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**Availability and Accessibility:
Their Relative Importance to Public
Radio's National Audience Growth:
1973 to 1984**

(22 pages)

Originally published as:

Availability and Accessibility: Their Relative Importance to Public Radio's National Audience Growth: 1973 to 1984. Research and Evaluation, Vol. 1, No. 1, National Public Radio, June 1985.



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AVAILABILITY AND ACCESSIBILITY: THEIR RELATIVE IMPORTANCE TO PUBLIC RADIO'S NATIONAL AUDIENCE GROWTH: 1973 TO 1984

1. Introduction

In 1984, public radio received some shocking news: after enjoying several years of rapid, uninterrupted audience growth, the NPR system of member stations had not increased its national audience between 1983 and 1984. Its audience growth appeared to have stagnated.

In the keynote address of the Fall 1984 round of NPR Programming Planning meetings, consultant David Giovannoni suggested that the system of NPR member stations had allowed an extended period of financially based turmoil to pull its attention from the practice of effective programming techniques. This was the cause, he argued, of the stagnation in audience growth between 1983 and 1984.

Claiming that the future of public radio funding lies in its audience, Tom Church of the Radio Research Consortium proposed a goal of doubling the national audience before 1989. NPR's board of directors heartily embraced this goal.

The stagnation in audience growth and resulting responses from the public radio community have raised several important questions. Has public radio's audience reached its maximum? Can public radio realistically expect to double its audience before 1989? And, if so, what is the most efficient and effective way to do so?

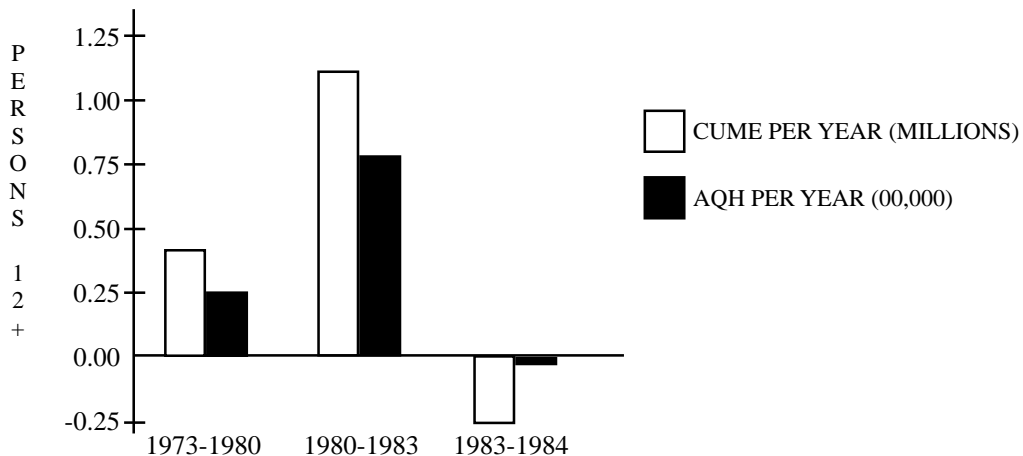
Key to all of these is an understanding of the causes of public radio's audience growth. Through the years, how much of the audience has been gained through system expansion, and how much has been gained through the adoption of effective programming techniques?

Clearly, the expansion of the system as measured by the number of member stations has an effect on the growth of the national audience; public radio must be available in a market before people can listen to it. But the mere number of stations is not the only predictor of audience use; the programming on stations is a second crucial factor. The programming must be "listenable," or accessible, before the service will be used by a significant portion of the public. Serving the public with programming it will listen to is at least as important as serving the public with programming it can listen to.

This study will demonstrate that, since the late 1970's, the purposeful increase in programming accessibility has been the primary cause of the public's increasing use of public radio.

It begins by examining the degree of public radio's audience growth, and by defining the apparent phases during which this growth has occurred.

Graph 1 Rates Of National Audience Growth



SOURCE: Arbitron Nationwide Reports

The average yearly audience growth for the system of NPR member stations is shown for three time periods: years 1973-1980 (Phase I), 1980-1983 (Phase II), and 1983-1984.

After a seven-year period of moderate growth, the national audience for NPR member stations grew at an unprecedented rate of over one million cume persons per year from 1980 to 1983. Since 1983, the system has lost both AQH and cume audience.

2. System Growth And Audience Growth

In 1973, the first year in which National Public Radio obtained a fairly reliable estimate of its national audience, approximately 2.2 million persons per week listened to its 142 member stations. As time passed, public radio stations throughout the country matured and became CPB-qualified, and more and more became members of NPR.

During the period between 1973 and 1980, the number of NPR member stations increased 67% — from 142 to 237, as shown in Table 1 on page 16. In that same time period, the national audience to NPR member stations increased at twice the rate — up 136% — from 2.2 million to 5.1 million persons per week.

Similarly, between 1980 and 1983 the number of member stations grew from 237 to 287 — an increase of 21%. If the size of the membership was solely responsible for audience growth, then a 21% increase in public radio's audience could have been expected in this period. Yet the cume audience for public radio increased 65%, and the AQH audience nearly doubled (up 96%).

2.1. Two Phases Of Audience Growth

These facts suggest not only that public radio's audience has grown significantly during the last decade, but also that it grew much faster between 1980 and 1983 than previously. For the sake of analysis, this paper will refer to the period between 1973 and 1980 as Phase I, and the period between 1980 and 1983 as Phase II.

During Phase I (1973 to 1980), the system's yearly audience growth was fairly steady, averaging 400 thousand weekly cume persons per year. During Phase II (1980 to 1983), this rate of growth nearly tripled; the number of people served each week by the system increased at

an unprecedented average of 1.1 million listeners per year. In this thirty-six month period, the national cume audience increased from 5.1 million to 8.5 million persons per week, also illustrated in Table 1.

Not only were more people listening to NPR member stations — they were listening longer. In 1973, the average time spent listening to the system was 4 hours and 45 minutes per week. In 1980, this had increased to almost 6 hours and 30 minutes per week, and by 1983, listeners were spending an average of over 7 hours and 30 minutes per week listening to NPR member stations.

Phase I of the NPR system's growth was characterized by fairly steady increases in the number of member stations, a twice as rapid increase in the cume and AQH audiences, and an overall increase in the average time spent listening by this audience. As displayed in Graph 1 on page 2, during the seven years of Phase I, the number of member stations increased 67% (10% per year); the cume audience increased 136% (20% per year); the AQH audience increased 225% (32% per year); and the average time spent listening increased 35% (5% per year).

Phase II of the system's growth was also characterized by a fairly steady increase in the number of member stations. As in Table 1, however, during this period, the rate of weekly cume audience growth was three times greater than the rate of member station growth, and the AQH audience was growing almost five times faster than new stations were becoming members.¹

¹ The most significant growth in audience occurred during the first 24 months of Phase II. The number of member stations increased 15% (8% per year); the cume audience increased 50% (25% per year); the average audience increased 81% (42% per year); and the average time spent listening increased 20% (10% per year).

Given this understanding of public radio's phases of growth, the central questions of this study are proposed:

☞ Which has been more important to the NPR system's increasing service to the public—the wider availability of its programming, or a change in the way the programming sounded, which made it more listenable, or accessible, to an audience?

Has the relative importance of availability and accessibility changed through the years?

What can be learned from this knowledge? How does it apply to decisions which must be made in 1985 and beyond?

3. Availability And Accessibility Defined

Availability, as used in this examination, is synonymous with the potential audience of the NPR system of member stations. Availability is measured by the number of people who could receive the programming of at least one member station. In the broadest terms, as the number of stations increases, the number of people to whom public radio programming becomes available increases.²

Availability, however, is difficult to measure accurately. Historically, at least since the Public Broadcasting Act of 1967, the availability of public radio in general (and later NPR member stations in particular) has been estimated using guesswork, politically expedient hunches, and models based on arguable assumptions. Indeed, there is no reliable estimate of public radio's coverage.³ Therefore, an accurate historical assessment of availability is impossible.

However, there are ways to estimate the growth of potential audience. The number of NPR

member stations and their concentration within markets of large, intermediate, and small populations are measures used in this examination to estimate public radio's availability. In addition, this study uses the size of the national FM radio audience as an indicator of the availability of FM — a factor which also has had a considerable effect on public radio's audience growth.

Given knowledge of availability, the next logical issue is the relative influence of non-availability factors on the growth of audience. Most non-availability factors are aspects of programming: the content of a station's signal, the elements of the schedule, the way these elements are presented, their sequence, timing, flow, promotion, etc.

These and many, many more programming-related aspects are controllable factors exerting considerable influence on the accessibility of a station's signal or a system's service to the audience. How "listenable" is the broadcast service? Is it consistent? Reliable? Professional? How effectively are elements of the service presented and promoted on the air? How responsive is the service to the people's needs and desires? At any particular time on any given day, how sensitive is the service to the way in which people are using the medium, and the reasons for which they turned on the radio? How appropriate, informative, and entertaining is the service to the people in a given community? These are some of the questions asked when addressing accessibility.

² Other, better defined factors of availability include a station's signal strength and frequency, terrain, population density, the saturation of receivers, and other variables impinging on the ability of the public to receive its signal.

³ This situation will change later this year when the CPB completes its calculation of potential audience using a method based in part on the Area Pop system, developed several years ago to estimate the availability of public television.

In short, “program availability” is the ability of a potential audience to receive NPR member stations’ signals. “Program accessibility” is the extent to which the form of programming encourages listening, thereby turning a potential audience into an actual audience.

The concepts of availability and accessibility have substantial ramifications in programming, policy, resource allocation, political, and other decision-making activities within and surrounding public radio. The issues are plentiful. Has expansion of the system into rural communities been efficient? Would continued expansion into unserved markets or enhancement of service within currently served markets be most effective? Are limited funds better spent on programming or on facilities?

This study limits itself to examining the relative importance of availability and accessibility factors. However, the results have many ramifications, some of which will be suggested in Sections 6 and 8.

4. The Availability Of Public Radio Programming

Through the years, many factors have been at work, no doubt synergistically, which have had a tremendous effect on public radio’s availability. Some have been fortunate environmental trends, such as the shift of listening from the AM band to the FM band. Others are the result of long-term investments made by public radio, including expansion into unserved areas, improvement of broadcast and production facilities in major markets, and encouragement of multiple services in mid-size and larger markets.

The number of member stations, the location of these stations, and the move of audience to the FM band are measures used in this section to assess the effects of increased availability.

4.1. The Effect Of More Member Stations

How much audience growth is attributable to the addition of new member stations? Certainly some, but not as much as might be expected. Indeed, even without the addition of stations, public radio has been expanding its listening audience.

Between 1979 and 1983, NPR gained a net 65 member stations. During this four-year period, these stations accounted for an increase of 91,000 AQH persons, as seen in Table 2 on page 17. However, stations which had already been members in 1979 increased their AQH audiences by 197,000 listeners. Indeed, this was more than a doubling of the combined AQH audience to stations which had already been members in 1979, as shown in Graph 2 on page 6.

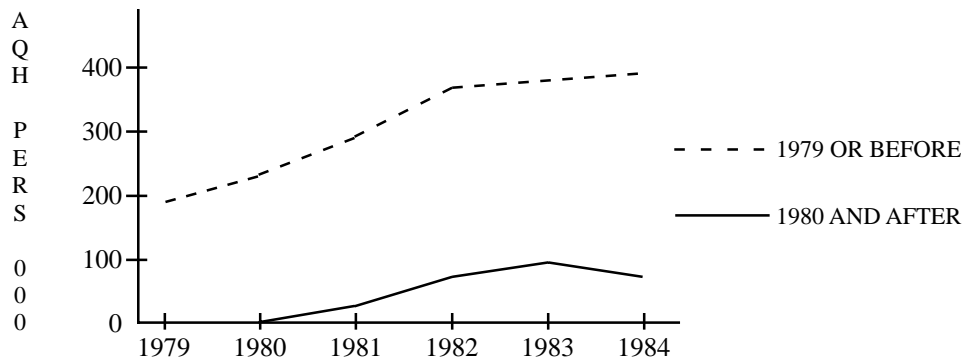
So while the system expanded by 65 member stations between 1979 and 1983, less than one-third of the audience growth can be attributed to the addition of these new member stations. At least two-thirds of the audience growth was due to other factors.⁴

Similar findings result from the examination of any single year’s growth rates. For instance, between 1981 and 1982 — the year that new stations added the most to the national audience — the 34 new stations were responsible for only 29% of the audience growth. The existing members accounted for 71% of the increase in audience.

The addition of new member stations has certainly been contributing to the system’s increased service to audience, but at no time have new members been singly (or even primarily) responsible for public radio’s audience growth. Even without the addition of new member stations, the public radio system has been significantly expanding its listening audience.

⁴ It is at least two-thirds because these factors could have been at work on the expansion stations also, making their effect even greater.

Graph 2 National Audience By Earliest Year Of NPR Membership



SOURCE: Arbitron Nationwide and Spring Reports

This graph displays the AQH audience for stations which were NPR members as of Spring 1979, and for stations which became members after that time.

Three out of four AQH listeners gained since 1979 are listening to stations which were members as of Spring 1979. In other words, increased audience service of existing stations outpaced audience service due to system expansion by a ratio of three to one in the period between 1979 and 1984.

At least since 1979, therefore, non-availability factors have been important to increased audience service than the expanded availability of NPR member stations.

4.2. The Effect Of Member Stations In The Largest Markets

When the system was expanding its service into unserved markets, most new stations were being added in the smaller markets, as shown in Table 3 on page 18. Because there was no audience in these markets to begin with, the rate of audience growth during this period was greatest in the smaller markets. However, audience growth in the largest markets has been responsible for the greatest number of new listeners.

The importance of stations in the largest markets can be demonstrated by the following example.

Imagine two stations — each with exactly the same power, antenna height, and frequency — in different geographic locations. The first station is in an area where its signal can be tuned in by ten thousand people. The second station is in an area where it can be heard by one million people. Even if the first station is listened to by every person in its coverage area, it would never be heard by more than ten thousand people. If the second station were to serve only two percent of the people in its coverage area, it would be used by twice the first station's maximum possible audience.

The inescapable fact is that, all other things being equal, stations in larger markets are much more efficient distributors of programming, and have a greater effect on national audience service than those in smaller markets.

The greater role played by stations in the larger markets in contributing to national audience has little to do with financial resources, political clout within the system, or the type of listeners being served. If anything, these stations have a more difficult time serving audiences because of the availability of a multitude of

well-financed, tightly programmed, and heavily promoted commercial stations in their markets.

It is evident in Table 5 on page 20 that, quite simply, these stations serve the most listeners because there are more potential listeners to be served within their coverage areas. As Graph 2 on page 16 demonstrates, national audience is a function of population concentration — not a function of station concentration.

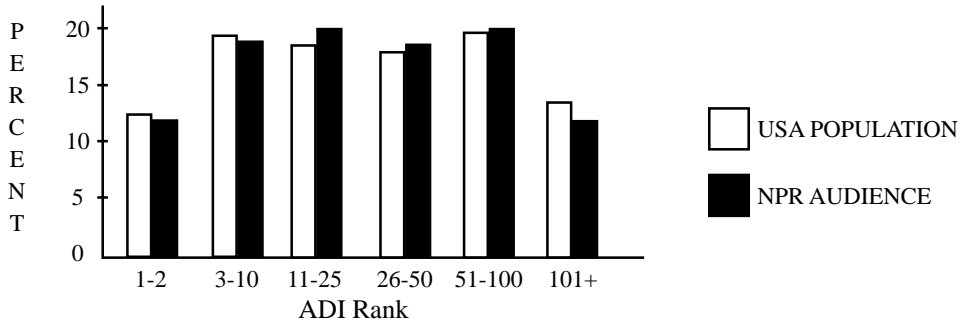
For instance, three public stations in the New York market are NPR members. In 1984, these stations served approximately 35,000 average listeners. It takes all twenty of NPR's member stations in markets ranked 100 to 130 to serve an equal number of listeners.

Indeed, a relatively small number of stations account for a huge percentage of the audience. The three member stations with the largest AQH audiences — WNYC-FM, WGBH-FM, and WETA-FM — account for over 10% of the average persons listening nationally, as shown in Graph 4 on page 10. When combined, the 100 member stations with the smallest audiences do not serve this many listeners, which is demonstrated in Table 6 on page 21.

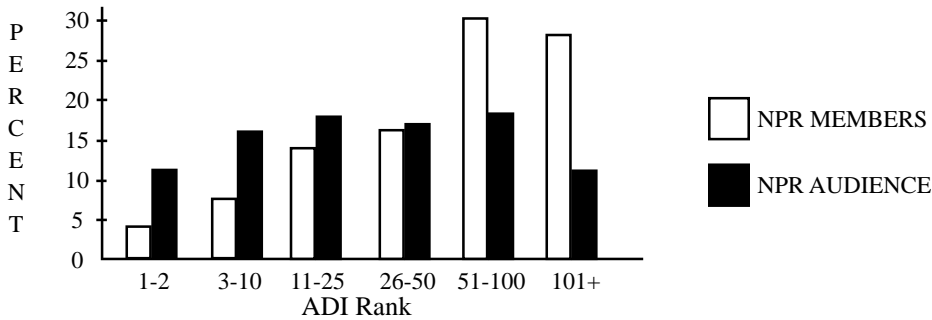
The importance of stations' potential audience is indisputable. Member stations in the top 25 markets accounted for 125,000 out of 298,000 average listeners added to the system between 1979 and 1983; this is 42% of the system's average audience growth during this four-year period — more than a doubling (+130%) of their own audience — during a time when the number of member stations in this set of markets increased by only a few stations, shown in Table 4 on page 19.

Clearly, some factor other than system expansion has been greatly responsible for the increase in public radio's audience. Could this

Graph 3 National Audience Is A Function Of Population Concentration...



Not A Function Of Station Concentration



SOURCE: Arbitron Nationwide. Persons 12+ in 48 states. Spring 1984.

The efficiency of stations in the largest markets is demonstrated by this graph.

Twelve percent of NPR's member stations are in the top ten ADI's, yet they account for 31% of the national AQH audience. Similarly, the NPR member stations in the top twenty-five markets account for one-half of the national AQH audience, and yet only one-quarter of the member stations are in these markets.

This apparent inequity is merely a function of population density. Stations in the top twenty-five markets reach one-half of the U.S. population. Clearly, national audience reach is much more a function of where people are concentrated than where stations are concentrated. Based on a listener-per station comparison, the efficiency of stations in populated areas is much higher than that of stations in sparsely populated areas, and makes them relatively more important from a national view of service to the public.

Table 5 on page 20 displays complete information on this matter.

factor be the migration of the radio audience to the FM band?

4.3. The Effect Of Increased FM Radio Use

Table 7 on page 22 displays the share of all radio listening to the FM band by persons over the age of 12. In 1973, only 28% of all radio listening was to FM; in 1984, the proportion was 68%. Since it is composed primarily of FM stations, the public radio system has ridden a tremendous availability wave during the 1970's. By all indications, the wave has a long way to go before hitting the beach.

The growth of the FM audience and the growth of the public radio audience are charted on Graph 5 on page 12. While the two have increased audience since 1973, the rate of public radio growth has exceeded the rate of FM audience growth, especially since 1980.

Clearly, something other than system expansion and increased use of the FM band has been responsible for a great deal of public radio's audience growth — especially during Phase II. Data indicate that this “something” is the increased accessibility of public radio programming.

5. The Accessibility Of Public Radio Programming

Accessibility of programming is a trait which has not been measured directly through the years; indeed, while one may know it when s/he hears it, it would be difficult to define in a measurable way even now. Since accessibility is not a measured quantity, its effects over time must be ascertained via an indirect method.

This examination assumes that the audience growth since 1973 is a combined function of

two factors: 1) increased availability (in the form of system expansion and increased FM use); and 2) increased accessibility.⁵ This assumption can be represented by the simple model $AVAILABILITY + ACCESSIBILITY = AUDIENCE$. By definition, the audience growth left remaining after taking into account public radio's increased availability is attributable to increased accessibility. In terms of the model, $ACCESSIBILITY = AUDIENCE - AVAILABILITY$.

5.1. Sizing Up Accessibility: Taking All Availability Factors Into Account

Graph 5 also plots the two availability measures against the public radio system's AQH audience growth since 1973. While the availability measures and public radio's audience grew in an almost linear way between 1973 and 1980, audience growth catapulted after 1980. Simple visual examination suggests that, while availability alone might be a good predictor of audience growth during Phase I, it cannot adequately explain audience growth during Phase II.

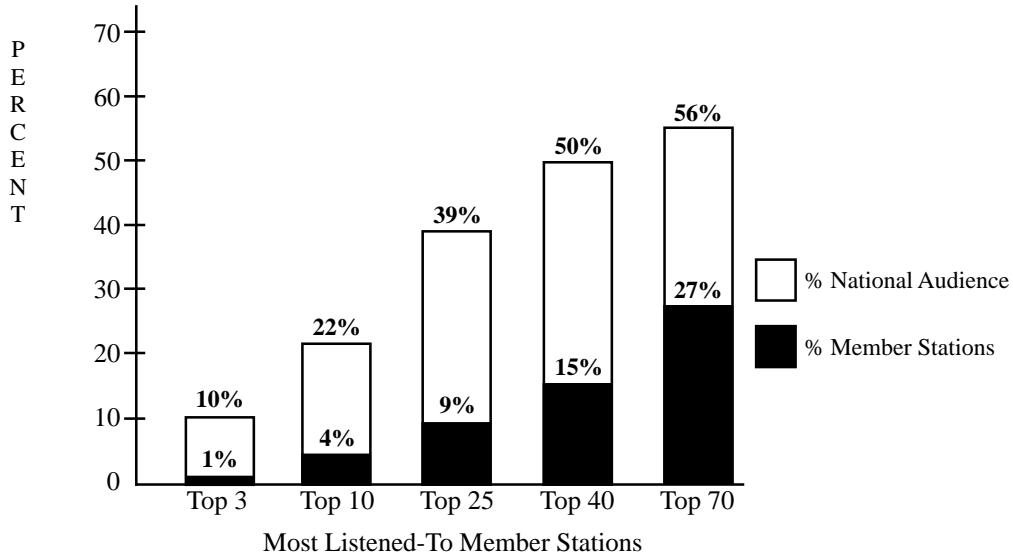
The $AUDIENCE = AVAILABILITY + ACCESSIBILITY$ model indicates that this unexplained difference between audience and accessibility is the result of an increase in public radio programming's accessibility.

5.2. 1980-1981: Accessible Programming Levels Reach Critical Mass

Accessible programming encourages audience use of a radio service by presenting the audio program elements in a form which maximizes their utility to the audience, making the service more “listenable” and thereby more “listened to.”

⁵ By using “persons using FM” as the measure of FM use, population increases are implicitly taken into account.

Graph 4 The Relative Importance Of The Stations With Large Audiences To The NPR System's National Audience



SOURCE: Arbitron Nationwide, Flip Reports, & ASALE Spring 1984

As measured by the average number of persons listening throughout the broadcast day, a few stations are much more important to the system than others. Indeed, three stations serve 10% of the national audience, twenty-five stations serve two-fifths of the national audience, and seventy stations serve two out of three listeners.

This raises a perennial representation issue which centers on the definition of the public radio constituency. If public radio's constituency is the public, then the forty stations which serve one-half of the national audience will have 50% of the representative weight. If the constituency is the set of member stations, then these forty stations will have 15% of the representative weight.

This is a dilemma which was faced by the architects of the United States Constitution and which was resolved by a bicameral system of representation: the constituency of the Senate is the states, and the constituency of the House of Representatives is the public. No similar system has been developed and accepted by public radio.

The history of public radio's move toward accessible programming has been described elsewhere.⁶ This analysis isolates three factors which were necessary for public radio to increase the accessibility of its programming: 1) the widespread acceptance of the concept that public radio programming could be made more accessible without compromising public radio's mission; 2) the training of a significant portion of public radio programmers to apply the techniques of accessible programming; and 3) the financial resources with which programming ideas could be turned into actual programming.

Concept acceptance did not happen overnight. It took several years of sporadic system debate before it became generally accepted by most practitioners. Once the concept was accepted, however, the system had the resources available to apply it. Series of programming workshops, combined with the availability of local audience estimates for public radio, gave public radio programmers the tools they needed to perform program accessibility experiments and to assess their results.

All of this occurred in the late 1970s — a period when public radio's funding adequately supported these experiments. The result: by 1981, a "critical mass" of accessible programming had been in place on public radio stations long enough to demonstrate its ability to significantly increase levels of audience service. This critical mass of accessible programming catapulted public radio's rate of audience growth out of the environmentally directed, availability-driven Phase I into the self-directed programming-driven Phase II.

6. 1984 And Beyond — Phase III?

Unfortunately for public radio, this second stage of audience growth appears to have ended

in 1983. Nationwide audience estimates show that, between Spring 1983 and Spring 1984, the audience for the NPR system of stations did not increase at all — in fact, it decreased slightly.⁷ Comparisons of individual station estimates from Fall 1983 and Fall 1984 confirm this leveling of growth. Has the system of NPR member stations entered a third phase — a period marked by no audience growth?

Even if this is not a new phase, an important question emerges: Is this stagnation of audience growth due to a decrease in availability and/or accessibility factors?

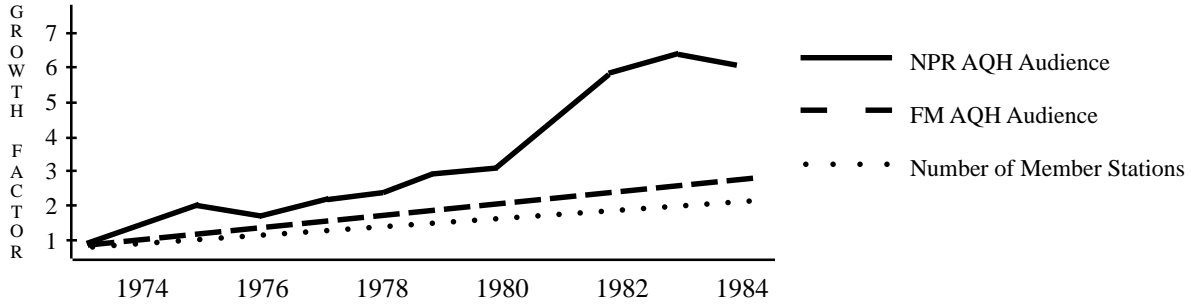
This question is simply answered by examining the two availability measures used in this analysis. In the year between 1983 and 1984, both the number of NPR member stations and the number of persons using FM radio increased. In other words, availability continued to increase between 1983 and 1984, but the audience did not. The logical conclusion, then, is that the accessibility of programming has stagnated, and perhaps even deteriorated, with predictable audience service results.⁸

⁶ See "How Public Radio Gained Two Million Listeners," Current, 31 March 1982, and Chapter 1, The State of Public Radio Programming in 1984, NPR Office of Audience Research and Program Evaluation, December 1983.

⁷ Audience loss is greatest in mid-size and smaller markets; however, audience to some major market flagship stations is also eroding [Table 4, Graph 6].

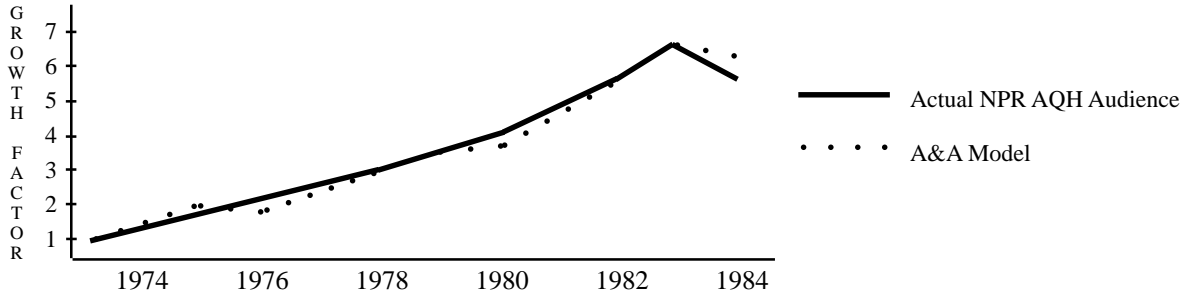
⁸ The model for audience growth presented in this study disregards any effect changing public tastes, intra- and inter-media competition, or other factors may have on the size of the public radio audience nationwide. While this implicit assumption may be debated, it is highly unlikely that any of these unaccounted variables could have changed enough in one year to offset continuing increases in availability.

Graph 5 Availability Factors And NPR System Audience Compared



SOURCE: Arbitron Nationwide; RADAR; NPR Representation

Availability And Accessibility Model Of NPR System Audience Growth



SOURCE: Arbitron Nationwide; Model S

The top graph compares the growth curves of the two availability measures used in this study — the number of member stations in the system, and the number of AQH persons using FM radio — with the AQH audience for the NPR system of member stations. All curves are indexed to their 1973 levels. While these two availability factors appear to have caused most of the audience growth between 1973 and 1980, some other significant factor came into play after 1980. This factor appears to be the increase in the accessibility of public radio's programming.

The bottom graph compares the growth curve of the actual AQH audience for the NPR system of member stations with the growth curve predicted by a model. The model is based on the two availability measures and one accessibility measure: the average number of "macro seams" among stations in the PRAP sample. Since PRAP did not begin until 1979, the average number of macro seams is estimated for the years 1973 through 1978; the estimate during these years has held constant to reflect no change in the accessibility of programming.

The very close fit between the audience predicted by the model and the actual audience demonstrates the elegance of the availability and accessibility concepts, and strongly suggests their validity.

6.1. The Decline Of Accessibility

How and why has the accessibility of public radio's programming declined?⁹ Section 5.2 suggested that three factors were necessary for public radio to increase the accessibility of its programming: 1) the widespread acceptance of the concept that public radio programming could be made more accessible without compromising public radio's mission; 2) the training of a significant portion of public radio programmers to apply the techniques of accessible programming; and 3) the financial resources with which programming ideas could be turned into actual programming. Has any of these three factors, or the critical mass of accessible programming they produced, diminished since 1983?

There is no evidence that the concept of accessible programming has fallen into disfavor. Yet significant programming training efforts, critical to the system's development of accessible programming skills, have not been ongoing; as a result, the natural turnover at stations and at NPR has decreased the level of experience and programming expertise within the public radio system.

Perhaps one of the reasons why programming training efforts have been ignored can be traced to the amount of attention paid to non-programming — specifically financial (and subsequently political) — changes within the system. Most agree that financial resources have been in disarray since NPR's financial crisis of 1983. Not only have the subsequent financial repercussions diverted attention from programming, they have also diverted resources. For example, one of the many casualties of NPR's financial crisis was the network's curtailed movement toward highly accessible "vertical services." By providing member stations and the public with interactive (a la MORNING EDITION) and parallel "streams" of reliable programming, the vertical services strategy was designed to further increase —

indeed maximize — the accessibility of existing and proposed public radio programming.

Another financially related casualty is NPR's programming leadership role. Recognizing that the future of public radio funding lies in its audience, NPR's board has embraced a goal of doubling the national audience before 1989. Yet, even if a plan for doing so were formulated and adopted, NPR currently lacks the resources it once had (and which appear necessary) to effectively lead the system's audience building activities.

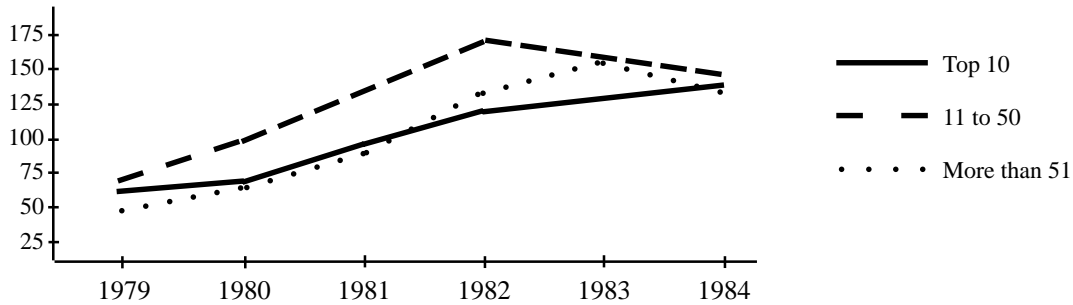
Indeed, no funding, production, or distribution entity is taking the lead in providing the system with accessible programming. In 1985, CPB continues to promote non-accessible programming through its funding and awards structures, which encourage production of short series and discrete, segmented, and otherwise non-accessible programs. American Public Radio, despite the technical excellence, creative nature, and marketplace success of much of its fare, also continues to deliver radio programs.

While it may be true that the old programmatic form of PRAIRIE HOME COMPANION is in part responsible for the program's success, PHC is an exception. The form is not well suited to the way in which radio is used by most listeners today.¹⁰ The Satellite Program

⁹ At this point, the study moves beyond the presentation of facts and models to suggest contexts in which its results can be applied.

¹⁰ An observation: the production and distribution of programs is most probably fostered by marketing considerations and requirements. The "hooks" of theme music, hosts, program guide art and copy, etc., are all necessary attributes of packaging which entice program directors to purchase/carry the programs. If true, this indicates that the "free marketplace" of programming, which the public radio system seems to be moving toward, will not (and possibly cannot) create seamless vertical programming designed to maximize accessibility.

Graph 6 National Audience By MSA Market Rank



SOURCE: Arbitron Nationwide and Spring Reports

NPR member station audience in the top ten markets continued to gain AQH listeners between 1983 and 1984, despite serious audience loss at a few flagship stations.

NPR member station audience has been eroding at stations outside the largest markets, beginning in 1982 in markets 11-50, and since 1983 in measured markets ranked 50+.

This reiterates the importance of the stations in the largest markets. If audience in these markets had not increased between 1983 and 1984, the system of NPR member stations would have experienced an even greater decline in national audience.

Development Fund has recently revised its guidelines to reflect its understanding of the need for accessible programming; unfortunately, the SPDF's funding structure limits its ability to encourage such production.

6.2. Availability Considerations

Fiscal and structural limitations not only inhibit public radio from increasing the accessibility of its programming — they may also affect public radio's availability.

For the most part, the public radio community is currently not recognizing the efficiency of the stations in the largest population centers. Substantial grants for the improvement of facilities in major markets are no longer awarded by the CPB. NPR remains a membership system which gives each member an equal vote in programming issues.

Even though public radio's availability has been increasing from 1973 through 1984, it is not guaranteed to increase indefinitely. Recognition of the efficiency of stations in large population centers is crucial to the maintenance and expansion of public radio's availability in the future.

7. Conclusions

The growth in the system's audience culminating in 1983 was the result of a number of long-term plans and investments which made public radio available to most Americans, and which resulted in a critical mass of programming which more and more listeners found accessible. As measured by the number of listeners, 1983 marked the year that the system of NPR member stations emerged from a condition of relative obscurity into a network of marginal significance. In that year, 4.4% of all Americans over the age of twelve listened for at least five minutes in a typical week, and 1.5% of all radio listening in America was to NPR member stations.

But the system remains vulnerable — demonstrably so in 1984 — to decreases in accessibility and availability.

Due primarily to changes in the funding environment and subsequent financial repercussions throughout all levels of the public radio system, the development of service-enhancing programming strategies has virtually stopped — victim of the system's inability to afford them.

8. Recommendations

If the NPR system of member stations is to double its audience between 1984 and 1989, then renewed attention must be paid to maintaining the availability and increasing the accessibility of its programming.

At a minimum, recognition must be given to the preservation (and preferably expansion) of public radio service in the largest population centers; attention should be paid to the ongoing development of programming skills; systems should be structured which encourage the production and distribution of accessible programming; and financial and structural options should be chosen which consolidate limited resources into sums large enough to effect major programming accessibility innovations or enhancements.

If public radio is to reach the critical mass of popular support necessary for it to continue the highest quality service to the public, all players in the public radio system — especially stations and their principal programming suppliers and funders — must work together to ensure the continued availability and increased accessibility of ALL public radio programming.

All tabulations done by NPR's Office of Audience Research and Program Evaluation for this study are based on Arbitron Nationwide data (1973 to 1984), Arbitron market-based audience estimates for member stations (1979 to 1984), and NPR Representation member station data (1973 to 1985).

Table 1

**Growth Of NPR Membership And National Audience Compared
1971-1985**

YEAR	#	STATIONS		CUME AUDIENCE		AQH AUDIENCE		TIME SPENT LISTENING				
		Since 1973 (%)	Since 1980 (%)	(Mil- Lions)	Since 1973 (%)	Since 1980 (%)	(Mil Lions)	Since 1973 (%)	Since 1980 (%)	(HR:MN)	Since 1973 (%)	Since 1980 (%)
1973	142	-		2.17	-	.08	-	4:44		-		
1974	168	+18%		2.60	+20%	.11	+38%	5:30		+16%		
1975	184	+30%		3.31	+53%	.15	+88%	5:36		+18%		
1976	193	+36%		3.09	+42%	.13	+63%	5:11		+10%		
1977	206	+45%		3.97	+83%	.18	+125%	5:40		+20%		
1978	215	+51%		4.23	+95%	.20	+150%	5:58		+26%		
1979	221	+56%		4.69	+116%	.24	+200%	6:21		+34%		
1980	237	+67%	-	5.12	+136%	.26	+225%	6:21		+35%	-	
1981	255	+80%	+8%	6.50	+200%	.34	+325%	6:39		+40%	+4%	
1982	273	+92%	+15%	7.66	+253%	.47	+488%	7:39		+62%	+20%	
1983	286	+101%	+21%	8.46	+290%	.51	+538%	7:32		+59%	+18%	
1984	287	+102%	+21%	8.21	+278%	.50	+525%	7:43		+63%	+21%	
1985	306	+115%	+29%									

SOURCE: NPR STATIONS SERVICES; ARBITRON NATIONWIDE REPORTS, PERSONS 12+, M-S 6a-12m

15-May-85

In 1983, 8.46 million persons 12+ listened to the system of NPR member stations each week. This was an increase of 290% over the audience in 1973 (almost a quadrupling) and, compared to the audience in 1980, an increase of 65%.

NOTE: The "number of stations" on this table comes from NPR Station Services. It differs from following tables because: 1) counts were taken at different times of the year; and 2) the following tables are based on those stations for which we have individual audience data. Individual estimates were necessary to calculate the types of statistics shown in the following tables.

Table 2

**NPR Member Station National Audience
By First Year Of NPR Membership
1979-1984**

BECAME NPR MEMBER:	AQH PERSONS 12+ - M-S 6a-mid (00)						ADI ** 1984
	1979	1980	TOTAL 1981	SURVEY AREA 1982	1983	1984	
1979 or before	189.0 (208)	229.1 (207)	287.1 (206)	363.5 (206)	385.6 (204)	391.6 (204)	424.1 (204)
1980	--	6.2 (12)	15.2 (12)	20.9 (11)	22.9 (11)	21.8 (12)	20.3 (12)
1981	--	--	12.5 (20)	19.8 (20)	23.5 (19)	19.7 (17)	22.0 (17)
1982	--	--	--	36.1 (43)	38.1 (41)	19.6 (33)	30.8 (33)
1983	--	--	--	--	5.6 (8)	4.5 (8)	3.3 (8)
1984	--	--	--	--	--	0.7 (15)	4.9 (15)

(N) Number of member stations for which audience data exists.
* Based on ADI estimates consistent with Table 5.

SOURCE: AUDIENCE ESTIMATES - ARBITRON SPRING REPORTS FOR MEMBER STATIONS, CPB, RRC
NUMBER OF STATIONS - LIST OF MEMBER STATIONS PROVIDED BY CPB TO ARBITRON FOR NATIONWIDE AUDIENCE ESTIMATES [SEE NOTE ON TABLE 1]

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In 1979, the 208 member stations for which there was audience data served 189,000 average quarter-hour listeners throughout the broadcast week. By 1984, 204 of those stations were still members, and they were serving 391,600 AQH listeners.

Table 3
Number Of NPR Member And Associate Stations
By Market Size
1979-1984

MARKET RANK*	NUMBER OF NPR MEMBER STATIONS					
	1979	1980	1981	1982	1983	1984
Top 10 MSA's	22	24	26	26	26	25
11-25 MSA's	23	24	25	27	28	27
26-50 MSA's	36	37	37	42	43	44
51-100 MSA's	32	37	44	49	48	47
101-173 MSA's	35	38	42	53	54	50
Condensed	18	18	19	26	26	26
Home to no market**	42	41	45	57	58	70
Total	208	219	238	280	283	289

* MSA rank is based on 1984 rankings.

** Stations for which no market-specific (MSA or Condensed) audience data were obtained.

SOURCE: LIST OF MEMBER STATIONS PROVIDED BY CPB TO ARBITRON FOR NATIONWIDE AUDIENCE ESTIMATES [SEE NOTE ON TABLE 1]

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Table 4
NPR Member Station National Audience
By Market Size
1979-1984

MSA RANK*	AQH PERSONS 12+ - M-S 6a-mid (00)						ADI **
	TOTAL SURVEY AREA						
	1979	1980	1981	1982	1983	1984	1984
1-10	66.5 (22)	70.6 (24)	99.8 (26)	129.2 (26)	143.2 (26)	152.4 (25)	146.2 (25)
11-25	28.0 (23)	36.7 (24)	51.4 (25)	71.7 (27)	70.5 (28)	63.0 (27)	67.8 (27)
26-50	43.7 (36)	59.9 (37)	70.5 (37)	102.8 (42)	98.7 (43)	98.5 (44)	93.5 (44)
51-100	27.9 (32)	40.0 (37)	55.2 (44)	73.6 (49)	81.3 (48)	71.8 (47)	78.2 (47)
101-173	16.5 (35)	20.0 (38)	25.4 (42)	48.2 (53)	61.8 (54)	54.5 (50)	60.6 (50)
Condensed	5.6 (18)	5.9 (18)	12.1 (19)	12.1 (26)	18.3 (26)	17.7 (26)	31.0 (26)
Home to no market	- (42)	- (41)	- (45)	- (57)	- (58)	- (70)	26.0 (70)

(N) Number of member stations for which audience data exists.
* MSA Rank is based on 1984 rankings.
** Based on ADI estimates consistent with Table 5.

SOURCE: AUDIENCE ESTIMATES - ARBITRON SPRING REPORTS FOR MEMBER STATIONS, CPB, RRC
NUMBER OF STATIONS - LIST OF MEMBER STATIONS PROVIDED BY CPB TO ARBITRON FOR NATIONWIDE AUDIENCE ESTIMATES [SEE NOTE ON TABLE 1]

15-May-85

In 1979, the 22 member stations in the top 10 markets for which there was audience data served 66,500 average quarter-hour listeners throughout the broadcast week. By 1984, the number of member stations in the top 10 markets had increased to 25, and together they served 152,400 AQH listeners.

Table 5

**U.S. Population - NPR National Audience - NPR Member Stations
By ADI Rank**

<u>ADI RANK</u>	<u>% U.S. POPULATION (12+)</u>	<u>% NPR AQH AUDIENCE</u>	<u>% NPR MEMBER STATIONS</u>
1-2	12.9	12.4	4.4
3-10	18.4	18.3	7.8
11-25	17.7	19.9	14.4
26-50	17.4	18.1	17.0
51-100	19.4	19.7	29.6
101+	14.2	11.6	26.7

Based on the contiguous 48 states.

SOURCE: ARBITRON NATIONWIDE REPORTS; U.S. BUREAU OF THE
CENSUS, 1980 CENSUS (updated and projected to
Jan. 1, 1984)

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Table 6

**Share Of National Audience
Accounted For By NPR Member Stations
With The Largest Audience
Spring 1984**

<u>NUMBER OF NPR MEMBER STATIONS</u>	<u>PERCENT OF ALL NPR MEMBER STATIONS*</u>	<u>PERCENT OF NATIONAL AQH AUDIENCE</u>
Top 3	1%	10%
Top 10	4%	22%
Top 25	9%	39%
Top 40	15%	50%
Top 70	27%	66%
Top 100	38%	78%
Bottom 100	38%	7%

*In the contiguous 48 states.

SOURCE: ARBITRON NATIONWIDE REPORTS;
ARBITRON FLIP REPORTS

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Table 7
Growth Of FM National Share
1973 - 1984

YEAR	FM NATIONAL SHARE
Spring 1973	28.3
Spring 1974	33.3
Spring 1975	36.6*
Spring 1976	39.8
Spring 1977	43.6
Spring 1978	46.6
Spring 1979	50.5
Spring 1980	55.0
Spring 1981	59.5
Spring 1982	60.5
Spring 1983	65.1
Spring 1984	68.2

* Estimate based on interpolation

SOURCE: RADAR SURVEY BASE: PERSONS 12+

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