Sutton  
–Leslie Peters

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# How AUDIENCE 98 Links Underwriting Income to Listening

**Underwriting income** is income (cash or trade) generated by underwriting and paid announcements sold by stations. It is the financial support for programming paid in return for on-air mention of that support. It is **listener-sensitive**, in that the organization providing the cash or trade finds value in reaching listeners, and that **value is influenced by the number and qualities of the people in the audience.**

AUDIENCE 98 asked 112 stations with sufficient Arbitron sample to provide program-specific underwriting income for its Program Economics analyses. The survey was designed by John Sutton of John Sutton Associates and conducted by Debora Giovannoni of Data Integrity in the summer of 1997.

Fifty-six stations participated, two of which do not solicit underwriting for their programming. Although they are not a true “national sample,” AUDIENCE 98 presents and uses them as the current best estimate of program-specific underwriting information for public radio.

The study collected underwriting information for all programs that generated at least one percent of all listening to the station in the Fall 1996 Arbitron survey.

**Time period.** Stations were asked to report underwriting income from one of three periods:

- September 19, 1996 through December 11, 1996, or
- September 1, 1996 through November 30, 1996, or
- October 1, 1996 through December 31, 1996.

Period One coincides with the Fall Arbitron survey. If stations could not provide exact infor-

mation from Period One, they were asked to provide it from Period Two (second preference) or Period Three (third preference).

Period Three was the third preference because it runs through the Christmas holiday and there is a presumed change in underwriting patterns and revenues at this time. Due to software and record keeping limitations, some stations were only able to provide estimates for one month in the survey period.

Weekly underwriting income averages are calculated from these numbers to correspond with Arbitron’s weekly audience estimates. AUDIENCE 98 typically shows these numbers as annual totals (in dollars) or as the underwriting return per listener-hour (in cents).

**Limitations.** While this study measures how much underwriting income is generated, it does not ascertain how that return is achieved. It does not look at units available, sold, or aired as bonuses. It does not track sales strategy, pricing, or effort. Nor does it control for season (many stations commented that Fall is their best quarter for underwriting billings).

While not a limitation per se, we note that the study looks at the total audience generated by each program. In some cases repeats or rollovers generate audience but return little in additional underwriting. This correctly lowers the return per listener-hour, but it may seem to under-represent the value of the first airing.

We also note that while AUDIENCE 98 links underwriting income with reported listening, it is likely that Arbitron estimates from Spring 1996 or earlier were used to sell the Fall 1996 contracts.

– John Sutton

# What We Learned by Gathering Underwriting Information from Stations

*“Programming causes audience.”*

– AUDIENCE 88

*“We don’t sell underwriting by program, so we can’t get that information.”*

– Numerous public radio station professionals

Public radio relies more heavily on underwriting income with each passing year. Programming causes the audience that underwriters “buy.” The AUDIENCE 98 Underwriting Survey is the first system-wide attempt to link underwriting to the programming that causes it.

There are two reasons why managers at stations would want to link underwriting income to specific programming. First, it allows them to track their full financial return from each programming investment. Second, it provides tools with which to compare financial returns across all programming in their schedule.

## The Underwriting Survey

AUDIENCE 98 invited 112 stations to augment their estimates of listener support with program-specific information about underwriting (defined here as any financial support for programming in return for on-air mention of that support). In the process of gathering this information we learned valuable lessons about record keeping and information management at stations.

Several stations generated underwriting figures by program quickly and easily. But for most it was a challenge, due primarily to

insufficient record keeping, inadequate software, or the belief that program-specific income figures are not relevant because underwriting is sold by dayparts and program packages.

From its inception, the AUDIENCE 98 Underwriting Survey was seen as a pilot project to inform subsequent endeavors. The need to set indus-

try standards for tracking underwriting support by program must clearly be addressed before this key relationship can be studied and moved forward.

However, these limitations have not kept us from forming the following impressions during our discussions with stations.

## Factors Affecting Underwriting Income

A station’s ability to generate underwriting rests on a combination of factors: audience, program format, market conditions, strategy, and effort.

**Audience** is a result of having the right program on the right station at the right time. The number of hours a program is on the air, the available audience, and the program’s power affect the size and qualities of the audience served during an individual program or daypart or package. This influences pricing and selling strategies.

**Program Format** influences the number of credit avails in each hour. Some programs offer more avails and as such offer greater potential for income.

**Market Conditions** such as exclusivity, uniqueness, competition, and sell-through rates can influence underwriters’ demand for a program. This offers the opportunity for flexibility in the rates charged by a station.

**Strategies** vary across stations and programs more than any other factor.

- Some stations offer 10-second credits in drive time while others run only thirty-second credits.
- Some offer combinations of 15-second credits and 30-second paid announcements.

- Some sell at the market cost-per-point while others sell well above or below that benchmark.
- Some place bonus spots in weaker programs; this can help close deals but it also lowers the return on the average credit.

Analyzing underwriting income by program lets a station evaluate the success of its strategies.

**Effort** also varies greatly across stations and programs.

- Some stations are aggressive in generating new business.
- Others wait for the phone to ring.
- Several stations admit selling just the “easy” dayparts and programs.
- Some have only one part-time person making sales calls while others have full-time staffs of four or five.

## Average Rates and Cost-Per-Thousand

While AUDIENCE 98 did not collect information about avails, units sold, or credit rates, discus-

sions with participating stations suggest that we need to clarify two concepts before we can make meaningful comparisons among programs and across stations. These are the “True Average Rate” and the “True Cost-Per-Thousand.”

**True Average Rate** is a station’s underwriting income divided by the total number of credits or spots broadcast. This includes bonus spots. We noticed during this process that most stations referred to their rate cards to report their average rate. Since many of these stations also made liberal use of bonus spots, the True Average Rate was significantly less than the published rate.

**The True Cost-Per-Thousand** is determined by dividing a program’s, format’s, or daypart’s True Average Rate by its average quarter-hour audience.

True Average Rates and True Cost-Per-Thousand are the foundations we need to compare the effectiveness of different programs and stations in generating underwriting income, and their potential for underwriting growth.

– John Sutton

## Appendix

# Understanding the Giving Model

AUDIENCE 98's Giving model is an statement of the interactions between givers' **motivations, mindsets, and means**. The simple statement

of the model on page 115 does not convey either its finer points or the full extent of what we learned in its creation.

<b>The Giving Model</b>					
Dependent Variable: Natural Logarithm of Annual Household Gift					
	Unstandardized Coefficients		Standardized Coefficients		
	B	S.E.	Beta	t	Sig.
(Constant)	2.861	.099		28.941	.000
Time Spent Listening	.006636	.000	.123	4.738	.000
Loyalty	.001950	.001	.088	3.427	.001
Personal Importance of Network Programming	.04081	.015	.063	2.672	.008
Personal Importance of Local Programming	.03770	.013	.065	2.810	.005
Annual HH Income	.003261	.000	.271	11.219	.000
Actualizer	.108	.034	.076	3.158	.002
Joint Licensee	.114	.032	.079	3.570	.000
Station's Average Gift	.002090	.000	.117	5.219	.000

**Reliance:** *Time Spent Listening* by the listener to the supported public radio station is in hours per week. *Loyalty* of the listener is the percentage of all his or her listening to radio that is to the supported station.

**Personal Importance:** *The Personal Importance of Local and Network Programming* are measured on a six-point scale, with 6 being "agree definitely" that the station's "network [or local] programming is an important part of my life. If it went away I would miss it."

**Listener Characteristics:** *Annual Household Income* is in thousands of dollars per year. *Actualizer* is dummy coded (0,1) to indicate whether the listener's primary or secondary VALS 2 type is Actualizer.

**Station Characteristics:** *Joint Licensee* is dummy coded (0,1) to indicate the radio station is licensed jointly with a public television station. *Station's Average Gift* is in dollars; it is the sum of all respondents' gifts to the station divided by the number of respondents giving to the station.



## Definitions

**Households.** The Public Radio Recontact Survey asks, “How much **did your household give** to [station] in the year of your most recent contribution?” (emphasis added). Because the measurement is the household’s gift, AUDIENCE 98 aggregates the responses of listeners in the same household into a single response. Therefore the giving model is based upon the **household** rather than the individual, unlike any other analysis in AUDIENCE 98.

For a detailed discussion of “Households, Pseudo-Respondents, and the Attribution of Listener Support,” see pages six through eight in the Public Radio Recontact Survey Database Toolkit.

**Annual Gift.** Again, the survey asks, “How much did your household give to [station] **in the year of your most recent contribution?**” (different emphasis added). The reported number is the **sum total of gifts for the year** for listeners who gave more than once, and should therefore be interpreted as an **annual gift**, not the amount of the most recent gift.

**Current Givers.** Both the “Givers” and “Giving” models created by AUDIENCE 98 focus on **current** givers only. The Public Radio Recontact Survey was fielded in March of 1997; current givers are those who said they “gave in 1996 or 1997.” Therefore, **a current giver is a person who lives in a household that has given to at least one public radio station in the last 15 months.**

## Control Variables

AUDIENCE 98’s Giving model acknowledges two station characteristics that make a difference in the size of listeners’ gifts. In statistical terms, we have “controlled” for the effects of these variables. This greatly strengthens the other

findings to emerge from our model.

**Joint Licensees.** We find no evidence that joint licensees perform better as a group than other stations. However, listeners who give to joint licensees report slightly higher giving levels. We interpret this simply as listeners reporting their gift to the combined radio and television operation.

For instance, one household in Washington DC reports giving \$60 to WAMU and \$75 to WETA, a joint licensee. But gifts to WETA radio are also gifts to TV; for most listeners it would be impossible to apportion the gift across the two operations. Again, by controlling for this real and understandable confusion, the remainder of AUDIENCE 98’s size-of-gift findings is greatly strengthened.

**The Station Itself.** Each station differs from others in its tactics and ability to earn gifts from listeners. At some stations the development efforts may be more aggressive, the tactics more powerful, or the communities richer.

We find no readily apparent commonalities among stations with higher-than-average gift levels. **But our model acknowledges these differences and is greatly strengthened as a result.**

The control variable used is a calculation of the average station gift as calculated from the AUDIENCE 98 database itself. Using a component of the dependent variable (gift size) to predict the dependent variable introduces multicollinearity in the model. Analysis shows the multicollinearity does not significantly alter the remainder of the model.

This table shows the standardized coefficients (betas) for the model with and without the average gift variable. Note how the inclusion of the variable increases the model’s predictive power without disrupting the other independent variables.

	<b>Model with Average Gift</b> r <sup>2</sup> = .152	<b>Model without Average Gift</b> r <sup>2</sup> = .134
Time Spent Listening	.123	.125
Loyalty	.088	.085
Personal Importance of Network Programming	.063	.059
Personal Importance of Local Programming	.065	.055
Annual HH Income	.271	.267
Actualizer	.076	.068
Joint Licensee	.079	.086
Station's Average Gift	.117	

– David Giovannoni

**Note:** Many listener characteristics could conceivably influence the size of a person's gift – but do not. This table shows how much the knowledge of

specific demographics, utiligraphics, and attitudes toward public radio would add were each included next in the Giving Model.

<b>Demographics</b>	<b>Beta In</b>	<b>Signif.</b>	<b>Tolerance</b>
Sex	-.009	.676	.955
Age	.024	.298	.909
Education	.007	.782	.824
White	.029	.192	.987
Black	-.008	.733	.983
Employed	.019	.425	.895
Retired	-.010	.681	.887
Fulfilled (VALS 2)	.014	.609	.687
<b>Utiligraphics</b>			
Years Listening to the Station	.022	.325	.963
Core Listener to the Station	.043	.283	.305
Exclusive Listener to the Station	-.015	.584	.642
Listens on Weekdays	.015	.511	.911
Listens on Weekends	.054	.019	.919
Time Spent Listening to News	-.001	.966	.794
Time Spent Listening to Classical	.000	.990	.926
Time Spent Listening to Jazz	.017	.461	.948
Horizontal Hold to the Station	.012	.697	.538
Occasions to the Station	.048	.132	.476
Duration per Occasion to the Station	-.029	.267	.730
Time Spent Listening to the Radio	.015	.690	.351
Occasions to the Radio	.028	.278	.745
Duration per Occasion to the Radio	-.049	.058	.720
Horizontal Hold to the Radio	.003	.885	.837
<b>Attitudes and Perceptions</b>			
Personal Importance of the Station	-.017	.565	.546
The news programming on public radio is unique, not available on commercial stations	.031	.211	.776
The music programming on public radio is unique, not available on commercial stations	-.006	.799	.908
I seek out public radio whenever I move residence or travel out of town	-.012	.636	.800
I generally think of public radio as being financially supported by contributing listeners	.031	.175	.953
I generally think of public radio as being financially supported by universities or government tax dollars	-.051	.021	.982
The social and cultural values I hear expressed on public radio usually fit closely with my own values	.030	.209	.864
I keep listening to the public radio station during its on-air membership drives	.048	.039	.890
The on-air membership drives are getting more prevalent than in the past	-.020	.358	.985
The on-air membership drives are becoming easier to listen to than in the past	.023	.314	.937
The on-air mentions of business support (underwriting) are getting more prevalent than in the past	-.004	.871	.966
The on-air mentions of business support (underwriting) are getting more annoying than in the past	-.026	.238	.993
My opinion of a company is more positive when I find out that it supports public radio	-.024	.301	.931
I am concerned that businesses which support public radio may eventually force changes in the programming	-.065	.004	.977
I personally would be less likely to contribute to public radio if more businesses were to support it	-.055	.013	.990