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# A Survey to Determine if a Positive Correlation Exists Between Cost of Production and Rates Charged for Advertising Space in South Dakota Weekly Newspapers

Harry D. Dawson

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A SURVEY TO DETERMINE IF A POSITIVE  
CORRELATION EXISTS BETWEEN COST OF PRODUCTION  
AND RATES CHARGED FOR ADVERTISING SPACE  
IN SOUTH DAKOTA WEEKLY NEWSPAPERS

BY

HARRY D. DAWSON

A thesis submitted  
in partial fulfillment of the requirements for the  
degree Master of Science, Major in  
Printing Management, South Dakota  
State University

1968

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This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable as meeting the thesis requirements for this degree, but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser Date

Head, Printing-Journalism Department Date

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## CHAPTER I

### INTRODUCTION

The primary purpose of a newspaper publisher, weekly or daily, is to operate his business in a manner to give his customers what they want and expect in a newspaper, and to show a profit on his investment in the business.

Income for most weekly and small daily newspapers is derived from three major sources, advertising space sales, subscription sales, and commercial printing sales and service. Some establishments also have another source of income--office supplies and equipment.

The sale of advertising space in the newspaper is the main source of income for most newspapers. Advertising sources for weekly and small daily newspapers are national advertising, local and classified advertising and legal advertising.

Orders for national advertising are usually received through the state newspaper association or advertising service, or directly from advertising agencies. Such advertising is designed for the large manufacturer's market, and is not necessarily local in nature.

Local advertising, including classified advertising, is usually solicited in the newspaper's immediate area by the staff of the newspaper. Legal advertising consists of public notices placed by officials of various political subdivisions. This includes minutes of official board meetings, notices for public bids, and other public business required to be published. Legal advertising is also placed by attorneys acting for their clients, such as notices required for

estate settlement.

Rates for legal advertising are set by legislative action and cannot be increased arbitrarily by the publishers.<sup>1</sup> The basis for legal rate is usually specified by the size of type and the length of line to be used in composition. Variations from the standards specified, if any, are calculated on the basis of the specified standard.

Rates for local and classified advertising are established by the individual newspaper and are usually based on the column inch. The column inch term means the space which is one column of the newspaper wide and one inch deep. This space varies slightly among newspapers because of differences in the width of columns.

Column width is usually expressed in terms of picas. A pica is a linear measurement, approximating one-sixth of an inch. The most common column width used in South Dakota weekly newspapers is 12 picas, or two inches.

National advertising rates are established by individual newspapers and are usually quoted on an agate line basis. An agate line is a unit of measurement for depth, 14 agate lines equal one column inch. Thus the area of space used by 14 agate lines also varies, depending on the column width. The rate is usually expressed in a number divisible by seven, for easier calculation in converting to column-inch rate.

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<sup>1</sup> South Dakota Code, Sec. 65.0512 as amended by Chapter 500 Session Laws of 1957.



### The Problem:

National advertising rates for weekly newspapers show a wide variation. This is true of weekly newspapers in other geographical areas of the United States as well as South Dakota, as evidenced by rates published in Weekly Newspaper Rates and Data, a publication of Standard Rate and Data Service, Inc., issue of March 15, 1967.<sup>2</sup> Rates for South Dakota weekly newspapers may also be found in the 1967 South Dakota Directory and Rate Book, published by the South Dakota Press Service, Inc.<sup>3</sup>

Circulation figures are normally used as one of the criteria in establishing advertising rates. Because of the higher cost of distribution of more copies of the newspaper, more raw material used in assembling the newspaper, more time consumed on press runs and the wider audience reached by the publication for the benefit of the advertiser, the newspaper with the higher circulation should have the higher advertising rate.

The fact that the above-mentioned criterion does not always hold true, is attested by information contained in Table 1. For comparison some rates for weekly newspapers in states outside the immediate geographic area of South Dakota are listed, with the information taken directly from Weekly Newspaper Rates and Data.<sup>4</sup>

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2 Weekly Newspaper Rates and Data: Standard Rate and Data Service, March 15, 1967.

3 1967 South Dakota Newspaper Directory and Rate Book, South Dakota Press Service, Inc.

4 Weekly Newspaper Rates and Data.

TABLE 1

Circulation and Advertising Rates of a random selection of newspapers in four states

State and Newspaper	Circulation	Column Inch Rate
<u>Alabama</u>		
Alexander City, Outlook . . . . .	4,888	\$1.12
Cullman, Tribune . . . . .	2,417	.77
Gunterville, Advertiser-Gleam . . . . .	3,656	.98
<u>Arizona</u>		
Cottonwood, Verde Independent . . . . .	2,758	1.35
Globe, Arizona Record . . . . .	2,959	1.40
Miami, Arizona Silver Belt . . . . .	2,180	1.40
Heber Springs, Cleburne County Times . . . . .	2,664	.70
<u>Washington</u>		
Dayton, Chronicle . . . . .	2,026	.91
Vashon, Vashon-Maury Island Beachcomber . . . . .	2,116	1.12
Prosser, Record-Bulletin . . . . .	2,051	1.05
Sunnyside, Sun . . . . .	3,016	1.12
<u>Maine</u>		
Belfast, Republican Journal . . . . .	4,961	1.40
Caribou, Aroostock Republican . . . . .	5,154	1.26
Ellsworth, American . . . . .	3,955	.98
Houlton, Pioneer-Times . . . . .	4,077	1.26

Table 1 shows that in only one of the states listed, Alabama, the sample showed a direct relationship between size of circulation and advertising rate. The discrepancy between rates and circulation noted in the other states applies also to weekly newspapers in South Dakota.<sup>5</sup>

A factor that could cause a variance in cost of production from one part of the country to another is the different rate paid for

<sup>5</sup> 1967 South Dakota Newspaper Directory and Rate Book.

labor. Labor is a significant factor in newspaper production costs. A survey of mechanical costs of newspaper operations as reported in the Inland Daily Press Association Service Bulletin found a figure of \$11 per year per subscriber as average.<sup>6</sup>

A study of labor costs in the typographical industry for the first quarter of 1967 showed South Dakota with an average work week of 40 hours and a weekly pay rate of \$121.80 to \$137.80. The rate in Alabama for the same period showed an average work week of 37 1/2 hours with a pay rate of \$114.80 to \$150.60; Arizona showed a pay rate of \$130.50 to 143.50 for 37 1/2 hours per week; Washington \$141.75 to \$157.25 for a 35 hour week; and Maine \$131.00 for a 37 1/2 hour week.<sup>7</sup>

National averages for printing and publishing wages in the last quarter of 1966 were \$116.84 for a 36.4 hour week.<sup>8</sup> Average weekly earnings in this industry in South Dakota in June 1967 were \$114.84.<sup>9</sup>

Although the above figures show some variation in pay scale, the national and South Dakota averages are not far apart.

According to the Inland Daily Press Association study, advertising department expense per subscriber differs very little regardless of circulation. A difference of only a few cents is shown between

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6 Inland Daily Press Association, Service Bulletin, December 11, 1964, page 215.

7 American Newspaper Publishers' Association, Bulletin of Labor Relations Committee, July 1, 1967, page 422.

8 Business and Defense Services Administration, Quarterly Report, January 1967, page 10.

9 School of Business University of South Dakota, Business Research Bureau, August 1967, page 12.

newspapers of 3,000 and of 109,000 circulation.<sup>10</sup>

One of the negative attitudes of advertising agencies toward the use of weekly newspapers as a medium is the claim that the costs of placing ads in weekly newspapers is disproportionately higher than other media. Whether this is a valid claim is beyond the scope of this study, but production costs of weekly newspapers are increasing, thus posing the threat of even higher rates and even more adverse commentary from agencies.

The cost of advertising in weekly newspapers has risen sharply in the last 5 to 10 years. In the last 10 years the average line rate has increased 41.7 per cent and in the last five years 18.1 per cent. But unlike other media, the greatest portion of this increase represents increased circulation. Average circulation in 1956 was 2,186; 2,606 in 1961; and 3,259 in 1966. This represents a 10 year increase of 49.1 per cent and a five-year increase of 25.1 per cent.<sup>11</sup>

Objective:

This study will be concerned with advertising income and production expense of South Dakota weekly newspapers from the standpoint of a justified advertising rate. From published advertising rates and expense data received from individual South Dakota weekly newspaper publishers, the author will endeavor to establish an average rate charged per unit of advertising and compare it with an average cost of producing that unit.

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10 Inland Daily Press Association, Service Bulletin.

11 George S. Burrows, "Weekly Newspaper -- The Pros and Cons", Media/scope, October 1967, page 53.

## CHAPTER II

### METHODOLOGY

This study was made by examining answers to a questionnaire mailed to 139 South Dakota weekly newspaper publishers representing 149 weekly newspapers in the state. (Appendix)

Data received from the publishers responding to the questionnaire were tabulated for easy reference and comparison. Responses were divided into eight groups according to circulation size of the newspaper. Because South Dakota is predominantly a "small town" state, the usual break-down of newspaper size into 1,000 circulation bracket increments was changed to yield a 400-circulation bracket.

The eight groups included: Group I, up to 400 circulation; Group II, 401 to 800; Group III, 801 to 1,200; Group IV, 1,201 to 1,600; Group V, 1,601 to 2,000; Group VI, 2,001 to 2,400; Group VII, 2,401 to 2,800; and Group VIII, more than 2,800.

Information asked of the respondents included the width of their columns in picas, page size in columns and inches, average number of pages issued per year and the average percentage of advertising per issue. From this information a figure representing the average annual income from advertising could be ascertained by computing the average number of advertising inches and multiplying by the published advertising rate for the individual newspaper.

Because of the variation reported in column widths used, the unit of advertising for comparison purposes was reduced to the square inch. This is done by obtaining the square picas area of the column

inch for each newspaper and dividing the number by 36, the number of square picas in a square inch.

Each respondent was also asked for annual gross expense. This figure was the cost of his entire operation but provided a yardstick or factor for placing a figure on cost of advertising production for comparison purposes.

The questionnaire also included a question to obtain the percentage of cost attributed to commercial job printing by the individual respondent. This figure was subtracted from total gross expense before computation was made on advertising unit cost figures.

To check the validity of the study, the average circulation as reported by respondents of each group was compared to the average circulation in that group size according to the published rate directory of the South Dakota Press Service, Inc. Rate spread and average rate were also checked against the averages derived from the published figures of all weekly newspapers in the state. This comparison showed very little deviation, so the answers as received were accepted as valid.

Cost figures were accepted as furnished by the publishers with the exception of a few of the smaller circulation newspapers where the publisher's salary was not included in the answer on gross annual expense. The reason for this omission is explained by the fact that some smaller operations do not keep sufficient records to furnish usable figures. After expenses are paid in such operations, the "manager takes what's left."<sup>12</sup> To offset this omission, an

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<sup>12</sup> Allan Smith, Hecla Independent, notation on questionnaire.

arbitrary figure of \$6,000 was added where it was apparent that this expense was omitted from the gross expense. This figure is the minimum suggested by the National Newspaper Association 1966 Weekly Newspaper Cost Study.<sup>13</sup>

To keep the study as accurate as possible, only those newspapers where all of the composition and presswork was done in the home plant were included in the study. Where central printing plants are used by several newspapers, the ratio of professional and clerical help to skilled craftsmen is upset. In the central plant operation fewer shop workers are needed to produce the newspapers than would be employed if the newspapers were each produced in a separate plant.

Published advertising rates in South Dakota weekly newspapers range from a low of 35 cents a column inch to a high of 98 cents a column inch among 149 newspapers of circulations ranging from 201 to 5,520.<sup>14</sup> The average rate in 1967 was 62 cents a column inch. This was the rate charged on the column inch or agate line basis with no adjustment for differences in column widths.

Costs per page of composition could vary considerably because of the format or page size used by the individual newspaper. It is reasonable to assume, other things being equal, that composition costs would be more for an eight-column, 22-inch page than for a

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<sup>13</sup> National Newspaper Association, 1966 Weekly Newspaper Cost Study, page 3.

<sup>14</sup> South Dakota Press Service, Inc., 1967 South Dakota Newspaper Directory and Rate Book.

five-column, 15-inch page.

Advertising inches only were used in computing the square-inch cost of production. This figure was calculated from the total number of inches published and the average percentage of advertising contained in the total number of inches. The gross column-inch expense was then reduced to square inch expense for comparison purposes.

The number of employees needed for production in the various size newspapers was ascertained from the questionnaire. Full and part-time employees as listed on the questionnaire were used to compute a man-hour basis for each newspaper. Using a 40 hour week as a standard, the average number of employees for each group was established. The employee factor would obviously have considerable bearing on production costs.

The average square-inch cost for each group of newspapers was then compared to the average circulation for each group to establish an average cost per 100 circulation. This part of the study will be made available to publishers who indicated a desire for the information when the questionnaire was answered. (See appendix)



## CHAPTER III

### FINDINGS

This study was made by examining answers to a questionnaire mailed to 139 South Dakota publishers representing 149 weekly newspapers in the state. The difference in the total number of weekly newspapers and the total of the mailing is accounted for because in 10 instances one publisher produces two newspapers in the same or adjacent communities.

A total of 54 publishers responded to the questionnaire, yielding 51 usable responses. One response from an establishment which was primarily a commercial printing plant did not provide answers because the questions on the form were applicable to the usual weekly newspaper operation and not to a commercial printing plant. Two other publishers failed to include information on their operation cost. Some of the information in the latter two responses was used in computing circulation and advertising rate averages to check validity of the sample. Some of the information in these incomplete responses was also used to compute averages of mechanical format used by South Dakota weekly newspapers.

Information furnished by the respondents, when reduced to mean averages of the sample, showed the average South Dakota weekly newspaper had a circulation of 1,398. The average page size was 7 columns wide by 19 inches deep. The average column width was 11 picas and 9 points. The average number of pages published by the respondents was 9 each week with 54 per cent of the space in the

newspaper devoted to advertising. The average newspaper employed 4.6 persons, including the publisher.

These averages were determined from data received from 53 newspapers. These averages compared favorably with averages computed from information contained in the 1967 South Dakota Newspaper Directory and Rate Book for the entire population of weekly newspapers in South Dakota. See Table 2.

TABLE 2

Comparison of Respondents' answers with information published in 1967 South Dakota Newspaper Directory and Rate Book on all weekly Newspapers in South Dakota

Group	Total* No. of Papers	No. Resp.	Total* Avg. Circ.	Resp. Avg. Circ.	Total* Avg. Rate	Resp. Avg. Rate
Group I (1-400 Circ.)	11	2	270	262	.45¢	.38¢
Group II (401-800 Circ.)	35	12	617	670	.53¢	.54¢
Group III (801-1200 Circ.)	37	16	943	989	.59¢	.61¢
Group IV (1201-1600 Circ.)	20	6	1395	1361	.69¢	.67¢
Group V (1601-2000 Circ.)	12	6	1764	1701	.75¢	.75¢
Group VI (2001-2400 Circ.)	6	3	2179	2257	.78¢	.79¢
Group VII (2401-2800 Circ.)	6	1	2492	2420	.74¢	.70¢
Group VIII (Over 2801 Circ.)	12	7	3599	3544	.93¢	.93¢

\*Note: 1967 South Dakota Newspaper Directory and Rate Book

A comparison of the averages in Table 2 shows the similarity of the responses in this study to the total weekly newspaper population

in the state. There is only slight deviation between the averages in circulation and advertising rates computed from respondent data and corresponding averages taken from information in the SDPS rate directory.

Although the percentage of responses varied among the respondent groups, this variation did not apparently affect the circulation and rate comparison within and between the groups.

The advertising rate spread within each group, from lowest to highest, is shown in Table 3. This information was taken from the 1967 South Dakota Newspaper Directory and Rate Book and showed a considerable deviation in advertising rates for newspapers in the same circulation group. The computed data showed no positive correlation between advertising rates and circulation.

Average cost figures for the several groups was computed from information furnished by respondents. To arrive at a yardstick or a cost figure for comparison, the percentage of advertising carried by each newspaper was multiplied by the total column inches it carried. This reduced the advertising percentage to column inches of advertising. This figure was then divided into the total expense to provide a figure that could be used for cost of production per column inch of advertising for the particular newspaper. These figures on costs of production were then averaged by groups for comparison with average advertising rates for that group. This comparison was made to see if the advertising rate charged was justified by cost of production figures.

The answers compiled by this method for average cost of

production per column inch showed no correlation with advertising rates or with circulation figures.

TABLE 3

Advertising rate spread among newspapers in each group from information published in the 1967 South Dakota Newspaper Directory and Rate Book

Group	Low adv. Rate	High adv. Rate	Difference
Group I (1-400 Circ.)	.35¢	.56¢	.21¢
Group II (401-800 Circ.)	.42¢	.84¢	.42¢
Group III (801-1200 Circ.)	.42¢	.84¢	.42¢
Group IV (1201-1600 Circ.)	.56¢	.98¢*	.42¢
Group V (1601-2000 Circ.)	.63¢	.98¢	.35¢
Group VI (2001-2400 Circ.)	.70¢	.98¢	.28¢
Group VII (2401-2800 Circ.)	.56¢	.84¢	.28¢
Group VIII (Over 2801 Circ.)	.84¢	.98¢	.14¢

\*Note: A reason for the wide deviation in this group is explained because of an error made by one publisher in listing his rate. Instead of correcting the error, it was allowed to stand and some other publishers, noting the higher rate, then raised their own rates.<sup>15</sup>

With one exception--Group VII--the figures for average circulation and average rate for a column inch showed a positive correlation as shown in Table 4. However, when the circulation and advertising rate is compared with the average cost of production for

<sup>15</sup> Homer Givens, Secretary South Dakota Press Association, conversation, September 21, 1967.

a column inch the correlation is nil.

TABLE 4

A comparison of average circulation and average advertising rates charged per column inch with cost of production per column inch of respondent newspapers

Group	Average Circulation	Avg. Adv. Rate charged per col. in.	Avg. cost of production per col. in.
Group I (1-400 Circ.)	262	.38¢	.91¢
Group II (401-800 Circ.)	670	.54¢	.49¢
Group III (801-1200 Circ.)	943	.61¢	.74¢
Group IV (1201-1600 Circ.)	1395	.67¢	.53¢
Group V (1601-2000 Circ.)	1764	.75¢	.81¢
Group VI (2001-2400 Circ.)	2179	.79¢	.79¢
Group VII (2401-2800 Circ.)	2492	.70¢	.62¢
Group VIII (Over 2801 Circ.)	3599	.93¢	.88¢

When the average inch rate as computed from the 1967 South Dakota Newspaper Directory and Rate Book and the average inch rate as computed from the respondents' answers was compared to the average cost of production for a column inch of advertising, a plus or minus factor was found. Where the cost of production was more than the charged rate, the minus factor would indicate that the charged rate was too low to meet production costs. Where the factor was on the plus side a margin of profit would be indicated. The largest variation occurred between Groups III and IV where the total deviation

was 31¢, from a loss of 15¢ a column inch on production in Group III to a profit of 16¢ a column inch in Group IV. This information is illustrated in Table 5.

TABLE 5

Comparison of average advertising rates as published in the 1967 South Dakota Newspaper Directory and Rate Book, average advertising rates established from respondents' answers with average cost of production computed from respondents' answers.

Group	Avg. inch Rate SDPS*	Avg. Resp. inch rate	Avg. inch cost of Resp.	Diff. on Resp. Avg. Rate	Diff. on SDPS Avg. Rate *
Group I (1-400 Circ.)	.45¢	.38¢	.91¢	-.53¢	-.46¢
Group II (401-800 Circ.)	.53¢	.54¢	.49¢	+.05¢	+.04¢
Group III (801-1200 Circ.)	.59¢	.61¢	.74¢	-.13¢	-.15¢
Group IV (1201-1600 Circ.)	.69¢	.67¢	.53¢	+.14¢	+.16¢
Group V (1601-2000 Circ.)	.75¢	.75¢	.81¢	-.06¢	-.06¢
Group VI (2001-2400 Circ.)	.78¢	.79¢	.79¢	.00¢	-.01¢
Group VII (2401-2800 Circ.)	.74¢	.70¢	.62¢	+.08¢	+.12¢
Group VIII (Over 2801 Circ.)	.93¢	.93¢	.88¢	+.05¢	+.05¢

\*Note: 1967 South Dakota Newspaper Directory and Rate Book

As shown in Table 5, the differences between average advertising rate and the average cost of production indicated no defined balance of advertising rate against cost of production in approximately half of the groups studied. Some indication is given by these figures that the larger operations are the most efficient.

The Group VI category should not be weighted too heavily in the over-all comparison because of the fact that the figures represent the operation of one newspaper.

Group IV, where the average size by circulation is nearest the over-all state average of size by circulation, showed the best rate-to-cost comparison. The groups on either side of Group IV showed a less favorable ratio.

To reduce the figures on column-inch advertising rate and column-inch production costs to square inch costs for comparison would not add to the understanding of the study because the ratio by group would be the same as the column-inch comparison. However, for a more meaningful comparison the cost figures are put into a square-inch basis for each 100 circulation. These cost figures are shown in Table 6. This unit brings the cost figures down to a universal that can be compared with each individual newspaper operation regardless of column width or circulation.

A factor in cost of production is the ratio of employees needed for the various sizes of operations. Averages for the number of employees of each group are listed in Table 7. As pointed out earlier in the study, these averages were computed from information furnished by respondents. For uniformity in compiling averages, the work week was arbitrarily established at 40 hours per man with the manager or proprietor included as one employee. The 40-hour work week was selected as an average because in many weekly newspaper operations employees are not hired or paid by the hour but work on a weekly pay basis and work the number of hours needed to

accomplish the objective of publishing the newspaper on a certain day each week.

TABLE 6

Cost of production per square inch of advertising  
by groups for each 100 circulation

Group	Cost of advertising production per square inch
Group I (1-400 Circ.) . . . . .	.174¢
Group II (401-800 Circ.) . . . . .	.040¢
Group III (801-1200 Circ.) . . . . .	.039¢
Group IV (1201-1600 Circ.) . . . . .	.020¢
Group V (1601-2000 Circ.) . . . . .	.024¢
Group VI (2001-2400 Circ.) . . . . .	.019¢
Group VII (2401-2800 Circ.) . . . . .	.013¢
Group VIII (Over 2801 Circ.) . . . . .	.013¢

That the small weekly newspaper is a one-man operation is indicated by the figures in Table 7. The table also shows a positive correlation between number of employees needed and the size of the newspaper operation based on the circulation criteria.

TABLE 7

Average number of employees for newspapers in each group

Group	Avg. No. of employees
Group I (1-400 Circ.) . . . . .	1.0
Group II (401-800 Circ.) . . . . .	1.6
Group III (801-1200 Circ.) . . . . .	1.7
Group IV (1201-1600 Circ.) . . . . .	3.4
Group V (1601-2000 Circ.) . . . . .	3.5
Group VI (2001-2400 Circ.) . . . . .	5.7
Group VII (2401-2800 Circ.) . . . . .	7.0
Group VIII (Over 2801 Circ.) . . . . .	10.7



## CHAPTER IV

## CONCLUSIONS

This study did not attempt to prove any hypothesis, but rather was designed to raise questions about a vital subject. By using this method of comparison of advertising rates charged and cost of production in weekly newspapers in South Dakota, there appears to be no valid justification for the advertising rates established for some operations.

Data collected for newspapers in Groups I and VII were sparse, with returns from only a relatively small portion of the total.

For Group I information was collected from two publishers of a possible total of 11. This may be the reason that the largest deviation in figure comparison with known data appeared in this group. Although a considerable deviation was indicated in the average rate computed, the average circulation figure of the two was close to the total group average. If this deviation occurring in the rate figures were constant in other figures, the relatively high cost per square inch of production for this group might be even higher.

Another consideration for the above conclusion is the arbitrary amount selected for addition to production costs for the manager's salary--\$6,000. This figure was the minimum suggested by the National Newspaper Association study,<sup>16</sup> and for the year 1967 is

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<sup>16</sup> National Newspaper Association, 1966 Weekly Newspaper Cost Study.

probably low. This arbitrary amount was added to data furnished by both respondents in this group.

Column inch production costs computed for newspapers in Group I, when compared to advertising rates charged per column inch, indicated inefficient operations, or what is more probable, insufficient size for efficient operations. Where column-inch production costs are more than double the rate charged for the space, a good source of other income must be present to justify the continued existence of newspapers in this group.

Data collected from respondents in Group II show good evidence of validity when compared with known data on these newspapers taken from the 1967 South Dakota Directory and Rate Book. The 12 respondents, from a possible total of 35, was sufficient to show a close correlation of known data on average rate charged and average circulation. The average rate compared with average cost of production for newspapers in this group indicated the operations are just above the break-even point, with a plus factor of approximately .05¢ of rate charged over production costs.

The largest deviations between rate charged and production costs occurred in Groups III and IV. Using the criteria of average published rate and average published circulation figures, with the same average figures computed from the respondents' answers, these groups showed very little deviation. However, the average cost of production for the groups showed a large difference--a total of 21¢ per column inch--with Group III the highest of the two. In the plus and minus factor column, Group IV with a plus factor of 14¢ to 16¢

per column inch difference of average rate over production cost showed a much healthier economic picture than Group III where the factor was a minus 13¢ to 15¢.

With a 50 per cent sample in Group V--6 of 12--data furnished by respondents showed an exact correlation on average rates charged and a close correlation on circulation when compared with known data on these elements taken from the SDPS rate book. Average cost of production per column inch in this group showed a considerably higher figure than that computed for Group IV. The higher figure on production costs of 81¢ for Group V, over 53¢ for Group IV, again caused the plus-minus factor of production cost compared with rate charged to show a minus .06¢ for Group V newspapers. This same figure held true on averages computed from the respondents' answers and averages computed from the SDPS rate book. This is also an indication these newspapers are operating near or below the economical break-even point.

Data averages for Group VI showed the same results as those for Group V. Three of a possible six publishers answered the questionnaire, and the correlation of data given by these respondents with data from the SDPS rate book on average rates and average circulation was close. The difference in rate charged and cost of production averages was practically zero, indicating that newspapers in this size category were operating at the break-even point.

Data collected for newspapers in Group VII were not sufficient to draw conclusions for the group. One publisher of a possible six, returned the questionnaire. Rate charged on this newspaper

and circulation figures given were close to the averages computed on the known data for the same items for the group. The rate compared to the computed cost of production per column inch showed this newspaper as a profitable operation with a plus factor of 12¢.

In Group VIII, using the same comparisons of average rates and average costs as outlined above, the plus-minus factor was computed as plus .05¢. This figure is an indication that newspapers in this group, although operating above the economical break-even point, are not operating as efficiently as the one respondent in Group VII. Among Group VIII newspapers the criteria for correlation of average rate charged and circulation as compared with the rate book information was close. The average rate of respondent newspapers was exactly the same as the average rate of all newspapers in the group, with a variation of only 55 in circulation figures. A good sample was obtained in this group also, seven of a possible twelve publishers returned the questionnaire.

From the figures computed from respondents' answers there is an indication that there is a close positive correlation of average rate charged to average circulation. The one exception in positive progression of rates occurs in Group VII, but it should be remembered that this group was represented by only one newspaper.

When average rates charged per column inch and average cost of production per column inch are compared, no correlation exists from group to group. This would indicate that a rate revision was needed for selected newspapers in each group. Most newspapers in most categories need to raise rates to cover production costs. In

a few isolated instances where individual newspaper advertising rates are now considerably higher than other newspapers of the category, publishers should consider objections voiced by national advertising agencies against weekly newspaper rates and bring their rates in line with the others and with production cost.

All computation of rates and income in this study were made from national advertising rates listed for each newspaper. No effort was made to determine local rates or local discounts. In most cases the local rate is lower than the national rate, or a local discount makes it so in the final analysis. Publishers should consider this discrepancy when or if they contemplate a rate revision.

Quoting from Burrows in Media/scope:<sup>17</sup>

. . . The advertising rate charged national advertisers is approximately 25-100 per cent higher than the local rate. This is unfair to the national advertiser. As a result, many of the advertiser's dollars that would be used for local newspaper advertising are turned over to retailers in the form of co-op allowances.

According to a National Newspaper Association survey,<sup>18</sup> local advertising is responsible for about 81 per cent of total advertising income on the average newspaper operation. If the difference between local rate and national rate is considerable, the individual publisher should give some thought to adjustment of local rate to bring his income up to costs, rather than an unwarranted increase in the national rate.

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<sup>17</sup> Media/scope.

<sup>18</sup> National Newspaper Association, 1956 Weekly Newspaper Cost Study.

A comparison of average rates and average wages showed little difference between newspaper operations in South Dakota and certain other states. When the three figures of average rates charged, average circulation and average wage paid are compared there is little justification for a deviation in rates within a category. This wide variation of rates of newspapers in the same circulation category is not exclusive to South Dakota weekly newspapers, as can be noted by a study of Table 1.

Another area of concern, not covered by this study, is the reliability of circulation figures. Certain discrepancies were noted in circulation figures provided by respondents in the survey and those provided by the same newspapers for the 1967 South Dakota Press Service directory. Although not great, the different figures add credence to another statement by Burrows in *Media/scope*:<sup>19</sup>

... Accurate circulation statements are important. Advertisers are a bit skeptical of weekly circulation figures in view of the number of free distributed weeklies, and are reluctant to accept them at face value. Consequently, if they are to mean anything to the national advertiser, they should be audited figures which guarantee the circulation delivery for the advertiser.

### Summary

Data were collected for this study from publishers of South Dakota Weekly newspapers. Fifty-one usable responses were received from a mailing to 149 weekly newspapers in the state. Some phases of the data collected--advertising rates and circulation figures--were compared to known data published in the 1967 South Dakota

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19 *Media/scope*.

Newspaper Directory and Rate Book. The result of the comparison indicated the information furnished by respondents to be sufficiently accurate to make conclusions concerning the entire population of weekly newspapers.

To obtain a workable size group for comparison purposes, respondents' answers were put into eight categories according to circulation size of the newspaper. Group I, all newspapers up to 400 circulation; Group II, newspapers with circulation from 401 to 800; Group III, newspapers with circulation from 801 to 1,200; Group IV, newspapers with circulation from 1,201 to 1,600; Group V, newspapers with circulation from 1,601 to 2,000; Group VI, newspapers with circulation from 2,001 to 2,400; Group VII, newspapers with circulation from 2,401 to 2,800; and Group VIII, newspapers with circulation over 2,800.

From the data collected averages were computed for newspapers in the various size categories for rate charged for a column inch of advertising space, circulation of the group, and production cost of one column inch of advertising for each group.

Averages computed from the data collected showed a positive correlation between advertising rate charged and circulation, with one exception. The exception, in Group VII, could be explained because of the low percentage of the total population of that particular size group contained in the sample. Averages obtained on cost of production figures, however, showed no relationship from group to group or with advertising rate charged within the selected group.

The average advertising rate charged per unit was compared to

the average cost of production per unit within each group to obtain a plus or minus factor in cents. This figure was obtained to compare operations between groups and to give the individual newspaper publisher a figure to compare rate charged and cost of production on his own operation.

To further facilitate a comparison process for each individual newspaper, the cost of production was broken down to a cost per square inch for each 100 circulation, rather than a cost per column inch, to give each publisher a realistic value of comparison regardless of column width.

The plus or minus factor--found by comparing rate charged to production costs--could be used to determine an economical break-even point on the operation of the newspapers in the group or individually.

The wide deviation in plus or minus factors from group to group would indicate that a selected rate revision should be considered. Because of the deviation in rates among newspapers in each group a blanket revision is not advisable when some of the objections already voiced by advertising agencies to weekly newspaper rates is considered.

The apparent high cost of production for newspapers in Group I would indicate a source of other income necessary to justify the existence of newspapers in this group as sound business ventures. Further study on this possibility could be useful.

The study indicates that newspapers close to the average over-all size of weekly newspapers in South Dakota--circulation approximately 1,400--are the most efficient, and are producing the most profit on



advertising according to size, when compared to other groups in the study.

The wide deviation in the plus-minus factor for newspapers in Group III and Group IV, could provide an area for further study on this phenomenon. A possible answer might be gleaned from the average number of employees in each operation as computed and shown in Table 7. Group III newspapers might be understaffed and unable to operate as efficiently as the next larger group. A study of personnel necessary for an efficient newspaper operation based on circulation number or dollar volume of business annually might shed some information on this problem.

The average number of employees on newspapers in each group showed a positive correlation with circulation size, but the information obtained from respondents was not sufficient to attempt to determine an ideal relationship between number of employees and newspaper size by circulation alone. Other factors not included in the study, especially commercial job printing performed in each plant, could cause considerable variation in the number of employees for the individual operation.

The study indicates that many publishers should consider a rate revision, preferably in local advertising rates. A revision of advertising rates to bring them up to production costs would certainly be justified. At the same time this type of rate revision could possibly bring about a positive correlation between advertising rates charged and circulation figures to help overcome the reluctance of some advertising agencies to use weekly newspapers as a medium for

their wares.

Some publishers will probably question the criteria and conclusions of this study. Summary dismissal of these findings without serious individual study, however, could be a mistake if all cooperative efforts are to be used to secure the common objective--more national advertising lineage for weekly newspapers.

## APPENDIX A

## LETTER TO PUBLISHERS

Dear Publisher:

As a former South Dakota weekly newspaper publisher, I would liked to have made this a personal call and visit, but the expense and time involved in trying to contact all South Dakota weekly newspaper publishers personally would be prohibitive. I am therefore using this method in an attempt to gather information for a Special Survey project.

This project is being attempted, with the assistance of the office of the South Dakota Press Association, to determine if advertising rates and costs of production in South Dakota weekly newspapers have a significant relationship. The information supplied by you will be used only in computing averages and will not be used individually or divulged to anyone not directly connected with the project.

Please note the questions concerning gross expenses of your business are so arranged that we hope to be able to ascertain average costs of newspaper production only. Gross income is not asked for and is not wanted. (Besides, it is none of our business.)

Your cooperation in returning a completed questionnaire as promptly as possible will certainly be appreciated. Results will be available for those who want them for comparison purposes. It could be interesting to see how your operation compares with the average.

A self-addressed, stamped envelope is enclosed for your use in

returning the questionnaire.

Respectfully,

(Signed)  
Harry D. Dawson

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## APPENDIX B

## QUESTIONNAIRE

## QUESTIONNAIRE

Width of column in picas \_\_\_\_\_.

Page size of newspaper \_\_\_\_\_ columns x \_\_\_\_\_ inches.

Average circulation per issue \_\_\_\_\_.

Average number of pages issued per year \_\_\_\_\_.

Average percentage of advertising per issue \_\_\_\_\_.

Number of back shop employees: full time \_\_\_\_\_; part time  
\_\_\_\_\_. (If part time, please give number of hours per  
week \_\_\_\_\_).

Number of office employees: full time \_\_\_\_\_; part time \_\_\_\_\_.  
(If part time, please give number of hours per week \_\_\_\_\_).

How is newspaper produced? Letterpress \_\_\_\_\_ Offset \_\_\_\_\_.  
(Please indicate by check mark).

Is all mechanical production work done in your plant? \_\_\_\_\_

If answer to above is NO, please explain \_\_\_\_\_

What is your annual gross expense? \_\_\_\_\_.

(Give figure in nearest round numbers, including manager salary).

What percentage of above figure would you charge to commercial job  
printing done in your plant? \_\_\_\_\_

(Include percentage of fixed charges and percentage of employee  
time along with percentage of manager time).

In appreciation of your time and effort in filling out this survey form, figures on cumulative averages will be made available to participants if desired. No individual figures for any specific plant or newspaper will be released. If you desire the information on the results mailed to you on completion of the survey, please indicate by checking the appropriate box below.

No. I do not desire information on the results.

Yes. Please send information on the results as soon as it is available.

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(Name of person filling out answers)

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(Name of newspaper)

## APPENDIX C

## FINDINGS RETURNED TO PUBLISHERS

To comply with the request of South Dakota weekly newspaper publishers who answered the questionnaire mailed in September in regard to a rate/cost study by Harry D. Dawson, the following information is made available from the study.

A production cost per square inch of advertising for each 100 circulation was compiled by reducing the figures returned to a cost per square inch basis on the percentage of advertising carried in the individual newspapers.

The newspapers were divided into eight groups by circulation and averages taken on rates charged and on production costs. The division of newspapers was as follows:

Group I--newspapers with less than 401 circulation.

Group II--newspapers with circulation between 401 and 800.

Group III--newspapers with circulation between 801 and 1,200.

Group IV--newspapers with circulation between 1,201 and 1,600.

Group V--newspapers with circulation between 1,601 and 2,000.

Group VI--newspapers with circulation between 2,001 and 2,400.

Group VII--newspapers with circulation between 2,401 and 2,800.

Group VIII--newspapers with circulation over 2,801.

A production cost per square inch was tabulated for papers in each group on an average basis from the cost figures supplied by respondent publishers. Consideration was given here for various column widths so the cost figure would be as accurate as possible

regardless of column width of the individual newspaper.

The following table gives the average circulation of responding publishers and the average rate charged:

A comparison of newspaper groups on average circulation and average rate charged

Newspaper Group	Average Circulation	Average Rate Charged
Group I . . . . .	262	.38¢
Group II . . . . .	670	.54¢
Group III . . . . .	989	.61¢
Group IV . . . . .	1,361	.67¢
Group V . . . . .	1,701	.75¢
Group VI . . . . .	2,257	.79¢
Group VII . . . . .	2,420	.70¢
Group VIII . . . . .	3,544	.93¢

The individual publisher can use the figures below for comparison of his costs with the average for the group. These figures

Average production costs per square inch for newspapers in the various groups

Newspaper Group	Average production cost per square inch
Group I . . . . .	.174¢
Group II . . . . .	.040¢
Group III . . . . .	.039¢
Group IV . . . . .	.020¢
Group V . . . . .	.024¢
Group VI . . . . .	.019¢
Group VII . . . . .	.013¢
Group VIII . . . . .	.013¢



do not purport to be exact costs for each newspaper, but rather a group average for a comparison factor.

Further comparison is given in the table below where the average computed rate of respondents was compared with the rates as listed in the South Dakota Press Service Directory for newspapers in the same group. Average costs of production per column inch was also computed and compared with the average rates as figured from respondents answers and from the rate directory.

The plus and minus factors in the two right hand columns are the computed differences in the average rates charged and the average cost of production per column inch for the newspapers in each size group.

Comparison of average rates from respondent newspapers,  
average rates from SDPS Directory and cost of production  
per column inch for newspapers in each group

Newspaper Group	Avg. SDPS Rate	Avg. Rate of Resp.	Avg. inch cost of Resp.	Diff. on resp. Rate	Diff. on SDPS Rate
Group I	.45¢	.38¢	.91¢	-.53¢	-.46¢
Group II	.53¢	.54¢	.49¢	+.05¢	+.04¢
Group III	.59¢	.61¢	.74¢	-.13¢	-.15¢
Group IV	.69¢	.67¢	.53¢	+.14¢	+.16¢
Group V	.75¢	.75¢	.81¢	-.06¢	-.06¢
Group VI	.78¢	.79¢	.79¢	.00¢	-.01¢
Group VII	.74¢	.70¢	.62¢	+.08¢	+.12¢
Group VIII	.93¢	.93¢	.88¢	+.05¢	+.05¢

In making comparisons using the rate/cost structure table above, it would appear that some rate adjustments are in order for newspapers

in certain circulation groups. The difference is most apparent in Groups I, III and IV. We can hardly argue with success, so Group IV newspapers could be termed efficient operations.

Publishers should also remember that this cost per square inch figure was based on all advertising space at the national advertising rate. Where a lower local rate applies, or considerable local discounts are given, the cost figure would of course be higher.

A comparison of rates of newspapers of comparable size in some other states with South Dakota newspapers showed that weekly newspaper rates in South Dakota were slightly lower than in some states outside the midwest. Average wages paid in the industry in South Dakota were also slightly lower.

Individual publishers should inspect their own rate/cost averages. If there is a considerable difference between local and national rate, an adjustment in local rate could help the cost figure without an over-all rate raise to the national advertiser.

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