

# Spatial Data

## INTRODUCTION

In an era where digital streaming and social media dominate our media consumption, it's easy to overlook the roots of broadcast media that laid the foundation for today's entertainment landscape. I embarked on a journey back to 1962, an era when radio and television were the main sources of information and entertainment. For this exploration, I selected the "Radio and Television Annual Year Book (1962)" to understand and illustrate the media landscape of the United States during that time.

## METHODOLOGY

- Chose pages 39–41 from the source that detailed the top 50 markets in radio and television. This included data on the number of stations reporting and their time sales figures.
- The selected text was already processed through OCR, so I extracted the relevant information into a structured spreadsheet format for further analysis.
- Employed geocoding techniques to assign precise longitude and latitude coordinates to each of the markets mentioned in the selected text source.
- Utilized Kepler, a powerful data visualization tool, to map the geocoded points of the markets.
- Implemented a color scheme in the Kepler visualization where the color intensity of each point corresponded to the time sales value. Darker colors indicated higher time sales.
- Conducted a thorough analysis of the visualizations generated by Kepler to interpret and understand the spatial distribution and intensity of time sales across the top 50 markets.

50 Leading National Spot Television Markets						
(Fiscal Year 1961)						
Rank	Market	No. of Stations Reporting	Time Sales National, Regional, and local advertisers and sponsors*			
1.	New York, N. Y. ....	7	\$59,928,711			
2.	Los Angeles, Calif. ....	5	29,481,507			
3.	Chicago, Ill. ....	4	27,982,679			
4.	Philadelphia, Pa. ....	3	18,519,835			
5.	Baltimore, Md. ....	3	15,530,110			
6.	Detroit, Mich. ....	3	10,798,087			
7.	Pittsburgh, Pa. ....	3	10,726,975			
8.	Kansas City, Mo. ....	3	10,501,590			
9.	San Francisco-Oakland, Calif. ....	4	9,791,446			
10.	St. Louis, Mo. ....	4	8,196,610			
11.	Hartford-New Haven, Conn. ....	4	7,757,298			
12.	Hartford-New Haven-New Britain, Conn. ....	5	7,016,968			
13.	Baltimore-Northern Falls, N. Y. ....	3	6,908,885			
14.	Baltimore, Md. ....	3	6,904,113			
15.	Milwaukee, Wisc. ....	4	5,877,647			
16.	Minneapolis-St. Paul, Minn. ....	3	5,656,135			
17.	Kansas City, Mo. ....	5	5,656,106			
18.	Seattle-Tacoma, Wash. ....	5	5,488,100			
19.	Indianapolis-Bloomington, Ind. ....	4	5,419,561			
20.	Houston-Galveston, Tex. ....	3	5,287,055			
21.	Houston-Galveston, Tex. ....	4	5,234,058			
22.	Houston, Tex. ....	3	4,950,197			
23.	Miami, Fla. ....	3	4,597,480			
24.	Columbus, O. ....	3	4,551,590			
25.	Atlanta, Ga. ....	3	4,398,754			
26.	Denver, Colo. ....	4	3,634,025			
27.	Albany-Schenectady-Troy, N. Y. ....	3	3,540,293			
28.	Albany-Schenectady-Troy, N. Y. ....	3	3,504,257			
29.	Albany-Schenectady-Troy, N. Y. ....	3	3,471,747			
30.	New Orleans, La. ....	3	3,338,200			
31.	Tampa-St. Petersburg, Fla. ....	3	2,983,439			
32.	Tampa-St. Petersburg, Fla. ....	3	2,883,129			
33.	Oklahoma City-Enid, Okla. ....	3	2,731,925			
34.	Charleston-Huntington, W. Va.-Ashland, Ky. ....	3	2,691,360			
35.	Rochester, N. Y. ....	3	2,387,922			
36.	Des Moines, Iowa. ....	3	2,300,575			
37.	San Antonio, Tex. ....	4	2,304,452			
38.	Johnstown-Altoona, Pa. ....	3	2,193,441			
39.	Portland, Ore. ....	3	2,159,059			
40.	Tulsa, Okla. ....	3	2,095,105			
41.	Spokane, Wash. ....	3	2,066,575			
42.	Charleston-Oak Hill-Huntington, W. Va.-Ashland, Ky. ....	3	1,939,130			
43.	Charleston-Oak Hill-Huntington, W. Va.-Ashland, Ky. ....	4	1,895,817			
44.	Phoenix-Mesa-Scottsdale, Ariz. ....	3	1,781,403			
45.	Portland-Portland Springs, Me. ....	4	1,704,965			
46.	Fresno, Calif. ....	3	1,658,969			
47.	Montgomery-Danville-Urbandale, Ill. ....	5	1,658,056			
48.	Fresno, Calif. ....	3	1,529,944			
49.	Flint-Saginaw-Bay City, Mich. ....	3	1,579,783			

50 Leading National Spot Radio Markets						
(Fiscal Year 1961)						
Rank	Market	No. of Stations Reporting	Time Sales National, Regional, and local advertisers and sponsors*			
1.	New York, N. Y. ....	30	\$26,612,905			
2.	Chicago, Ill. ....	28	12,374,150			
3.	Los Angeles, Calif. ....	30	9,241,312			
4.	Philadelphia, Pa. ....	20	8,625,580			
5.	Detroit, Mich. ....	11	6,770,324			
6.	Boston, Mass. ....	17	5,214,804			
7.	Seattle-Puget Sound, Calif. ....	13	5,113,123			
8.	St. Louis, Mo. ....	14	3,744,028			
9.	Washington, D. C. ....	9	3,407,327			
10.	Washington, D. C. ....	17	3,429,143			
11.	Cincinnati, Ohio. ....	8	3,081,233			
12.	Buffalo-Niagara Falls, N. Y. ....	20	3,070,523			
13.	Buffalo, N. Y. ....	11	2,505,245			
14.	Minneapolis-St. Paul, Minn. ....	12	2,491,049			
15.	Kansas City, Mo. ....	9	2,090,350			
16.	Hartford, Conn. ....	12	1,846,447			
17.	Kansas City, Mo. ....	11	1,847,639			
18.	Seattle-Tacoma, Wash. ....	13	1,875,491			
19.	Seattle-Tacoma, Wash. ....	18	1,731,000			
20.	Seattle, Wash. ....	8	1,659,052			
21.	Miami, Fla. ....	6	1,649,472			
22.	Seattle, Wash. ....	16	1,554,554			
23.	Seattle, Wash. ....	6	1,576,674			
24.	Columbus, O. ....	9	1,537,961			
25.	Indianapolis, Ind. ....	6	1,490,004			
26.	Indianapolis, Ind. ....	7	1,386,142			
27.	Louisville, Ky. ....	6	1,386,142			
28.	Albany-Schenectady-Troy, N. Y. ....	9	1,386,142			
29.	Albany-Schenectady-Troy, N. Y. ....	12	1,322,334			
30.	Denver, Colo. ....	6	1,285,876			
31.	Rochester, N. Y. ....	10	1,217,001			
32.	Memphis, Tenn. ....	10	1,217,779			
33.	San Antonio, Tex. ....	10	1,188,005			
34.	Seattle, Wash. ....	9	1,188,390			
35.	Sacramento, Calif. ....	6	1,123,124			
36.	Syracuse, N. Y. ....	7	1,105,105			
37.	Nashville, Tenn. ....	8	947,313			
38.	Tampa-St. Petersburg, Fla. ....	15	925,760			
39.	Tampa-St. Petersburg, Fla. ....	11	925,760			
40.	Tampa-St. Petersburg, Fla. ....	12	874,411			
41.	Cedar Rapids, Iowa. ....	12	859,598			
42.	Birmingham, Ala. ....	7	843,261			
43.	Portland, Ore. ....	11	806,399			
44.	Fort Worth, Tex. ....	7	798,149			
45.	Jacksonville, Fla. ....	11	724,629			
46.	Phoenix, Ariz. ....	15				
47.	Portland-Portland Springs, Me. ....	16				
48.	Fresno, Calif. ....	17				
49.	Montgomery-Danville-Urbandale, Ill. ....	18				
50.	Fresno, Calif. ....	19				

1	A	B	C	D	E	F	G	
1	New York	NY (New York)	40.712775	-74.0059728	7	26,612,905	58,657,711	
2	2	Chicago	IL (Chicago)	41.9781136	-87.997982	4	28,072,507	5,074,207
3	3	Baltimore	MD (Baltimore)	38.923948	-76.6121993	3	22,339,404	3,983,953
4	4	Philadelphia	PA (Philadelphia)	39.9525839	-75.1652215	3	18,519,832	3,000,353
5	5	Boston	MA (Boston)	42.360285	-71.058801	3	13,866,110	2,000,353
6	6	Detroit						