

grow the **audience**
for public radio

The Performance of NPR News Stations

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Station Resource Group
Walrus Research

Corporation for Public Broadcasting

INTRODUCTION: The NPR News Franchise

Public radio's most powerful format starts the day with Morning Edition, mixes news and talk programs through midday, and ends the afternoon with All Things Considered. This report names the format *NPR News* because of the powerful role of NPR's news magazines and the salience of the NPR brand, but the format typically includes programs from other networks as well – APM's Marketplace, the BBC World Service, and PRI's The World. At some stations local reporting in Morning Edition and other local news and talk programming play important roles. And most NPR News stations feature weekend entertainment such as Car Talk, A Prairie Home Companion, and Wait Wait . . . Don't Tell Me!

The NPR News format is the most-listened-to public radio service in all but a handful of the markets in which it is offered.

A long path to growth

The NPR News format was not an overnight success. News is a costly format to execute, especially in the sound-rich, in-depth style of public radio. It took two decades of work by NPR and a handful of other producers to build a portfolio of national news and information programming that extends from morning to night. CPB provided direct, full funding of NPR's programming for fifteen years. CPB also provided crucial, multi-year start-up support for news programs such as Marketplace that were launched elsewhere.

Ramp-up of local news production at NPR News stations has taken a similarly long road, from early newscasts and occasional public affairs programs to regular local reporting and daily talk, public affairs, and news magazine efforts. Evolving local programming strategies have also played a key role. Stations presented early national and local news efforts in the context of eclectic schedules that typically featured multiple genres of music and cultural fare. The emergence of multiple public radio stations in numerous markets and iterative steps of format-focusing eventually brought more coherence to individual station schedules and greater differentiation among stations serving the same community.

A decade ago, in the mid-to-late 1990s, the combined audience of NPR News stations began to surpass the listening to news-and-classical stations, the previously most-listened-to public radio format. Then a remarkable thing happened: over the span of six years (spring 1999 to fall 2004) listening to public radio news stations grew by 55%. In a time of relentless news cycles – Bush v. Gore, 9/11, the wars in Afghanistan and Iraq, Bush v. Kerry and more – listeners tuned to public radio news stations in droves.

INTRODUCTION: The NPR News Franchise

Differences in performance

Within the broad pattern of success for NPR News stations we can see significant differences in performance. Some NPR News stations achieve shares of listening in their markets that are more than twice those of NPR News stations elsewhere. Some NPR News stations are among the top-rated stations of all kinds – commercial and public – in their markets and others fall far back in the pack.

Gaining a better understanding of these differences and what accounts for them is a key step in growing the public radio audience. We can do a better job of setting benchmarks to assess local efforts, framing goals for the format both locally and nationally, and calling attention to best practices across the country.

The report takes a deep dive into the character of individual radio markets – the context in which stations compete for listeners’ attention and loyalty – and takes our understanding of station performance a major step forward. We review and build on our knowledge of the link between education levels in a community and public radio listening, explore other important market factors, and offer breakthrough material – public radio’s first use of VALS psychographic data at the market level. Using advanced statistical techniques, we are able to:

Explore and explain the connection between the character of different markets and the performance of NPR News stations. Station programmers often remind observers that “our market is different.” We sort out the differences that matter and calculate how much of a difference they make.

Identify top performers among NPR News stations – those that achieve audience levels significantly above what market characteristics alone would suggest – so we can learn from their experiences.

Predict the audience for an NPR News station in markets that do not currently have the format – places like Houston, Atlanta, and Tampa.

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SECTION ONE: STATIONS AND MARKETS

- **Listeners In Most Major Markets Are Served By An NPR News Format Station**
- **Leading NPR News Stations Average 3.1 Metro Share**
- **Market Size Does Not Explain Audience Share For NPR News**
- **Amount Of Local Talk Programming Does Not Explain Station Share**
- **Station Share Is Function Of Cume Rating Or Market Reach**

SECTION TWO: DEMOGRAPHICS

SECTION THREE: PSYCHOGRAPHICS

MAJOR MARKETS: NPR News Format

Listeners In Most Major Markets Are Served By An NPR News Format Station

For this study we identified 36 stations that broadcast an NPR news format in the top 50 markets. To meet our definition of the format, stations had to schedule news and talk programming on weekdays between Morning Edition and All Things Considered. They also had to capture at least a 0.5 share of listening in their home market as of Fall 2007.

Three major markets have 2 stations doing an NPR news format – New York, San Francisco and Salt Lake.

In 8 major markets the NPR news station has competition for Morning Edition and ATC from a dual format station such as KCRW Los Angeles, WGBH Boston and WDET Detroit.

We did not include markets like Atlanta and Tampa where Morning Edition is available only on a dual format station. Also not included are the PPM markets, Philadelphia and Houston, and three embedded markets such as Long Island.

Market	Metro Population 12+	NPR News		Dual
New York	15,344,600	WNYC-FM	WNYC-AM	
Los Angeles	10,902,400	KPCC-FM		KCRW-FM
Chicago	7,784,400	WBEZ-FM		
San Francisco	5,969,400	KQED-FM	KALW-FM	
Dallas-Fort Worth	4,973,000	KERA-FM		
Washington DC	4,210,000	WAMU-FM		
Boston	3,874,600	WBUR-FM		WGBH-FM
Detroit	3,866,500	WUOM-FM		WDET-FM
Miami-Fort Laud-Hollywd	3,538,400	WLRN-FM		
Seattle-Tacoma	3,328,100	KUOW-FM		KPLU-FM
Phoenix	3,173,200	KJZZ-FM		
Minneapolis-Saint Paul	2,683,000	KNOW-FM		
San Diego	2,515,100	KPBS-FM		
Saint Louis	2,308,400	KWMU-FM		
Baltimore	2,255,100	WYPR-FM		
Denver-Boulder	2,244,300	KCFR-AM		KUNC-FM
Portland OR	2,049,600	KOPB-FM		
Charlotte-Gast-Rock Hill	1,886,100	WFAE-FM		
Sacramento	1,805,200	KXJZ-FM		
Cleveland	1,782,400	WCPN-FM		WKSU-FM
Cincinnati	1,751,400	WVXU-FM		
San Antonio	1,626,500	KSTX-FM		
Salt Lake City-Ogdn-Prvo	1,621,900	KUER-FM	KCPW-FM	
Kansas City	1,592,800	KCUR-FM		KANU-FM
Las Vegas	1,541,900	KNPR-FM		
Milwaukee-Racine	1,431,300	WUWM-FM	WHAD-FM*	
Columbus OH	1,427,000	WOSU-AM		WCBE-FM
Indianapolis	1,350,900	WFYI-FM		
Norfolk-VA Beach-N.News	1,327,700	WHRV-FM		
Raleigh-Durham	1,230,300	WUNC-FM		
Greensboro-WS-High Point	1,154,400	WFDD-FM		
Jacksonville	1,106,400	WJCT-FM		
Hartford-New Britain	1,048,200	WNPR-FM		

*WHAD in Milwaukee carries the Wisconsin Public Radio Ideas Network. The weekday schedule is primarily call-in talk and news programs including NPR's Talk Of The Nation and CBC's As It Happens, but WHAD does not broadcast Morning Edition or ATC.

AUDIENCE SHARE: NPR News Format

Leading NPR News Stations Average 3.1 Metro Share

In this report we are looking for market factors that explain and predict the audience of NPR news format stations.

Concentrating on the leading NPR news station in each market, we dropped WNYC-AM New York, KALW-FM San Francisco, KCPW-FM Salt Lake and WHAD-FM Milwaukee.

In 33 large markets the leading NPR news format station averaged a 3.1 share of metro listening. The chart shows the distribution of audience share across those stations.

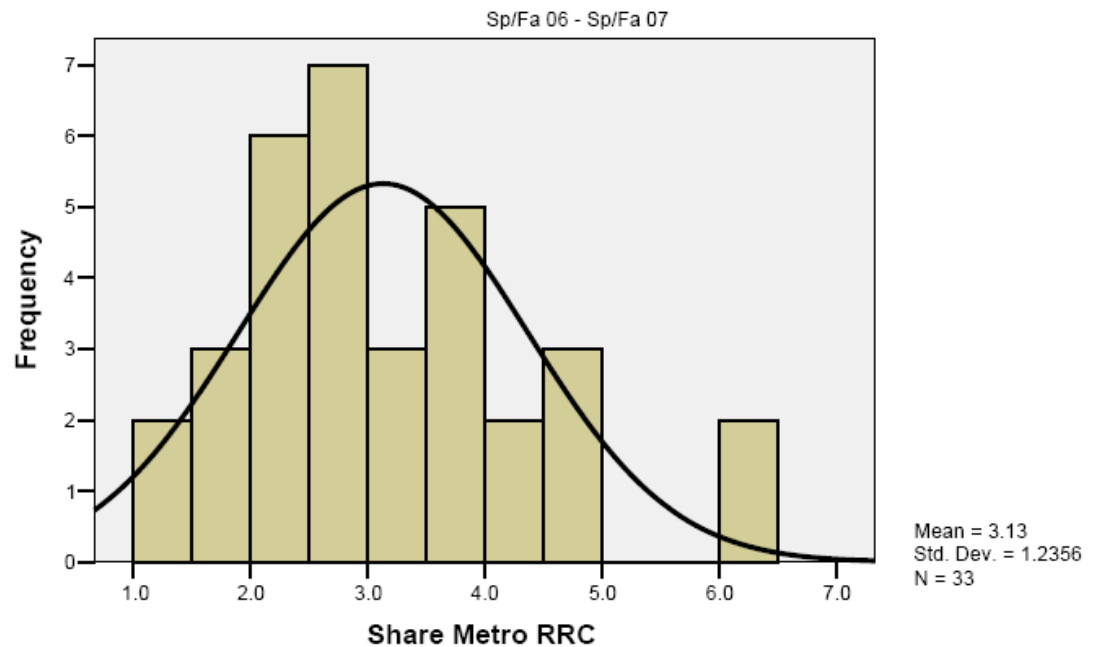
At the low end, 2 stations posted less than a 1.5 share. At the high end, 2 stations captured over a 6 share.

These share numbers are reliable because we averaged RRC data from four surveys, Spring and Fall, 2006 and 2007.

What might explain the varying performance of the NPR news format across these large markets?

Distribution of Metro Share

33 Leading NPR News Format Stations



The original source for the data in this chart is Arbitron's public radio diary database as processed by the RRC. We averaged metro share estimates over four surveys. The figures are percent of listening by persons 12+ for the broadcast week. Arbitron estimates and data are copyrighted by and proprietary to Arbitron, Inc.

EXPLAINING SHARE: Not Market Size

Market Size Does Not Explain Audience Share For NPR News

We used statistics to look at possible explanations for the variance in audience share captured by leading NPR news format stations in 33 large markets.

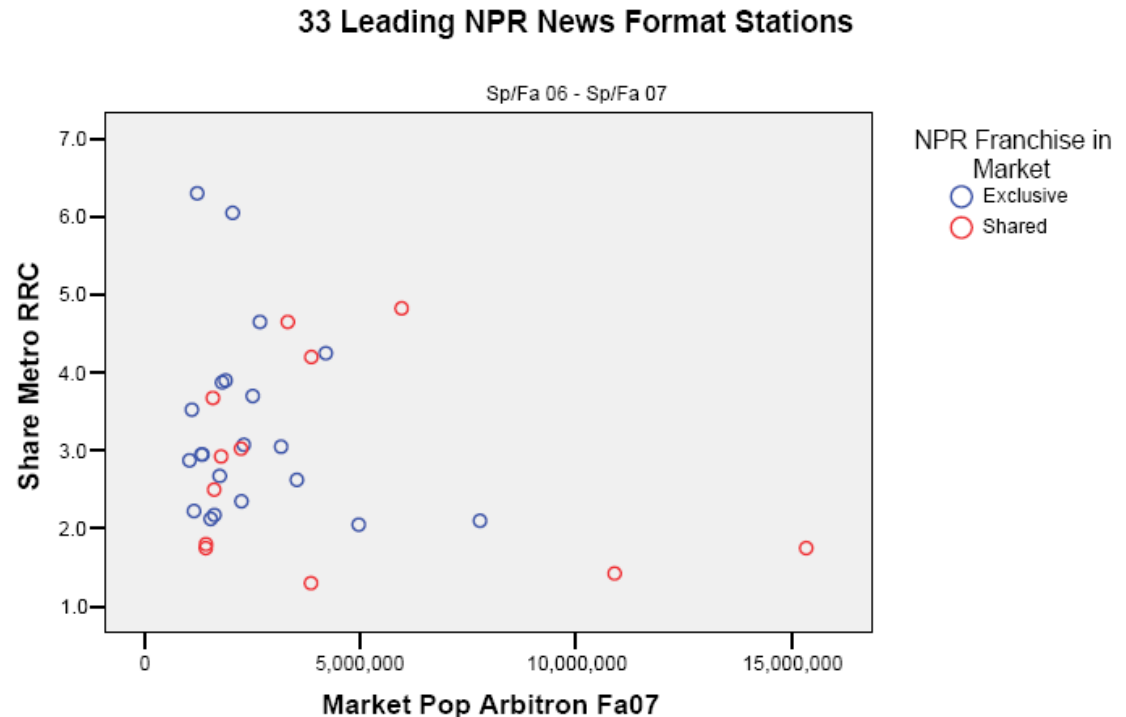
The first explanation to go was market population size, which does not correlate with metro share among these stations.

On this chart, each marker is an NPR news format station. The blue markers are stations like WBEZ that enjoy an exclusive franchise on Morning Edition in the market. The red markers are stations like WBUR which must compete with WGBH for Morning Edition.

While New York and Los Angeles each contain over 10 million persons, most of the 33 markets we analyzed have a population below 5 million. The y-axis on the chart is the metro share for the leading NPR news station.

Statistically, there is no significant correlation between market size and audience share among these stations.

No Significant Relationship Between Market Size And Metro Share



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EXPLAINING SHARE: Not Local Talk

Amount Of Local Talk Programming Does Not Explain Station Share

In recent years several NPR news format stations have invested in local showcase programs such as WUNC's The State Of Things and KCFR's Colorado Matters.

In this study we were not able to measure the quality of programming but we did count up the number of quarter hours devoted to local talk between Morning Edition and ATC.

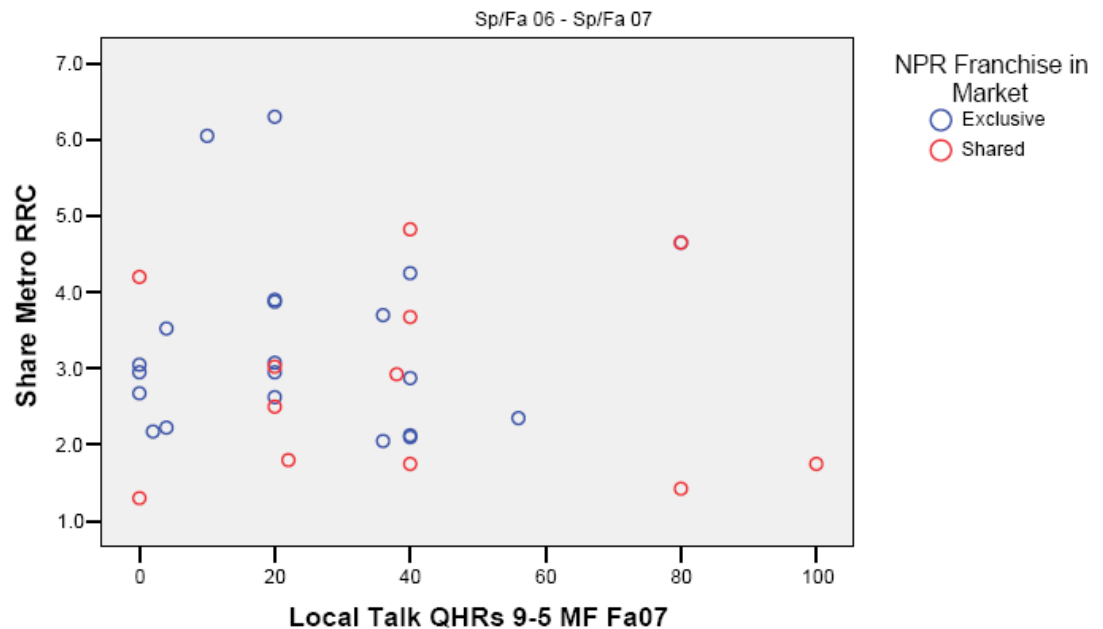
We found no relationship between the amount of local talk programming and the station's share of audience.

The x-axis on this chart is the number of quarter hours of local talk programming, Monday-Friday 9am-5pm. One cluster of stations schedules virtually no local talk programming, yet shares range over 3 points. Another cluster schedules around 40 quarter hours of local, yet shares also range over 3 points.

We did not look at indicators such as audience loyalty for local programs.

No Significant Relationship Between Amount Of Local Talk And Metro Share

33 Leading NPR News Format Stations



The original source for the data in this chart is Arbitron's public radio diary database as processed by the RRC. We averaged metro share estimates over four surveys. The figures are percent of listening by persons 12+ for the broadcast week. Arbitron estimates and data are copyrighted by and proprietary to Arbitron, Inc.

For definitions of local, we used program schedules from NPR's carriage database as published by Audience Research Analysis.

EXPLAINING SHARE: Cume Rating

Station Share Is Function Of Cume Rating Or Market Reach

There is one powerful explanation for the audience share of NPR news – the station’s reach into the market’s 12 plus population or its metro cume rating.

This chart shows a direct linear relationship between the station’s cume rating and its metro share.

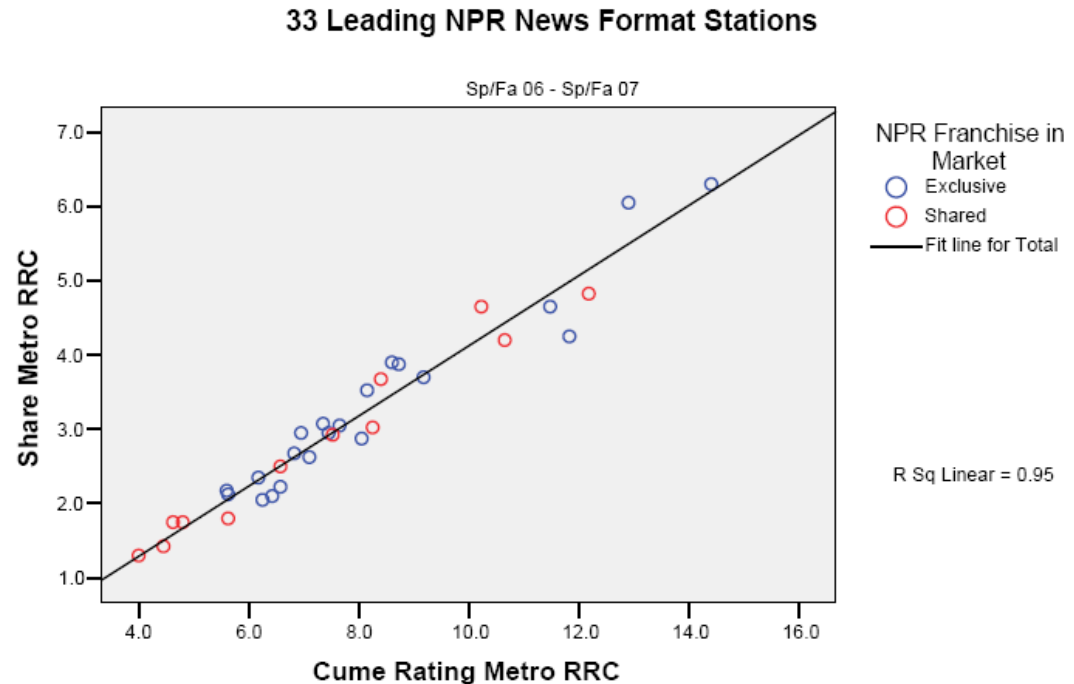
Metro cume rating is also appropriate for this analysis since we will be looking at the demographic and psychographic composition of metro populations.

We will use metro cume rating as the dependent variable in this study – the measure of station performance we will explain and predict.

This choice is consistent with two recent studies: *Listeners and Revenue* by Peacock Research for NPR and *Individual Giving To Public Radio Stations* by SRG.

Metro cume rating is a powerful measure of station performance in fund raising as well as audience share.

Direct Relationship Between Market Reach And Metro Share



The original source for the data in this chart is Arbitron’s public radio diary database as processed by the RRC. We averaged metro share and cume rating estimates over four surveys. The figures are percent of listening by persons 12+ for the broadcast week. Arbitron estimates and data are copyrighted by and proprietary to Arbitron, Inc.

SECTION ONE: STATIONS AND MARKETS

SECTION TWO: DEMOGRAPHICS

- **NPR News Stations Achieve Greater Reach In Highly Educated Markets**
- **Economic Factors Like Income And Occupation Drop Out When Controlled By Education**
- **Racial/Ethnic Composition Of Market Population Does Not Explain Station Performance**

SECTION THREE: PSYCHOGRAPHICS

EXPLAINING REACH: Level Of Education

NPR News Stations Achieve Greater Reach In Highly Educated Markets

Education is the strongest predictor of individual listening to public radio. Thus it is not surprising that NPR news format stations achieve greater reach in highly educated populations.

The x-axis on this chart is the percent composition of each metro by college graduates age 25 or older.

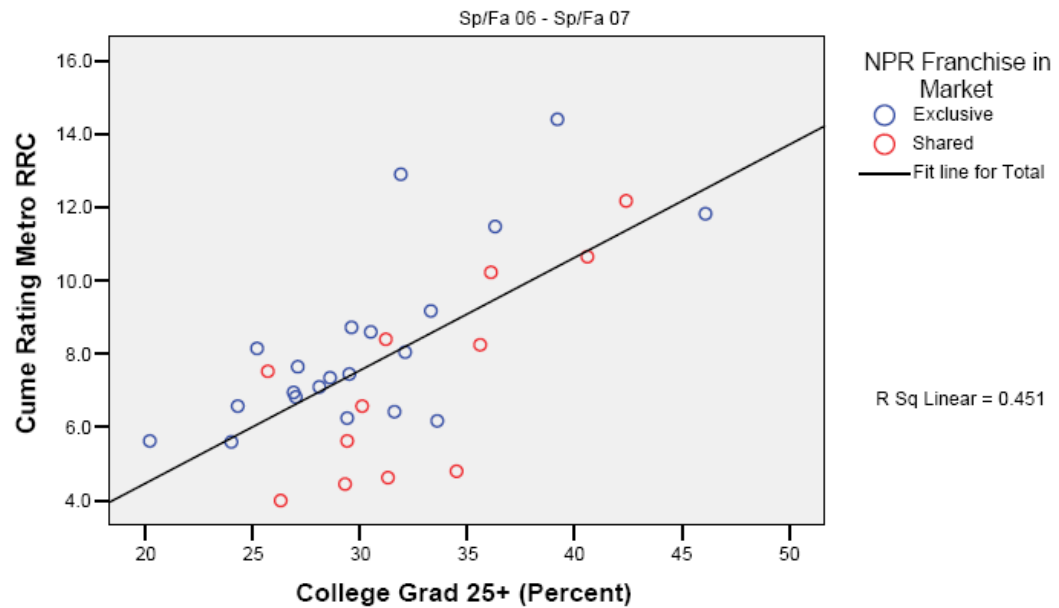
The correlation coefficient between the college composition of the market and the cume rating of the leading NPR news station is .67, indicating a strong positive relationship.

That translates to R Square of .45, which means that market education alone explains 45 percent of the variance in station performance.

You can see that most stations fall close to the regression line, which would be useful to predict cume rating based on market education alone.

Strong Relationship Between Market Education And Station Reach

33 Leading NPR News Format Stations



The original source for the data in this chart is Arbitron's public radio diary database as processed by the RRC. We averaged cume rating estimates over four surveys for persons 12+. For market education we used the 2006 American Community Survey by US Census for persons 25+.

Arbitron estimates and data are copyrighted by and proprietary to Arbitron, Inc.

MARKET ECONOMICS: Function Of Education

Economic Factors Like Income And Occupation Drop Out When Controlled By Education

One hypothesis that pops up from time to time is that the performance of NPR news stations is a function of market economics.

We looked at Census data for two measures of income: Per Capita Income and Median Household Income. We also looked at occupations in each market such as the Information industry and Professional/Scientific/Technical.

While each of those market economic variables do correlate with the performance of the NPR news format, they completely drop out when we use partial correlation to statistically control for market education.

After all, education leads to higher income and professional occupations.

We also looked at younger or older populations. The age of a market's population also drops out when we statistically control for market education.

Market Economic Variables That Correlate With Station Reach

.671	College Graduate 25+
.586	Occupation: Professional/Scientific/Technical
.533	Per Capita Income
.506	Median Household Income
.308	Occupation: Information

(Zero-Order Pearson's Coefficient)

Market Economic Variables Do Not Correlate With Station Reach When Education Is Controlled

<u>Not Significant</u>	Occupation: Professional/Scientific/Technical
<u>Not Significant</u>	Per Capita Income
<u>Not Significant</u>	Median Household Income
<u>Not Significant</u>	Occupation: Information

MARKET RACE AND ETHNICITY: Not A Factor

Racial/Ethnic Composition Of Market Population Does Not Explain Station Performance

In our previous report we found that different public radio formats vary in their appeal by race/ethnicity. The NPR news format generally does not generate equal audience shares across Arbitron's Blacks, Hispanics and Others.

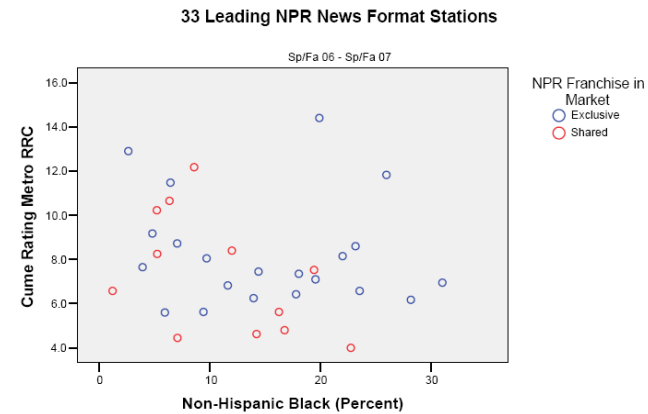
Consider that a station's share is influenced by several factors such as the array of competing formats in the market and the time spent using radio by various demographic segments of the market.

Is there any relationship between a market's race/ethnic composition and the performance of the NPR news format? The answer is no.

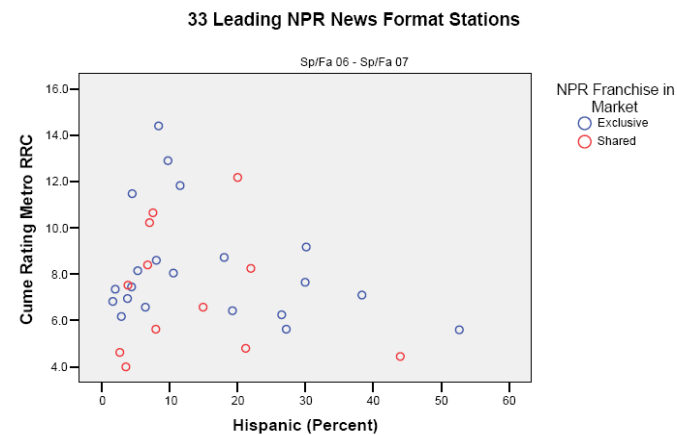
We found no significant relationship between Black or Hispanic market composition and the cume rating of the NPR news format station.

Again we are left with college education as the powerful demographic explanation for NPR news station performance.

No Relationship Between Market Black Composition And Station Reach



No Relationship Between Market Hispanic Composition And Station Reach



SECTION ONE: STATIONS AND MARKETS

SECTION TWO: DEMOGRAPHICS

SECTION THREE: PSYCHOGRAPHICS

- **VALS™ Segments American Adults By Psychographic Values And Lifestyles**
- **VALS™ Market Composition Strongly Explains The Reach Of NPR News Format**
- **Predicting Performance: Market Education, Exclusivity, And Psychographics**
- **Predicting Performance: Most Stations Within Model**
- **Predicting Performance: Over And Under**
- **Looking Forward**

VALS™ PSYCHOGRAPHICS: A Brief Review

VALS™ Segments American Adults By Psychographic Values And Lifestyles

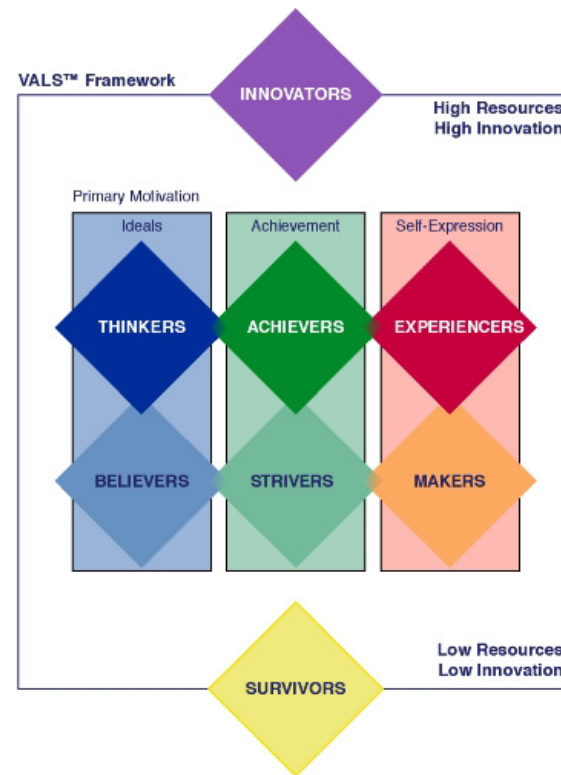
Audience 88 introduced public radio to VALS™, the segmentation system designed by SRI Consulting Business Intelligence. Listeners were assigned to segments based on their values and lifestyles, rather than simple demographics like age, race or sex.

Audience 98 found that NPR News listeners, especially the core listeners who contribute money, were concentrated in two VALS segments – Actualizers and Fulfilled. SRI has renamed those VALS segments as Innovators and Thinkers.

GeoVALS™ is a proprietary SRI system that estimates the distribution of VALS segments across geographical areas. We obtained VALS distributions for 50 Standard Metropolitan Statistical Areas, as of 2004.

Since the VALS data we worked with lump Baltimore in with Washington, DC, from here on out the sample is 31 stations, not WAMU-FM or WYPR-FM.

VALS™ places U.S. adult consumers into one of eight segments based on their responses to the VALS questionnaire. The main dimensions of the segmentation framework are primary motivation (the horizontal dimension) and resources (the vertical dimension).



VALS Framework reprinted with permission

To learn more about VALS, go to www.sric-bi.com/VALS, the website of SRI Consulting Business Intelligence, Menlo Park, CA 94025

VALS™ COMPOSITION: Station Reach

VALS™ Market Composition Strongly Explains The Reach Of NPR News Format

The top 50 metro areas vary widely in their psychographic composition – the distribution of VALS segments among the market’s adult population.

For example, in one large market nearly 40 percent of adults are Innovators or Thinkers. That is certainly fertile ground for the NPR news format. Yet in another top 50 market only 17 percent of adults are Innovators or Thinkers.

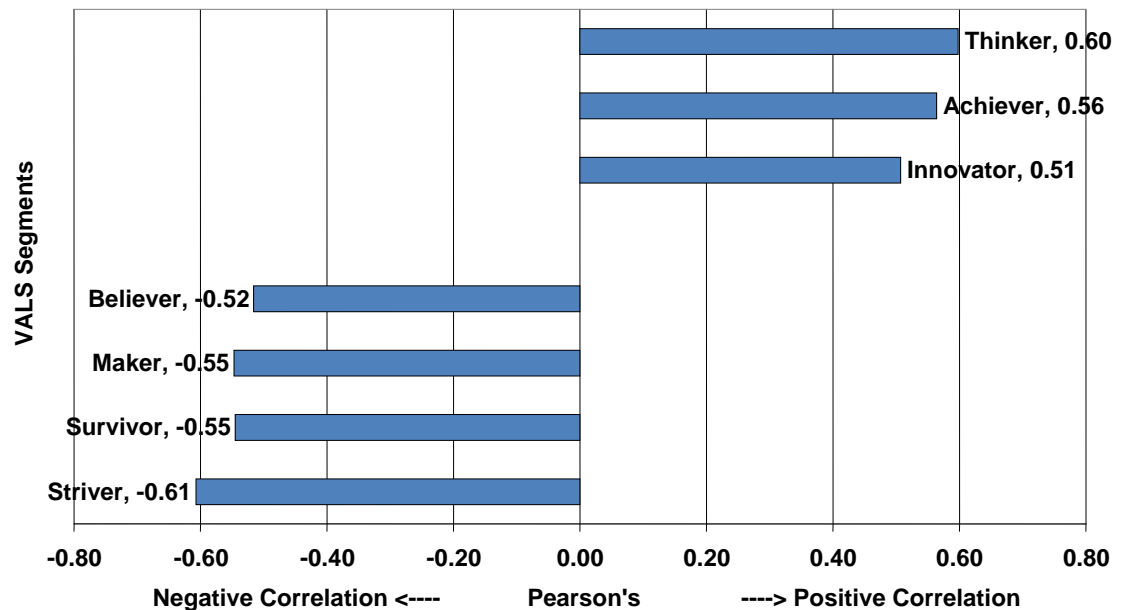
On the market level, we found that three VALS segments exhibit strong positive correlations with station cume rating: Thinker, Achiever and Innovator.

Four VALS segments exhibit strong negative correlations: Striver, Survivor, Maker and Believer.

The Experiencer VALS segment has no significant correlation with NPR news station performance and is dropped from further analysis in this report.

How VALS Market Segments Correlate With Cume Rating

31 Leading NPR News Stations
Sp/Fa 06 - Sp/Fa 07



Figures show the Pearson’s correlation coefficient between each market’s composition of individual VALS segments and the cume rating of the leading NPR news format station.

To learn more about VALS, go to www.sric-bi.com/VALS, the website of SRI Consulting Business Intelligence, Menlo Park, CA 94025

REGRESSION MODEL: Beyond Education

Predicting Performance: Market Education, Exclusivity, And Psychographics

Multiple linear regression is a statistical analysis that generates an equation predicting a dependent variable (station performance) from several independent variables (market characteristics).

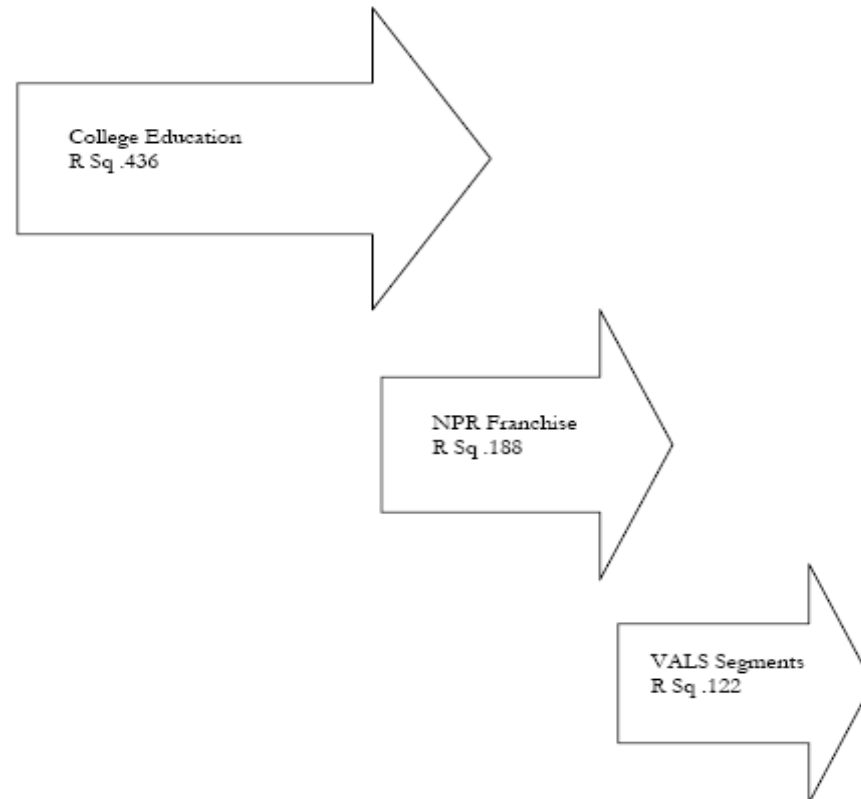
The best model identifies the fewest independent variables that together make the most powerful explanation.

Recall that market education alone can explain much of the variance in NPR news station performance. We boosted that explanatory power to 75 percent (R Square) by adding two more independent variables:

One variable is the competition in the market – whether the NPR station has an exclusive or shares the franchise. The other variable is the psychographic composition of the market per VALS.

The remaining 25 percent variance in station performance is not yet explained.

NPR NEWS STATION PERFORMANCE BASED ON MARKET CHARACTERISTICS A Linear Regression Model



Figures show Model Summary statistics (R Square) for multiple linear regression equation predicting station cume rating.

Detailed statistical output available from Walrus Research.

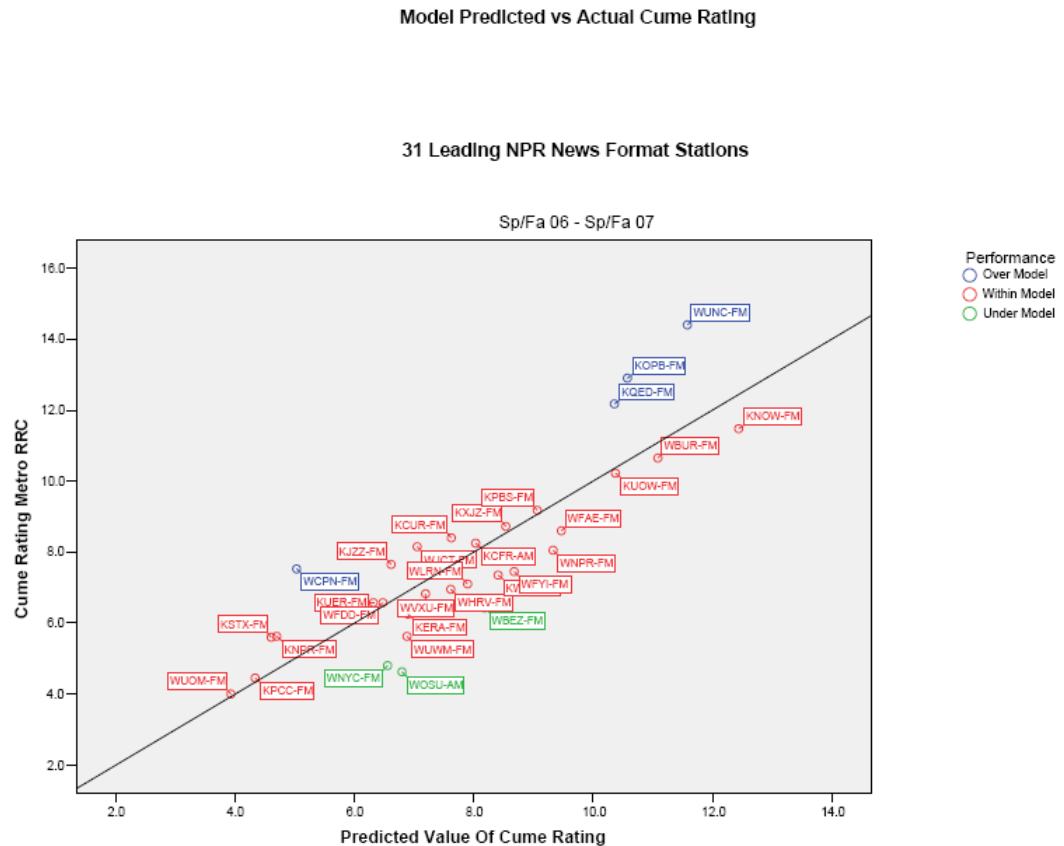
PREDICTING PERFORMANCE: Most Stations Within Model

We have defined performance in terms of cume rating. Nineteen of the 31 stations we analyzed fall within one cume rating point of where, using the model, we would expect to find them. All but seven of the 31 are within one standard deviation. These are the signs of strong statistical model.

We can spot four stations, WUNC, Chapel Hill, WCPN, Cleveland, KOPB, Portland, and KQED San Francisco, that achieve cume ratings significantly above the model – 2 or 3 extra cume rating points. This performance may reflect factors under the station’s control, such as programming or promotion, or factors outside their control, such as market characteristics for which we have yet to account.

The same possibilities apply to stations that perform below the predicted level.

The chart on the next page is another way of seeing these differences.

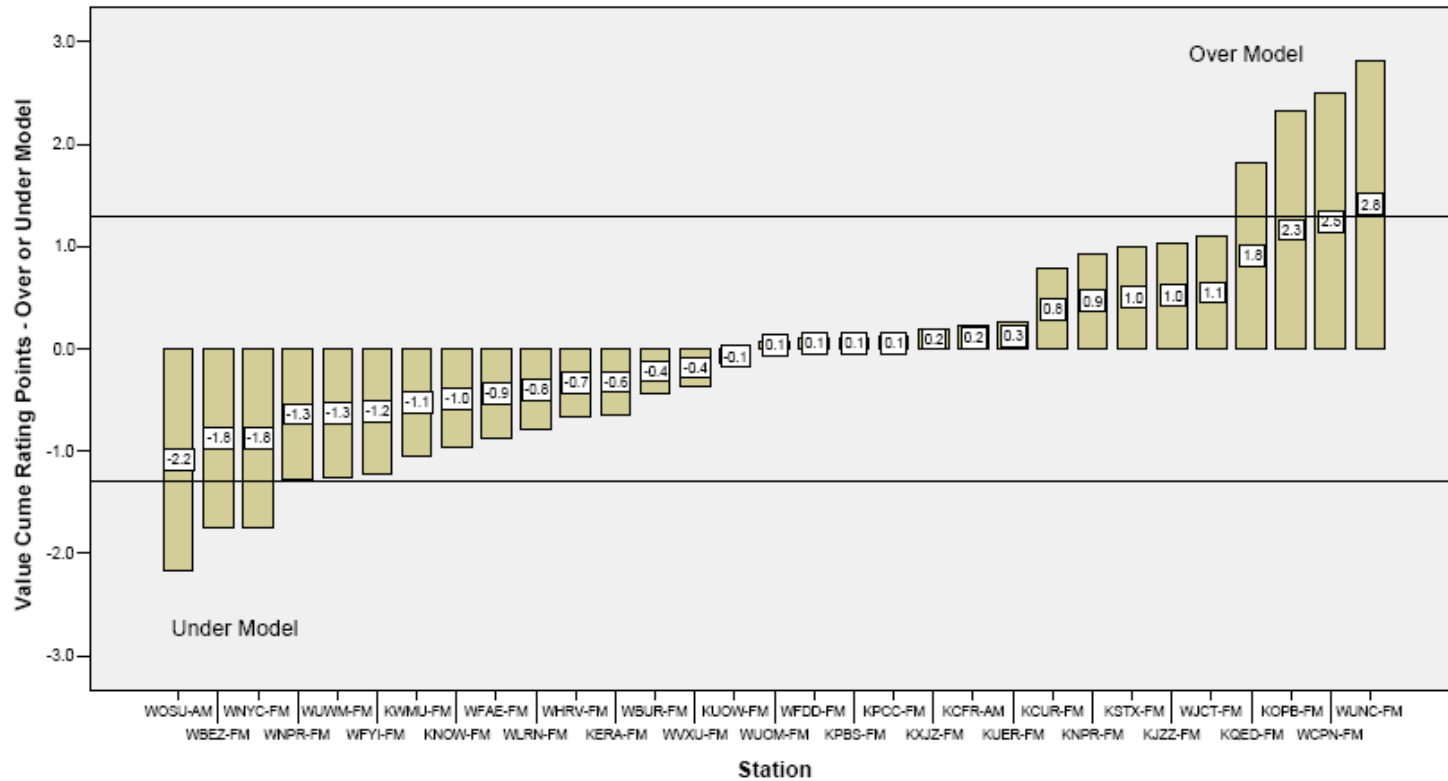


PREDICTING PERFORMANCE: Over and Under

Difference Between Predicted And Actual Cume Rating

31 Leading NPR News Stations

Sp/Fa 06 - Sp/Fa 07



STRATEGIC POLICY: NPR News Format

Looking Forward

The most powerful finding of this report is the extent to which the performance of individual NPR News stations is driven by a basic interplay between the format itself and a short list of market factors: education levels, the presence or absence of competition for the NPR franchise, and the relative presence of key VALS psychographic segments.

This underscores the importance and urgency of close attention to the performance of the principal drivers of the format, the NPR news magazines. Morning Edition and All Things Considered (including their weekend versions) account for between a third and a half of the listening to each of these stations.

To grow the audience for the NPR News format as it is currently conceived, it is essential to grow the audience for the signature NPR news magazines.

Right behind these programs are a handful of other national programs from NPR, APM, and PRI that round out the

shared programming portfolio of the format. It is important to remember that national entertainment programs, such as Car Talk and A Prairie Home Companion, also make valuable contributions to these stations' overall service.

Strategies for audience growth among NPR News stations must also look beyond the national programs and consider the clear differences among individual stations that the market characteristics we tracked do not explain.

Most likely, there are important decisions at the station level that explain some of these differences in performance – programming choices and execution, fundraising capacity, promotion, marketing, community engagement, etc.

NPR's Morning Edition Grad School team conducted extended listening checks for many of the stations in this study. They report huge differences in how Morning Edition sounds from one station to another. SRG's *Charting the Territory* documented significant differences in loyalty to locally produced programs that follow Morning Edition.

An obvious next step – outside the scope of the current Grow the Audience project – is to explore the relationship between such observations and findings and the analysis in this report.

A strategic application of the model developed in this report is to explore the audience prospects for an NPR News format station in markets that don't have one.

Three especially large markets that do not have an NPR News format station are Houston, Tampa, and Atlanta, where, respectively, KUHF, WUSF, and WABE broadcast the dual format of classical music and NPR news that dominated the public radio landscape for many years.

Using the regression model and assuming that an NPR News format station in each market would have an exclusive NPR news franchise, we can predict the following cume rating ranges:

NPR News Format Prediction

Atlanta	8.0 to 10.6 cume rating
Tampa	7.2 to 9.8 cume rating
Houston	3.7 to 6.3 cume rating