

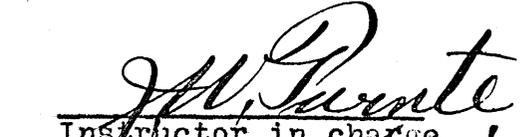
THE COST OF LIVING OF TEACHERS IN SIXTY-TWO
KANSAS COMMUNITIES

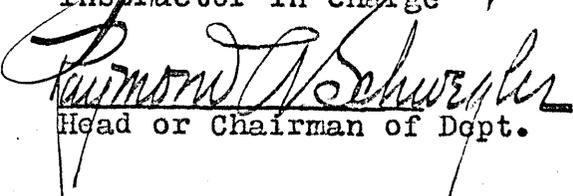
by

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the degree of Master of Science in Education.

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INTRODUCTION

WORK OF THE RESEARCH COMMITTEE OF THE
KANSAS STATE TEACHERS ASSOCIATION.

When the members of this committee faced a realization that the work of the School Code Commission authorized by the legislature of 1927 might take into consideration a reconstructed scheme of education in the state of Kansas, it was agreed to turn all the energies of the Committee to the making of studies necessary or desirable to place in the hands of the School Code Commission such information as would enable them to formulate a sounder policy in the administration of the schools of the state.

THE MAJOR PROBLEM

The major problem undertaken by the Committee was to show the need of equalizing the educational opportunity to children in every community in Kansas. The correlated problem growing out of this is the establishment of a definite minimum standard of instruction. In determining the cost of a given minimum standard unit of instruction in different Kansas communities the cost to teachers of food and housing accommodations must be considered a necessary factor for about 75 percent of the school budget is spent for salary of the teacher.

THE SPECIFIC PROBLEM STATED

The specific part of the problem assigned to the writer is,- To find what comparative differences exist in the cost of food and room rent for teachers in different

Kansas communities, and to determine what effect this should have on state aid in the support of public education based on a standard unit of instruction.

THE LOGIC OF THE INQUIRY

If this inquiry is logical it must rest on a proper conception of educational need in the community. The interpretation of educational need as used by Paul R. Mort¹ is,

"Educational need is the composite of all those elements in the community that would affect the cost of the educational offering demanded by a state program for making available to all children a satisfactory minimum educational program."

If differences in the cost of living affect the cost of the minimum educational program in Kansas, then the possibility of such differences constitutes a problem for study that is of interest in the present situation.

1. Mort, Paul R. The Measurement of Educational Need. Page 1. Bureau of Publications, Teachers College, Columbia University, 1924.

Chapter II

MEASURING THE COST OF LIVING

In undertaking a study of cost of living for teachers one first must see what has been done in the past and what use might be made of such studies. Cost of living figures have been compiled in the past mainly for arbitration boards¹ and for fixing of minimum wage. Since the war, which called for many adjustments of salaries, studies have been made covering subsistence and rent allowance to officer in various branches of governmental service. A history of earlier studies is given in the introduction of the government bulletin cited above.²

ESTABLISHING STANDARDS FOR SELECTION OF THE DATA

While it is true that some teachers are married and supporting a family, some live with their parents in the community, yet by far the greatest percent of teachers are single women living away from home. Since we must definite standards alike in all communities we have set as our standard for comparison of living costs,--the single woman teacher staying away from home and paying normal prices for board and room in the community.

While it might be suggested that the best method of determining cost of living would be to take the price paid

1. United States Bureau of Labor Statistics-The Use of Cost of Living Figures in Wage Adjustments. No 369, page 431, ff. Government Printing Office.
2. Ibid-See Introduction.

for board and room by teachers of the community, it must be recognized that expenditures differ in a community depending on standards of living. It is evident, then, at a glance that such data would not rightly indicate community differences in cost of living. It was found by the National Industrial Conference Board¹ that actual expenditures depend upon the available income, individual tastes and managerial ability. It is not the purpose of this study to find differences in the level of living for teachers in different communities, for such differences do exist, but rather to ascertain what difference exist among communities upon the same standard of living unaffected by salaries or social levels. We must constantly keep in mind that our final measuring stick is a standard minimum educational program for all communities.

We then turn to the other method of study, namely,--where we pick certain standard articles of living common to all communities and price them on a scale sufficiently wide to measure the community as a whole. This means that items priced must be found in each community of the state and certainly contained in the diet of all serving meals. Also the items must be of a standard grade such as butter,--first class creamery; flour,--Kansas high patent, bleached; Borden's condensed milk in pound cans. There is a reason, then, why canned goods such as corn and tomatoes are not included,--they vary in quality as used in different communities and different boarding houses and are not comparable as to price. It is necessary, also, to price these selected items in a number of stores in the

1. Cost of Living in the United States. 1925 Ch.I, National Industrial Conference Board.

community to get a community price on each item. As this study progresses it will be apparent that this is the type best suited to the study in hand.

LIMITING THE DATA

Studies by the Department of Labor and by special commissions have always attempted to build a normal budget for the group being investigated. When David P. Harry, Jr., faced the task of an original investigation¹ of the cost of living of teachers in the state of New York, he sought the possibility of shortening the items of the budget for the teachers of the state as well as making some needed adjustments. He found, for example, that studies made on working classes assigned a heavier proportion of the budget to food than would satisfy in his study for teachers and a corresponding lower proportion for savings, further education, etc. After wide investigation and comparison² Mr. Harry set the following weighted budget for teachers of New York state: food 25 percent, rent 20 percent, clothing 20 percent, miscellaneous articles and service 15 percent, savings and further education 20 percent. Because of the practise of wide difference in the buying of clothing and often in a larger community, all items except room rent; and food, were finally developed as a constant and the simplified budget recommended developed in his study is: food 22.5 percent, rent 20.5 percent, all other items constant at 57 percent. For a full development of this plan of elimination and shortening of the budget see his study referred to above.

1. David P. Harry, Jr.,--Cost of Living of Teachers in the State of New York, Teachers College Bureau of Publications, 1928 Columbia University, N. Y. City.
2. Ibed. Chapters I and II

LIMITING THE FOOD ITEMS

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The U. S. Bureau of Labor Statistics collects prices monthly on a food budget of 43 items in various communities throughout the country. D. P. Harry made a study of these and after determining to his satisfaction the reliability of the prices of these 43 food items, he tried out¹ different smaller groups of selected food items and found a surprisingly low variation in index. His final selection was 13 items making up a total of 73.563 percent of the average total price of food based on the original 43 items.

By careful comparison on the different communities studied on the basis of 43 items he found that the average of the difference between this 13-item estimated food index and the actual 43-item food index was less than 0.9 of one percent. The correlation between the two indexes was plus .992. The actual difference in dollars and cents for a whole year's food budget between the 13-item and the 43-item budgets, taken on the March 1923 bulletin of prices was only 8 cents for New York City, 62 cents for Rochester and \$1.89 for Buffalo. After checking on all of the 85 communities studied and working out the variations he shows conclusively that the 13-item food budget was a sufficient base to substitute in a predicted food formula and in the interest of brevity and more accuracy in obtaining data it is recommended in his study referred to above.

1. David P. Harry, Jr.,--Cost of Living of Teachers in the State of New York. Teachers College Bureau of Publications 1928. Chapters X and XI

In working out a prediction formula from the 13-item budget instead of dividing by 73.56 percent to get it on a basis of the whole budget he used the reciprocal as a multiplier, 1.1753. (The Monroe calculator works faster in multiplication) The formula then, as worked out is: 1.1753 times total weighted food prices of the 13 items, plus \$61.57. (The \$61.57 mentioned comes from the regression equation of the two distributions.) For a full discussion and justification of this formula see the last reference mentioned.

This brief discussion of the original study made in New York state by D. P. Harry is given to furnish foundation for the validity of the Kansas study.

Chapter III

SECURING THE DATA

For a study of this nature it is necessary to have a comparable unity of measure for the different communities; and in regard to the food prices, it is especially necessary that the data be secured at the same time. The forms used in securing the data for this study are known as the Mort-Harry forms developed from the study made in New York state. These forms secure from the different communities the prices of thirteen comparable food items and the rent of a carefully standardized room. The comparisons are worked out on a basis of indexes for food and for room rent. For an understanding of these forms and their validity of standardization see chapter II and the references given there. These forms were developed in connection with the state-wide study in New York and also used in Pennsylvania.

In securing food prices and room rent from the different communities, printed forms I-General Directions, II-Food Prices-in sufficient quantity to reach each store or market, III-Room Rent-with columns for rent by the week at different localities, these together with an introductory letter were sent to the superintendent in each community of over 1000 population in Kansas.¹ This list includes 11 first class cities, 77 second class cities, 53 third class cities, a total of 141.²

1. Appendix A. Forms for Securing Cost of Living.
2. Appendix A. List of cities in study, with those contributing and those not.

Replies in form for use were received from 6 first class cities, 38 second class and 18 third class cities, a total of 62. While this is not as large a number as hoped for, the distribution is quite wide including down the west side of the state,--Phillipsburg, Norton, Hays, Ness City, Garden City, and Liberal. Through the center of the state are included Belleville, Concordia, Salina, Abilene, McPherson, Halstead, Stafford, Kingman, Anthony. Through the eastern end of the state are included Atchison, Topeka, Valley Falls, Baldwin, Paola, Ottawa, Iola, Fredonia, Galena, and Girard. The only shortage in a proper representation is in the larger cities of southeast Kansas, and a shortage in the smaller towns. On the whole the data seem very reliable. These data were all secured in the month of May, 1928, mostly between May 5 and May 10.

CALCULATION OF THE FOOD INDEX

The prices on food were reported on Form II. A separate form was obtained for each store or market in the community that was visited by the investigators. This was done in some communities by the members of the Domestic Science classes, in others by the superintendent or a teacher assigned. The number of forms for a community ran as low in number as three and as high as thirty five. The first step was a careful check on each sheet to cancel off any prices where there evidently was a misunderstanding. Potatoes were priced by the pound and in many cases the price listed was by the peck. After corrections had been made the sheets were tabulated on worksheet A (sample on next page). Thus the average price on each of the thirteen items for each community was computed.

It will be noted that instead of the 43-item budget used by Department of Labor¹ in gathering such data the list used in the Mort-Harry forms contains only 13. The selection of these items was limited to those of standard grade, easily and clearly recognized and commonly used in all communities. For validity of this selected list see chapter II under "Limiting the Data."

1. U. S. Bureau of Labor Statistics--Bulletin #396
Retail Prices 1890-1924 Government Printing Office.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	10	28	55	28	30	28	30	3	10	1.30	55	20	10
2.	10	25	50		27	27	30	2	7	1.35	55	25	10
3.	10	27	50					2½	10	1.15	60	15	13
4.	10	25	50		30	30	25	2	9	1.25	55	15	10
5.	10	28	50		35	35	25	2	7		58		12
6.	10	27	53		35	30	30	2	9	1.30	60	20	13
7.	10	30	55	28	30	30	30	3	10	1.25	55	20	13
8.	10	27	50		30	30	25	3	7	1.45	58	20	12
Ave.	10	27	52	28	31	30	28	2½	9	1.30	57	20	12

In this community there were eight stores where prices were obtained on the thirteen food items on the list. The average of the community was found on each item of food and these averages transferred to worksheet B where the food prices were weighted.

Since the thirteen items have been priced in a buying unit rather than in the consumptive quantity, the next step is the weighting of each item according to the proportional part it should have in the food budget. The weights used are those suggested by the U. S. Bureau of Labor in their studies on cost of living.¹ These are shown on worksheet B (sample on next page and all sheets in Appendix B.)

1. U. S. Bureau of Labor Statistics--Bulletin #396
Retail Prices 1890-1924 Government Printing Office.

AVERAGE AND WEIGHTED PRICES OF FOOD BY COMMUNITIES

Food Art- icles with weights	Abilene		Anthony		Ark City		Arma	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
11) Milk								
1 qt. x 42	10	41.20	10	41.20	12	49.44	12½	51.50
2) Eggs								
68 x 1 dz.	28½	19.38	27	18.36	27	18.36	26	17.68
3) Butter								
75 x 1 lb	48	36.00	50	37.50	52	39.00	50	37.50
4) Hens dressed								
25 x 1 lb	34	8.50	35	8.75	35	8.75	31	7.75
5) Sirloin steak								
27 x 1 lb.	39	10.53	35	9.45	37	9.99	31	8.37
6) Round steak								
27 x 1 lb	37	9.99	35	9.45	35	9.45	31	8.37
7) Pork Chops								
29 x 1 lb	32	9.29	34	9.86	35	9.57	33	9.57
8) Potatoes								
746 x 1 lb	33	24.87	3	22.38	3½	26.11	2 2/3	19.89
9) Bread								
642 x 1 lb	9½	60.99	9½	60.99	9½	60.99	9	57.70
10) Flour 9.14 x 24½ lb. bag	1.25	11.42	1.15	10.51	1.19	10.87	1.18	10.78
11) Coffee								
33 x 1 lb	55	18.33	56	18.68	54	17.82	52	17.36
12) Tea								
52 x 1 lb	29	15.08	31	16.12	25	13.00	29	15.08
13) Evapor- ated Milk								
95 x 1 lb	12½	11.64	11	10.45	11	10.45	10	9.50
Total Weighted Prices		277.24		273.70		283.80		271.13

COMPUTING THE TOTAL FOOD BUDGET FROM THE 13 ITEMS

Since other items than the thirteen priced are included in the total food budget a predicted formula must be devised, based on the weighted food prices of the thirteen food items. The formula used is the one devised by David P. Harry, Jr., from his study in New York state and described in the last part of chapter II of his work. This formula is: Cost of Whole Food Budget equals the sum of weighted prices of the thirteen food items x 1.1753 plus \$61.50.

Worksheet C on the following pages shows how the formula for total predicted food prices is carried forward by communities to secure in column #5 the food index.

COMPUTATION OF FOOD INDEX

Formula: Total weighted food x 1.1753 plus \$61.50 equals total predicted food price.

1	2	3		
Community	Total Weighted Food (B)	#2 x 1.1753	Total Predicted Food Price #3 plus 61.50	Food Index #4 div. by ave of #4
1. Abilene	277.24	325.84	387.34	.992
2. Anthony	273.70	321.68	383.18	.981
3. Ark City	283.80	333.55	395.05	1.011
4. Arma	271.13	318.66	380.16	.973
5. Atchison	296.70	348.71	410.21	1.050
6. Augusta	276.31	324.75	386.24	.989
7. Baldwin	284.13	333.94	395.44	1.012
8. Belleville	286.82	337.10	398.60	1.028
9. Burlington	280.28	329.41	390.91	1.001
10. Caldwell	269.24	316.44	377.94	.968
11. Cherokee	269.81	317.11	378.61	.969
12. Concordia	279.11	328.04	389.54	.997
13. Dodge City	291.69	342.82	404.32	1.039
14. Downs	285.41	335.44	396.90	1.016
15. Ellis	293.68	345.16	406.66	1.041
16. Ellsworth	290.48	341.40	402.90	1.031
17. Emporia	291.68	342.81	404.31	1.039
18. Florence	278.28	327.06	388.56	.995
19. Frankfort	291.56	342.67	404.17	1.039
20. Fredonia	267.22	314.06	375.56	.961
21. Galena	276.29	324.72	386.22	.989
22. Garden City	266.48	313.18	374.68	.959
23. Girard	285.59	335.65	397.15	1.017
24. Great Bend	265.21	311.70	373.20	.955
25. Halstead	287.19	337.53	399.03	1.021
26. Hays	279.89	328.95	390.45	1.000
27. Herington	293.17	344.56	406.06	1.039
28. Hoisington	270.32	317.71	379.21	.971
29. Holton	274.46	322.57	384.07	.983
30. Horton	273.69	321.67	383.10	.980
31. Humboldt	272.36	320.10	381.60	.977
32. Iola	259.17	304.60	366.10	.937
33. Junction City	282.75	332.32	393.80	1.008
34. Kingman	280.52	329.70	391.20	1.001
35. Kinsley	270.50	317.92	379.42	.971
36. Leavenworth	306.38	360.09	421.59	1.079
37. Liberal	274.21	322.28	383.78	.982
38. Lindsborg	252.44	296.69	358.19	.917

Worksheet C (continued)

COMPUTATION OF FOOD INDEX

39. McPherson	254.74	299.40	360.90	.924
40. Medicine Lodge	270.06	317.40	378.90	.971
41. Minneapolis	277.81	326.52	388.02	.993
42. Mulvane	273.47	321.41	382.90	.980
43. Neodesha	283.58	333.29	394.79	1.010
44. Ness City	304.87	358.31	419.81	1.075
45. Newton	275.43	323.71	385.21	.986
46. Norton	303.13	356.27	417.77	1.070
47. Ottawa	268.67	315.77	377.27	.966
48. Osborne	286.81	337.17	398.67	1.030
49. Oxford	305.13	358.62	420.12	1.075
50. Paola	275.64	323.96	385.46	.987
51. Phillipsburg	275.85	324.21	385.71	.987
52. Salina	279.56	328.57	390.07	.999
53. Scammon	291.45	342.54	404.14	1.037
54. Seneca	290.51	341.44	402.94	1.031
55. Smith Center	280.68	329.88	391.38	1.003
56. Stafford	272.94	320.79	382.29	.980
57. St. John	282.30	331.79	393.29	1.007
58. Topeka	274.88	323.07	384.57	.983
59. Valley Falls	281.01	330.27	391.77	1.003
60. Wichita	294.17	345.74	407.24	1.043
61. Wilson	273.18	321.07	382.57	.979
62. Winfield	275.02	323.23	384.73	.985

Total	24,215.96
Average	390.58

OBSERVATIONS ON FOOD INDEX

Of the sixty two cities, twenty nine are above average on food index and thirty three are below average. The variation is not wide, from Lindsborg .917 to Leavenworth 1.079. The high indexes are about evenly divided between larger cities in northeastern Kansas and smaller places in the extreme western part of the state. Oxford, a small town in Cowley county with a high index is surrounded by towns with a lower index, but it has a reason,--the townsite at the time of this study was covered with oil derricks and all prices soar in such times. On the whole, food prices are fairly even in Kansas communities and where they are low there is frequently some special reason for it. In some it is the entry of a new chain store.

All but eight of the communities are between 95 and 105 or within 5 percent of the mean. The close grouping and evenness of prices makes the rank of food index seem unreasonable. Mulvane with a rank of 46 is only four percent away from Halstead with a rank of 17. The Standard Deviation is ^{.0388}~~3.88~~. (See next page.)

In general, we would say that food prices vary so little in the state that it can affect but little the whole index of cost of living.

FOOD INDEX IN ORDER OF RANK

62 DIFFERENT KANSAS COMMUNITIES

1.	Leavenworth	1.079	32.	Florence	.995
2 $\frac{1}{2}$	Ness City	1.075	33.	Minneapolis	.993
2 $\frac{1}{2}$	Oxford	1.075	34.	Abilene	.992
4	Horton	1.070	35 $\frac{1}{2}$	Galena	.989
5	Atchison	1.050	35 $\frac{1}{2}$	Augusta	.989
6	Wichita	1.043	37 $\frac{1}{2}$	Phillipsburg	.987
7	Ellis	1.041	37 $\frac{1}{2}$	Paola	.987
8 $\frac{1}{2}$	Dodge City	1.039	39	Newton	.986
9 $\frac{1}{2}$	Emporia	1.039	40	Winfield	.985
9 $\frac{1}{2}$	Frankfort	1.039	41 $\frac{1}{2}$	Topeka	.983
9 $\frac{1}{2}$	Herington	1.039	41 $\frac{1}{2}$	Holton	.983
12	Scammon	1.037	43	Liberal	.982
13 $\frac{1}{2}$	Ellsworth	1.031	44	Anthony	.981
13 $\frac{1}{2}$	Seneca	1.031	46	Horton	.980
15	Osborne	1.030	46	Mulvane	.980
16	Belleville	1.028	46	Stafford	.980
17	Halstead	1.021	48 $\frac{1}{2}$	Medicine Lodge	.979
18	Garard	1.017	48 $\frac{1}{2}$	Wilson	.979
19	Downs	1.016	50	Humboldt	.977
20	Baldwin	1.012	51	Arma	.975
21	Ark. City	1.011	52 $\frac{1}{2}$	Hoisington	.971
22	Neodesha	1.010	52 $\frac{1}{2}$	Kinsley	.971
23	Junction C.	1.008	54	Cherokee	.969
24	St. John	1.007	55	Caldwell	.968
25 $\frac{1}{2}$	Smith Center	1.003	56	Ottawa	.966
25 $\frac{1}{2}$	Valley Falls	1.003	57	Fredonia	.961
27 $\frac{1}{2}$	Kingman	1.001	58	Garden City	.959
27 $\frac{1}{2}$	Burlington	1.001	59	Great Bend	.955
29	Hays	1.000	60	Iola	.937
30	Salina	.999	61	McPherson	.924
31	Concordia	.997	62	Lindsborg	.917

Range = 1.079 - .917

Q = .025

S.D. = ~~3.88~~ .0388

This means that 50 per cent of the indexes fall between .975 and 1.025 or only 2 $\frac{1}{2}$ points from the average, and that about 68 per cent fall between .9612 and 1.0388

Chapter V

CALCULATION OF RENT INDEX

Concerning the Standards for Rooms

As laid down in chapter II, the standard set up is shelter and living accommodations for the single woman teacher away from home. Criterion I of the National Industrial Board demands that the same article or convenience be compared in the various communities. Also one must keep in mind from the standards set in chapter II that one is striving to get data bearing on a minimum standard of educational need. It is found, for example, that some single women teachers prefer to live in an apartment, some occupy a room at a residential hotel, some room alone, while others have a room mate at less expense per person for the room. Since comparable costs must be secured in each community it is necessary to hold to the actual needs of comfort for a single woman teacher staying away from home. The main essential, then, is not an ideal standard for women teachers but the comfortable standard that we might reasonably expect to find in any community. The room standards set in Form #3 are clear and definite and are available in all communities from which data are used. These standards are in a large measure the ones used by the Young Women's Christian Association Room Registry of New York City as things which they consider essential for young women living away from home.

In the form used the different necessities for a standard room are set forth but there is no attempt to weight the different accommodations. For some, location or transportation accessibility is of the highest concern. For others, rest and quite and good air are most desired. Sometimes a shortage of heat or similar inconvenience is overcome by the motherliness of the landlady. In this way many factors counterbalance each other in making up a desirable home room for a teacher. The standards taken from the Y W C A form are used as a guide in securing uniformity of data. The directions ask specifically that all rooms be excluded which do not come up to the standards set and also to exclude all that are above the standards.

CALCULATING THE RENT INDEX FROM THE DATA

When the investigator was careful to discard such rooms as did not conform to the standard, the data were in such form as to be easily tabulated. Almost 50 percent of the communities report rent as by the month but since Kansas schools are for the most part based on a twenty day month for nine months it was easy to calculate one-fourth of the month's price as a week's rent. Form III then was quickly and easily tabulated and the average rent per week for each community was then placed in alphabetical order on worksheet D, (see next page) and the rent index found by dividing each one by the average for the whole group.

Worksheet D

Table V.

CALCULATION OF RENT INDEX

1. Community	2 Number rooms	3. Ave. Rent per wk.	4 Rent Index #3 div. by ave. of #3
Abilene	32	\$3.28	1.054
Anthony	15	3.00	.961
Arkansas City	33	3.50	1.125
Arma	Est.	2.50	.804
Atchison	31	3.70	1.190
Augusta	10	3.75	1.206
Baldwin	10	3.00	.961
Belleville	12	2.70	.867
Burlington	Est.	3.00	.961
Caldwell	11	3.28	1.055
Cherokee	13	3.00	.961
Concordia	24	2.50	.804
Dodge City	15	3.75	1.206
Downs	3	2.33	.749
Ellis	14	2.80	.900
Ellsworth	15	3.25	1.045
Emporia	16	3.70	1.190
Florence	7	2.70	.867
Frankfort	4	2.50	.804
Fredonia	20	2.85	.916
Galena	11	2.25	.723
Garden City	6	2.65	.852
Girard	7	3.30	1.061
Great Bend	29	3.50	1.125
Halstead	6	2.60	.826
Hays	33	3.20	1.029
Herington	12	3.44	1.106
Hoisington	18	3.40	1.093
Holton	Est.	3.00	.961
Horton	12	3.20	1.028
Humboldt	13	2.75	.884
Iola	4	2.75	.884
Junction City	18	3.50	1.125
Kingman	22	2.86	.919
Kinsley	11	2.50	.804
Leavenworth	37	4.10	1.319
Liberal	11	4.00	1.254
Lindsborg	8	2.90	.932
McPherson	16	2.62	1.173
Medicine Lodge	4	3.64	.842

Worksheet D

Calculation of Rent Index -continued.

1 Community	2 Number rooms	3 Ave. Rent per wk.	4 Rent Index #3 div. by ave. of #3
Minneapolis	2	2.50	.804
Mulvane	8	2.50	.804
Neodesha	29	3.08	.990
Ness City	5	3.25	1.045
Newton	27	3.00	.961
Norton	20	3.40	1.093
Ottawa	15	3.37	1.083
Osborne	15	3.00	.961
Oxford	4	3.00	.961
Paola	20	2.90	.932
Phillipsburg	5	2.40	.771
Salina	61	3.93	1.264
Scammon	5	2.00	.643
Seneca	16	3.00	.961
Smith Center	4	2.60	.836
Stafford	7	3.00	.961
St John	9	3.25	1.045
Topoka	80	4.40	1.415
Valley Falls	7	3.00	.961
Wichita	58	4.96	1.595
Wilson	4	3.00	.961
Winfield	16	4.12	1.325

Average Rent 3.11

Cities represented

First class	6
Second class	38
Third class	<u>18</u>
Total	62

VARIATIONS IN THE RENT INDEX

Not only are there striking variations among communities but even within the same communities. In cities between 2000 and 4000 room rent was less costly than in cities above or below that. In many of the communities mentioned in this range the price paid by teachers for room rent controls a set price for the community year after year. This price seemingly has little regard for the price paid as house rent in that town; for example, a room in a dwelling in Concordia which rents at \$45.00 per month will bring \$10.00 per month when the same room in Kingman would rent for \$12.00 per month and the dwelling rent for \$35.00. This is an observation made by the writer on two communities which he knows quite well. The same holds true of numerous other communities as evidence appears on the data sent in.

Higher rents are for the most part found in the larger cities, where property valuations are higher and rents are higher. In some communities in Kansas, teachers are paying as high as \$40.00 per month for living quarters. Such does not represent the cost of living as considered in this study and such data have been excluded.

On the whole the rent index varies much more than food index for the different communities. Food index varies from .917 to 1.079 while rent index varies from .643 to 1.595. The two lowest on rent index are Scammon and Galena, small mining towns in southeast Kansas where property valuations are low. There is little personal wealth and the situation is reflected properly in a low rental price on rooms. Phillipsburg and Downs are next lowest in the list, both of them in

the section of the state where they have experienced "hard times" the past few years. This, also, may be reflected in a low room rent. The highest room rents are in the larger cities of the state but while Wichita heads the list the others do not follow in the order of size. When one looks at the high five of the list on rent index, Wichita, Topeka, Winfield, Leavenworth, Salina, one is aware that there are other towns as large as this group but he notices that four of the five are college towns. It might be fair to presume that in college towns, at least in some of them, rooms of the standard called for in this study are in greater demand and bring a higher rental.

The outstanding fact concerning the cost of room rent to teachers in different communities is that it varies to a much greater degree in cost of food and that in the final table of total indexes of cost of living for the different communities, the rent index almost controls the ranking of the communities in the upper quartile.

Table VI

RENT INDEX IN ORDER OF RANK -

62 DIFFERENT KANSAS COMMUNITIES

1.	Wichita	1.595	33 $\frac{1}{2}$	Holton	.961
2.	Topeka	1.415	33 $\frac{1}{2}$	Newton	.961
3.	Winfield	1.325	33 $\frac{1}{2}$	Osborne	.961
4.	Leavenworth	1.319	33 $\frac{1}{2}$	Oxford	.961
5.	Salina	1.264	33 $\frac{1}{2}$	Seneca	.961
6.	Liberal	1.254	33 $\frac{1}{2}$	Stafford	.961
7 $\frac{1}{2}$	Augusta	1.206	33 $\frac{1}{2}$	Valley Falls	.961
7 $\frac{1}{2}$	Dodge City	1.206	33 $\frac{1}{2}$	Wilson	.961
9 $\frac{1}{2}$	Emporia	1.190	40 $\frac{1}{2}$	Lindsborg	.932
10 $\frac{1}{2}$	Atchison	1.190	40 $\frac{1}{2}$	Paola	.932
11	McPherson	1.173	42	Kingman	.919
12	Ark City	1.125	43	Fredonia	.916
13	Junction City	1.125	44	Ellis	.900
13	Great Bend	1.125	45 $\frac{1}{2}$	Humboldt	.884
15	Herington	1.106	45 $\frac{1}{2}$	Iola	.884
16 $\frac{1}{2}$	Norton	1.093	47 $\frac{1}{2}$	Belleville	.867
16 $\frac{1}{2}$	Hoisington	1.093	47 $\frac{1}{2}$	Florence	.867
18	Ottawa	1.083	49	Garden City	.852
19	Girard	1.061	50	Medicine Lodge	.842
20	Caldwell	1.055	51 $\frac{1}{2}$	Smith Center	.836
21	Abilene	1.054	51 $\frac{1}{2}$	Halstead	.836
23	Ness City	1.045	55 $\frac{1}{2}$	Kinsley	.804
23	Ellsworth	1.045	55 $\frac{1}{2}$	Minneapolis	.804
23	St. John	1.045	55 $\frac{1}{2}$	Mulvane	.804
25	Hays	1.029	55 $\frac{1}{2}$	Frankfort	.804
26	Horton	1.028	55 $\frac{1}{2}$	Concordia	.804
27 $\frac{1}{2}$	Neodesha	.990	55 $\frac{1}{2}$	Arma	.804
33 $\frac{1}{2}$	Anthony	.961	59	Phillipsburg	.771
33 $\frac{1}{2}$	Baldwin	.961	60	Downs	.749
33 $\frac{1}{2}$	Burlington	.961	61	Galena	.723
33 $\frac{1}{2}$	Cherokee	.961	62	Scammon	.643

Range = 1.595 - .643

Q = .1195

S.D. = ~~.1951~~ .1770

Chapter VI

THE TOTAL INDEX OF THE COST OF LIVING

Having computed the food index for each community and the rent index, the next task is the computation of the total index for each community. In chapter II, under the heading "Limiting The Data", the writer discussed the proportions of the budget as it was made up for this study. The formula then is: Total Cost of Living Index equals $.225 \times$ Food Index, plus $.205 \times$ Rent Index, plus $.57$. Applying this formula to the indexes secured on worksheet C and D one has on the following pages on worksheet E the listing for each community of the Food Index, the Room Index and the Total Index.

It will be seen from a study of these sheets that rent index has a larger influence on the total index than has the food index. As was stated in the discussion under food index, food prices in the state of Kansas are fairly evenly distributed. Such being the case it is fair to presume that the variance in room rent would affect the total index. The high five in rent index are in this order,--Wichita, Topeka, Winfield, Leavenworth, Salina. The high five in total index are, in order,--Wichita, Leavenworth, Topeka, Winfield, Salina. This is rather striking but the correlation does not hold for the whole list.

Following worksheet E is a relisting of the cities, arranged in order of rank on Total Index and the rank for each city in Total Index, Food Index and Rent Index is listed for comparison.

Table VII

WORKSHEET E, ABBREVIATED TO GIVE THREE INDEXES

Community	Food Index (Worksheet C)	Rent Index (Worksheet D)	Total Index (from formula)
1. Abilene	.992	1.054	1.0093
2. Anthony	.981	.961	.9877
3. Ark City	1.011	1.125	1.0281
4. Arma	.973	.804	.9537
5. Atchison	1.050	1.190	1.0503
6. Augusta	.989	1.206	1.0397
7. Baldwin	1.012	.961	.9947
8. Belleville	1.028	.967	.9790
9. Burlington	1.001	.961	.9922
10. Caldwell	.968	1.055	1.0041
11. Cherokee	.969	.961	.9850
12. Concordia	.997	.804	.9591
13. Dodge City	1.039	1.206	1.0510
14. Downs	1.016	.749	.9520
15. Ellis	1.041	.900	.9887
16. Ellsworth	1.031	1.045	1.0162
17. Emporia	1.039	1.190	1.0478
18. Florence	.995	.867	.9716
19. Frankfort	1.039	.804	.9686
20. Fredonia	.961	.916	.9740
21. Galena	.989	.723	.9407
22. Garden City	.959	.852	.9605
23. Girard	1.017	1.061	1.0163
24. Great Bend	.955	1.125	1.0155
25. Halstead	1.021	.836	.9711
26. Hays	1.000	1.029	1.0059
27. Herington	1.039	1.106	1.0305
28. Hoisington	.971	1.093	1.0125
29. Holton	.983	.961	.9882
30. Horton	.980	1.028	1.0012
31. Humboldt	1.977	.884	.9710
32. Iola	.937	.884	.9620
33. Junction City	1.008	1.125	1.0274
34. Kingman	1.001	.919	.9836
35. Kinsley	.971	.804	.9633
36. Leavenworth	1.079	1.319	1.0832
37. Liberal	.982	1.254	1.0481
38. Lindsborg	.917	.932	.9674
39. McPherson	.924	1.173	1.0184
40. Medicine Lodge	.979	.842	.9629

Worksheet E - Continued

<u>Community</u>	Food Index (Worksheet C)	Rent Index (Worksheet D)	Total Index From formula
41. Minneapolis	.993	.804	.9582
42. Mulvane	.980	.804	.9753
43. Neodesha	1.010	.990	1.0003
44. Ness City	1.075	1.045	1.0261
45. Newton	.986	.961	.9889
46. Norton	1.070	1.093	1.0349
47. Ottawa	.966	1.083	1.0094
48. Osborne	1.030	.961	.9988
49. Oxford	1.075	.960	1.0089
50. Paola	.987	.932	.9832
51. Phillipsburg	.987	.771	.9502
52. Salina	.999	1.264	1.0539
53. Scammon	1.037	.643	.9351
54. Seneca	1.031	.961	.9990
55. Smith Center	1.003	.836	.9671
56. Stafford	.980	.961	.9875
57. St John	1.007	1.045	1.0108
58. Topeka	.983	1.415	1.0813
59. Valley Falls	1.003	.961	.9927
60. Wichita	1.043	1.595	1.1317
61. Wilson	.979	.961	.9873
62. Winfield	.985	1.325	1.0632

RANK OF DIFFERENT COMMUNITIES ON TOTAL INDEX,
FOOD INDEX AND RENT INDEX

Community	Total Index	RANK		
		Total	Food	Rent
Wichita	1.1317	1	6	1
Leavenworth	1.0832	2	1	4
Topeka	1.0813	3	41½	2
Winfield	1.0632	4	40	3
Salina	1.0539	5	30	5
Dodge City	1.0510	6	9½	7½
Atchison	1.0503	7	5	10
Liberal	1.0481	8	43	6
Emporia	1.0478	9	9½	9
Augusta	1.0397	10	35½	7½
Norton	1.0349	11	4	16½
Herington	1.0305	12	9½	15
Arkansas City	1.0281	13	21	13
Junction City	1.0274	14	23	13
Ness City	1.0261	15	2½	22½
McPherson	1.0184	16	61	11
Girard	1.0163	17	18	19
Ellsworth	1.0162	18	13½	22½
Great Bend	1.0155	19	59	13
Hoisington	1.0125	20	52½	16½
St John	1.0108	21	24	24
Ottawa	1.0094	22	56	18
Abilene	1.0093	23	34	21
Oxford	1.0089	24	2½	33½
Hays	1.0059	25	29	25
Caldwell	1.0012	26	55	20
Horton	1.0012	27	45½	26
Neodesha	1.0003	28	22	27
Seneca	.9990	29	13½	33½
Osborne	.9988	30	15	33½
Baldwin	.9947	31	20	33½
Valley Falls	.9927	32	25½	33½
Burlington	.9922	33	27½	33½
Newton	.9889	34	39	33½
Ellis	.9887	35	7	44
Holton	.9882	36	41½	33½
Anthony	.9877	37	44	33½

Table VIII-continued

RANK OF DIFFERENT COMMUNITIES ON TOTAL INDEX,
FOOD INDEX AND RENT INDEX -Continued

Community (Arranged in order of rank on Total Index)

	Total Index	RANK		
		Total	Food	Rent
Stafford	.9875	38	47	33½
Wilson	.9873	39	48½	33½
Cherokee	.9854	40	54	33½
Kingman	.9873	41	27½	42
Paola	.9832	42	37½	40½
Belleville	.9790	43	16	47½
Mulvane	.9753	44	45½	55½
Fredonia	.9740	45	57	43
Florence	.9716	46	32	47½
Halstead	.9711	47	17	51½
Humboldt	.9710	48	50	45½
Frankfort	.9686	49	9½	55½
Lindsborg	.9674	50	62	40½
Smith Center	.9671	51	25½	51½
Medicine Lodge	.9629	52	48½	50
Iola	.9620	53	60	45½
Garden City	.9605	54	58	49
Concordia	.9591	55	31	55½
Minneapolis	.9582	56	33	55½
Arma	.9537	57	51	55½
Kinsley	.9533	58	52½	55½
Downs	.9520	59	19	60
Phillipsburg	.9502	60	37½	59
Galena	.9407	61	35½	61
Seammon	.9351	62	12	52

Using 1.0000 as a base or average on Total Index

Range = 1.1317 - .9357

Q = .0473

S.D. = ~~1.2~~ .0701

COMPARISON WITH NEW YORK STUDY

In comparing this study with the New York study one finds that the range on total index is somewhat less. In the New York study the standard deviation of scores on total index was 6.88, while in the Kansas study the standard deviation is only ^{7.01} 4.2 (~~computed on next page~~). This means that about two-thirds should have indexes between 95.8 and 104.2. In reality 47 or practically four-fifths are in that range. Only nine communities fall outside this range. The conclusion, then, is that the distribution is closer to the central tendency than in the New York study.

Chapter VII

A STUDY OF FINAL RANKINGS AND CORRELATIONS

In chapter VI is found the consummation of this study. From these pages is to be determined whether or not the difference in cost of living to teachers in the different Kansas communities is sufficient to warrant the conclusion that it should be included in a state program for financing public education. A more detailed study of these statistics will help in arriving at that decision.

RELATIONSHIPS OF THE DIFFERENT FACTORS

By use of the Spearman Foot-rule on rankings one finds the correlation of Rent Index to Total Index is high, plus .975.¹ Correlation in the New York study was plus.94. On the other hand correlation of Food Index with Total Index, measured the same way, is only plus .384² while the New York study gave plus .72. The correlation of Food Index and Rent Index is plus .192. It would seem then that food prices have little bearing on differences in cost of living and likewise food prices do not affect the cost of room rent. Reasons for this are discussed in chapter IV.

ROOM RENT THE OUTSTANDING FACTOR

The fact previously shown³ that the high five in Room Rent Index are also the high five in Total Index, plus the high correlation between the two of plus .975 leads to the conclusion that Room Rent is the outstanding factor in determining the rank in the total index. It is of interest to note that the New York study of D. P. Harry, previously referred to, found the same to be true.

1. Page 35

2. Page 36

3. Page 24

SCALING TOTAL INDEX ON A DIFFERENT BASE

The scaling on Total Index is on a base of 1.00 as the average. The validity of this as a base for the whole state might be questioned, when it is recalled that a large percent of the cities listed in this study are first and second class cities, the smaller cities and towns not being properly represented. From the large number of cities represented at 98 plus it might be advisable to take one of these cities as a base, say Stafford, and figure each of the others from that. Weight is added to this suggestion when it is considered that room rent is the same for twelve cities at this level. Also Stafford is typical of a smaller city system of schools quite common in Kansas, being a third class city drawing a large share of high school pupils from the rural districts surrounding.

In this type of study any city can be taken as the base, but if one lower than the average is selected it would cause those with high index to have a still higher index. For example, using Stafford (.9875) as a base, Wichita would read 1.146. It appears to the writer that this might prove a better base than 1.000.

The new indexes for those above the average, based on Stafford as a base follow on the next page.

Table VIII-a

New Indexes For Those Above Average Based On Stafford
As Base

Wichita	1.1460	Hoisington	1.0253
Leavenworth	1.0968	St John	1.0235
Topeka	1.0949	Ottawa	1.0221
Winfield	1.0765	Abilene	1.0220
Salina	1.0672	Oxford	1.0216
Dodge City	1.0642	Hays	1.0186
Atchison	1.0635	Caldwell	1.0138
Liberal	1.0613	Horton	1.0138
Emporia	1.0610	Neodesha	1.0129
Augusta	1.0528	Seneca	1.0116
Norton	1.0479	Osborne	1.0114
Herington	1.0435	Baldwin	1.0072
Arkansas City	1.0411	Valley Falls	1.0052
Junction City	1.0403	Burlington	1.0047
Ness City	1.0390	Newton	1.0014
McPherson	1.0312	Ellis	1.0012
Girard	1.0291	Holton	1.0007
Ellsworth	1.0290	Anthony	1.0001
Great Bend	1.0283		

Table IX

CORRELATION OF TOTAL INDEX AND RENT INDEX

Using the Spearman Foot-rule

RANK			Rank		
Total Index	Rent Index	D	Total Index	Rent Index	D
1	1	0	32	33 $\frac{1}{2}$	-1 $\frac{1}{2}$
2	4	-2	33	33 $\frac{1}{2}$	- $\frac{1}{2}$
3	2	1	34	33 $\frac{1}{2}$	$\frac{1}{2}$
4	3	1	35	44	-9
5	5	0	36	33 $\frac{1}{2}$	2 $\frac{1}{2}$
6	7 $\frac{1}{2}$	-1 $\frac{1}{2}$	37	33 $\frac{1}{2}$	3 $\frac{1}{2}$
7	10	-3	38	33 $\frac{1}{2}$	4 $\frac{1}{2}$
8	6	2	39	33 $\frac{1}{2}$	5 $\frac{1}{2}$
9	9	0	40	33 $\frac{1}{2}$	6 $\frac{1}{2}$
10	7 $\frac{1}{2}$	2 $\frac{1}{2}$	41	42	-1
11	16 $\frac{1}{2}$	-5 $\frac{1}{2}$	42	40 $\frac{1}{2}$	1 $\frac{1}{2}$
12	15	-3	43	47 $\frac{1}{2}$	-4 $\frac{1}{2}$
13	13	0	44	55 $\frac{1}{2}$	-11 $\frac{1}{2}$
14	13	1	45	43	2
15	23	-8	46	47 $\frac{1}{2}$	-1 $\frac{1}{2}$
16	11	5	47	51 $\frac{1}{2}$	-4 $\frac{1}{2}$
17	19	-2	48	45 $\frac{1}{2}$	2 $\frac{1}{2}$
18	23	-4 $\frac{1}{2}$	49	55 $\frac{1}{2}$	-6 $\frac{1}{2}$
19	13	6	50	40 $\frac{1}{2}$	9 $\frac{1}{2}$
20	16 $\frac{1}{2}$	3 $\frac{1}{2}$	51	51 $\frac{1}{2}$	- $\frac{1}{2}$
21	24	-3	52	50	2
22	18	4	53	45 $\frac{1}{2}$	7 $\frac{1}{2}$
23	21	2	54	49	5
24	33 $\frac{1}{2}$	-9 $\frac{1}{2}$	55	55 $\frac{1}{2}$	-1 $\frac{1}{2}$
25	25	0	56	55 $\frac{1}{2}$	$\frac{1}{2}$
26	20	6	57	55 $\frac{1}{2}$	1 $\frac{1}{2}$
27	26	1	58	55 $\frac{1}{2}$	2 $\frac{1}{2}$
28	27	1	59	60	-1
29	33 $\frac{1}{2}$	-4 $\frac{1}{2}$	60	59	1
30	33 $\frac{1}{2}$	-3 $\frac{1}{2}$	61	61	0
31	33 $\frac{1}{2}$	-2 $\frac{1}{2}$	62	62	0
	33 $\frac{1}{2}$				93 $\frac{1}{2}$ -93 $\frac{1}{2}$

Spearman "Foot-rule", Formula 7

$$R = 1 - \frac{6 \sum G}{n^2 - 1} = 1 - \frac{6 \times 93.5}{62^2 - 1} = .85$$

Using table 3, page 295, Otis: Statistical Method in Educational Measurement

where $R = .85$, $r =$ Plus .975 Coefficient of C.

In New York study it was plus .94

Table X

CORRELATION OF TOTAL INDEX AND FOOD INDEX

RANK			RANK		
Total Index	Food Index	D	Total Index	Food Index	D
1	6	-5	32	25½	6½
2	1	1	33	27½	5½
3	41	-38	34	39	-5
4	40	-36	35	7	28
5	30	-25	36	41½	-5½
6	9½	-3½	37	44	-7
7	5	2	38	47	-9
8	43	-35	39	48½	-9½
9	9½	-½	40	54	-14
10	35½	-25½	41	27½	13½
11	4	7	42	37½	4½
12	9½	2½	43	16	27
13	21	-8	44	45½	-1½
14	23	-9	45	57	-12
15	2½	12½	46	32	14
16	61	-45	47	17	30
17	18	-1	48	50	-2
18	13½	4½	49	9½	39½
19	59	-40	50	62	-12
20	52½	-32½	51	25½	25½
21	24	-3	52	48½	3½
22	56	-34	53	60	-7
23	34	-11	54	58	-4
24	2½	21½	55	31	24
25	29	-4	56	33	23
26	55	-29	57	51	6
27	45½	-18½	58	52½	5½
28	22	6	59	19	40
29	13½	15½	60	37½	22½
30	15	15	61	35½	25½
31	20	11	62	12	50

Spearman Foot-rule, Formula 7

$$R = 1 - \frac{6 \sum G}{n^2 - 1} = 1 - \frac{6 \times 492}{3843} = .23$$

Using table III, page 295, Otis: Statistical Method in Educational Measurement,

Where $R = .23$, $r =$ Plus .384

Coefficient of Corr.

New York study gave $r =$ plus .72

Table XI

CORRELATION OF FOOD INDEX AND ROOM RENT INDEX

Using Spearman "Foot-rule".

RANK		D	RANK	
Food Index	Rent Index		Food Index	Rent Index
6	1	5	25½	33½
1	4	-3	27½	33½
41½	2	39½	39	33½
40	3	37	7	44
30	5	25	41½	33½
9½	7½	2	44	33½
5	10	-5	47	33½
43	6	37	48½	33½
9½	9	½	54	33½
35½	7½	28	27½	42
4	16½	-12½	37½	40½
9½	15	-5½	16	47½
21	13	8	45½	55½
23	13	10	57	43
2½	22½	-20	32	47½
61	11	50	17	51½
18	19	-1	50	45½
13½	22½	-9	9½	55½
59	13	46	62	40½
52½	16½	36	25½	51½
24	24	0	48½	50
56	18	38	60	45½
34	21	13	58	49
2½	33½	-29	31	55½
29	25	4	33	55½
55	20	35	51	55½
45½	26	19½	52½	55½
22	27	-5	19	60
13½	33½	-20	37½	59
15	33½	-18½	35½	61
20	33½	-13½	12	62

Spearman "Foot-rule", Formula 7

$$R = 1 - \frac{6 \sum G}{n^2 - 1} = 1 - \frac{6 \times 569}{3843} = .11$$

Using table III, page 295, Otis ; Statistical Method in Educational Measurement

where R = .11 , r = plus .192
Coefficient of Corr.

Chapter VIII

APPLICATION OF THE STUDY TO THE KANSAS PROBLEM

Determining The Basis of State Aid.

If the variance in total index is sufficient to take into consideration in the allotment of state aid to schools, those communities above the base or average should have a larger share of state aid. If the cost of a standard minimum unit of instruction be set at \$1000 for an elementary unit and \$1500 for a high school unit, the amount of state aid to each community can be easily figured from worksheet E and F.¹

If one considers only cost of living index and applies state aid on the basis suggested in the previous chapter, the correction can be applied through the following steps:-

- (1) Subtract 1.00 from the index number of total cost of living in each community.
- (2) Compute $\frac{3}{4}$ of this difference to secure the index multiplier. (Approximately 75% of school expense is for teachers' salary.)
- (3) Multiply number of elementary teachers plus $1\frac{1}{2}$ times the number of high school teachers, by the index multiplier to find the number of units of educational need due to the cost of living.

It will be seen that the amount of the correction depends upon the number of teaching units and the size of the index number of the cost of living. The larger cities, because of rather uniformly high index and larger number of teachers, may expect larger state aid.

On the following page is a table showing the Cost of Living Correction for the Different Kansas Communities. AS there would probably be no negative corrections, the only ones included are those above the base or average. In this case we have taken the new base suggested, Stafford, and the total indexes listed are on that base.

COST OF LIVING CORRECTION FOR DIFFERENT COMMUNITIES

Based on \$1000 unit for grades and \$1500. for high school.

Community	Total Index	Index Multiplier	Correction per unit	No. of \$1000 units
Wichita	1.1460	.110	\$110.00	602
Leavenworth	1.0968	.0726	72.60	101
Topeka	1.0949	.0712	71.20	365
Winfield	1.0765	.0574	57.40	95
Salina	1.0672	.0504	50.40	158
Dodge City	1.0642	.0487	48.70	81
Atchison	1.0635	.0476	47.60	86
Liberal	1.0613	.0460	46.00	49
Emporia	1.0610	.0458	45.80	123
Augusta	1.0529	.0396	39.60	45
Norton	1.0479	.0359	35.90	39
Herington	1.0435	.0326	32.60	35
Arkansas City	1.0411	.0308	30.80	111
Junction City	1.0403	.0302	30.20	70
Ness City	1.0390	.0293	29.30	15
McPherson	1.0312	.0234	23.40	52
Girard	1.0291	.0219	21.80	38
Ellsworth	1.0290	.02175	21.75	29
Great Bend	1.0283	.0212	21.20	81
Hoisington	1.0253	.0189	18.90	
St John	1.0235	.0176	17.60	27
Ottawa	1.0221	.0166	16.60	85
Abilene	1.0220	.0165	16.50	64
Oxford	1.0216	.0162	16.20	16
Hays	1.0186	.0140	14.00	28
Caldwell	1.0138	.0104	10.40	27
Horton	1.0138	.0104	10.40	42
Neodesha	1.0129	.0097	9.70	46
Seneca	1.0116	.0087	8.70	11
Osborne	1.0114	.0086	8.60	25
Baldwin	1.0072	.0054	5.40	20
Valley Falls	1.0052	.0039	3.90	19
Burlington	1.0047	.0035	3.50	26
Newton	1.0014	.0011	1.10	90
Ellis	1.0012	.0009	.90	21
Holton	1.0007	.0005	.50	32
Anthony	1.0001	.0001	.10	36

In interpreting the table on Cost of Living Correction it is noticed that Wichita has a total index of 1.146 which means that living costs are 14.6% above the average or base; and the correction per \$1000 teacher unit is \$110.00. This means that where the average cost of unit of instruction is figured at \$1000.00 for the state as a whole, in Wichita it costs \$1110.00 because of the excess in cost of living. By multiplying the correction per unit for each community by the number of \$1000.00 teacher units given in the last column the total correction for each community is found.

OTHER CONSIDERATIONS

Questions which arise at this point and need to be considered in a discussion of the major problem, viz--The establishment of a standard minimum unit of instruction on a basis of equality are,- (1) Are the cities with a higher total index paying their teachers accordingly? This can be determined from the data on worksheet F¹ ~~where~~ where we find the average salary of elementary teachers for each community. The correlation by ranks on this column and the total index column should shed considerable light on this question. (2) What is the relative ability of a city to pay the higher salaries required by a higher cost of living? Again the data on worksheet F can be used. Dividing the valuation of each community by the number of teacher units gives the valuation per teacher unit. This is the proper basis for comparison on ability to pay and support the standard minimum program.

These questions are not a part of this study but are set forth here as necessary to a completion of the major study which has to do with the establishment of a standard minimum unit of instruction on a basis of financial equality.

Worksheet F

Table XIII

ADDITIONAL DATA ON CITIES INCLUDED IN THE STUDY
 Population from League of Kansas Municipalities Annual
 Magazine, 1928. Other data from Kansas Educational Directory
 1927-8, State Department of Education, Topeka, Kansas.

<u>City</u>	<u>Popul.</u>	<u>Val. in Mills</u>		<u>Teachers</u>		<u>Ave. Sal.</u> Elem. Tea.
		<u>thous.</u>	<u>Levy</u>	<u>Gr.</u>	<u>H.S.</u>	
Abilene	5375	7996	14	29	23	\$1105
Anthony	2752	3926	18	16	13	1052
Arkansas City	14052	17969	16	75	23	1291
Arma	2809	1002	45.4	14	8	806
Atchison	15116	18274	10.95	55	21	1225
Augusta	3900	5350	19.05	23	15	1289
Baldwin	1296	1124	19.36	9	7	910
Belleville	2052	2932	12.6	13	12	1048
Burlington	2383	2127	18.5	8	12	945
Caldwell	1957	2763	14.2	12	10	922
Cherokee	1665	Co. H.S.	3.25	13	13	999
Concordia	5550	7074	14	28	19	1159
Dodge City	7653	8761	17.5	58	15	1137
Downs	1362	1979	11	8	7	972
Ellis	1688	2769	23	9	8	1005
Ellsworth	1955	3399	13.4	11	12	1152
Emporia	13242	19864	14	78	30	1438
Florence	1563	3928	17	19	10	1180
Frankfort	1380	1997	18.5	8	10	990
Fredonia	3966	3529	19	27	9	1062
Galena	5493	1890	36.5	28	8	748
Garden City	5124	5445	20. Jr. C	31	11	998
Girard	3024	2720	20	18	13	993
Great Bend	5197	6840	16.5	54	18	1185
Halstead	1187	2140	15.3	8	8	1108
Hays	5106	4500	15.8	14	9	904
Herington	4946	3716	17	21	9	990
Hoisington	2938	3271	20	17	12	1087
Holton	2675	4152	12	18	9	904
Horton	4200	3680	17.5	21	14	976
Humboldt	2909	6591	10	15	10	862
Iola	7354	7257	18	46	15	969
Junction City	6479	9259	14	49	14	1245
Kingman	2563	3500	16.5	17	14	1121
Kinsley	1803	2500	16.5	10	10	1086
Leavenworth	20747	15100	16	71	20	1212
Liberal	3494	5351	17	32	11	1041
Lindsburg	2046	2581	13.5	10	8	1120
McPherson	4800	6268	14	31	14	1137
Medicine Lodge	1188	1661	26	6	9	1060

Table XIII-cont.

Worksheet F Continued

ADDITIONAL DATA

Minneapolis	1690	2836	14.1	9	11	1016
Mulvane	1025	2114	14	8	9	963
Neodesha	3662	7287	16.5	28	11	
Ness City	1029	1228	25.7	6	6	1049
Newton	9701	11398	16	32	25	1177
Norton	2165	Co.H.S.	5	19	13	1185
Ottawa	9775	9836	15.9	47	25	1285
Osborne	1819	2375	14	10	10	1129
Oxford	1223	5300	4	8	5	967
Paola	4179	4875	12	20	14	1125
Phillipsburg	1408	2318	14.5	8	11	973
Salina	16286	29768	13.	116	28	1476
Scammon	1418	791	24.4	8	2	810
Seneca	1874	2234	12	8	2	1013
Smith Center	1460	2329	11.6	9	11	980
Stafford	1532	2022	14.9	10	12	1044
St John	1588	1712	19.9	10	11	1134
Topeka	60455	86489	14.25	278	55	1611
Valley Falls	1166	1600	17.5	8	7	990
Wichita	99651	129868	18Mun.U.	451	101	1550
Wilson	1080	2098	20.3	8	6	1080
Winfield	11287	11800	20	64	21	1238

Ave. salary for the group \$1067.

11
Ave for first class cities 1340.

Ave 76 sec. class cities 1032.

Ave. 167 -smaller " 954.

Chapter IX

CONCLUSIONS AND RECOMMENDATIONS

An analysis of this study into the cost of living in 62 different Kansas communities gives the following major findings: 1. Food prices throughout the state, taken in May, 1928 are very constant with few exceptions. On a base or average of 1.00 the range in food index is from .917 to 1.079 with a Q of .025, meaning that 50 percent of the communities fall within $2\frac{1}{2}$ points of the average. 2. Variations are greater in rent index than in food index. The range is from 1.595 to .643, using 1.00 as an average or base. Higher rents prevail in the larger cities with better valuation of real estate, and especially in college towns. 3. When total index of the cost of living is based on food and rent, with other items constant as in this study, the cost of room rent is the outstanding factor in determining the index rank of each community. The range in total index of cost of living is from 1.1317 to .935 with a Q of .0473, meaning 4.73 points from the average.

While there is some variance in the cost of living index in the different cities, there are other factors in the situation which so far outweigh this factor that the writer is brought to the conclusion that variance in cost of living is not sufficient to take it into account in determining a state policy for financing public education. He bases his conclusions on the following grounds:

1. Only nine of the sixty two cities have an index in excess of five points from the average or 1.00. The Standard Deviation is $\frac{7.01}{4.2}$, which is ~~low in comparison~~ with New York study (6.88).

2. Of the seven school communities more than five points above the average, (the ones which would benefit most in equalization on that basis) all are caring for the increased cost of living to teachers by maintaining higher salaries than the average for the group studied. Average salaries of elementary teachers in these communities as found on worksheet F are: Wichita \$1550, Leavenworth \$1212, Topeka \$1611, Winfield \$1238, Salina \$1476, Dodge City \$1137, Atchison \$1225. Average for the whole group \$1067. Thus it is seen that Dodge City, the lowest in the group, is paying more than the 3.9 percent above the average as indicated by the total index.

3. All of the same seven cities mentioned have splendid valuation as compared to the others in the group and can therefore support teachers on the higher level. See worksheet F.

4. The "Kansas" idea of state aid in the equalization of educational opportunity is based on the main contention that some communities are not financially able to give an equal educational opportunity. Our only constitutional grant for state aid is to "weak districts." An equal educational opportunity without undue burden financially to the community,--is the aim of our legislation for schools, and the above mentioned points show that equal-

ization on a basis of cost of living to teachers does not have much share in such a plan.

It is the final opinion of the writer, then, based on facts determined in this study, that variations in the cost of living in the different Kansas communities is only a minor factor in determining the educational need in a financial sense. He, therefore, believes it should not be included as a "weight" in a state plan for the financing of public education in the interest of a standard minimum educational program for each and every community in the state.

BIBLIOGRAPHY

1. Mort, Paul R. The Measurement of Educational Need. Bureau of Publications, Teachers College, Columbia University, 1924.
2. United States Bureau of Labor Statistics. The Use of Cost of Living Figures in Wage Adjustments, #369. Government Printing Office.
3. Report of National Industrial Conference Board, 1925. Ch. I. Cost of Living in the United States.
4. Harry, David P. Jr. Cost of Living of Teachers in the state of New York. Teachers College Bureau of Publications, Columbia University, 1928.
5. United States Bureau of Labor Statistics, Bulletin #396. Retail Prices 1890-1924. Government Printing Office.
6. League of Kansas Municipalities Annual Magazine, 1928. Lawrence, Kansas.
7. Kansas Educational Directory, 1928- State Department of Education, Topeka, Kansas.

APPENDIX A
COMMITTEE ON RESEARCH AND LEGISLATION

KANSAS STATE TEACHERS ASSN.

Concordia, Kansas
April 30, 1928

Fellow Superintendents:

At last we are making progress in our efforts toward school legislation through the School Code Commission. With the approval of the School Code Commission the Legislation and Research Committee of the State Teachers Association are making a study on which to base a new scientific plan for support of public schools. If we succeed, (and we are very hopeful now), it will be the biggest thing in school legislation that Kansas has ever seen. There is a tremendous amount of work involved and we need the hearty cooperation of every person asked to help.

The study assigned me is a comparison of the cost of living in different Kansas communities. I am calling on 141 communities to furnish the data. Yours is one of them. I know this is the rush time of the year but we must have the data early in May to complete the study in time.

Forms for the "Cost of Living Investigation" are hereby enclosed. Form I gives the general directions to be followed in making the investigation. Form II provides for investigating food prices and Form III provides for investigation of room rent.

The organization of the job, including the assigning of the task to the various teachers and the selection of the stores, should all be accomplished before Friday, May 4. This is a good class project for a Domestic Science teacher. Divide up the work so it can be covered in one week. Each teacher should know just what she has to do, what pupils, if any, she has to use, and what stores she is responsible for, so that she can begin the actual collection of prices with her first class Monday morning, May 7. The collection of facts should be completed and all the materials returned to the Superintendent's office on or before Friday, May 11.

The Committee will appreciate your forwarding this material promptly to me at Concordia, so that all material for the state will be available for study by May 15.

These will need to be sent first class and I trust I can count on you for that as I would have to weigh packages separately to determine return postage.

Very truly yours,

Guy H. Jaggard.

GHJ:lt

COST OF LIVING OF TEACHERS

Paul R. Mort, Associate Professor of Education, Teachers College, Columbia University

and

David P. Harry, Jr., Assistant Professor of Educational Administration, University of Pittsburgh

Form I—General Directions for the Organizer

A. PURPOSE.

1. These forms are for use in finding the cost of living of teachers. There are separate forms for food and room rent.
2. Each food article is carefully defined and described in order that the same articles may be priced in each community. Standards are set up for the room in order to secure comparable information.
3. It is essential that the prices quoted by the various dealers within the community should be considered confidential and not for purposes of comparison within the community.
4. All the prices for each community will be combined into an index which will compare communities but not individual stores. The methods of developing and applying the index are discussed in the manual.

B. DIRECTIONS TO THE SUPERINTENDENT, SUPERVISING PRINCIPAL, OR TEACHERS PLACED IN CHARGE OF THE SECURING OF PRICES.

1. The organizer should carefully study the directions, standards, and forms for recording the prices before attempting to delegate parts of the work to other teachers.
2. The organizer should select the other teachers for the various parts of the job with the interests of the teacher in mind. Each individual asked to help should be instructed carefully in the standards to be used, the directions to be followed in securing the prices, and in the method of recording the prices secured.
3. The larger the city the more careful must be the organizing. In the smaller communities almost every store can be visited. In the larger cities the stores must be selected. This selection should be made before the actual collection of prices begins in order that every section of the city will be included.
4. In the larger cities, because of the large number of stores and the size of the territory covered more teachers should be asked to cooperate in the securing of the prices.
5. Each teacher should know just what she has to do, what pupils, if any, she is to use, and what stores she is responsible for, so that she can begin the actual collection of prices with her first class on the date set.

6. As soon as each teacher finishes her part of the job she should return her material to the organizer with a report of what has been accomplished so that the organizer can arrange for the completion of any part of the work omitted.
7. The organizer should check all of the returns handed to her to see that all the information requested from the community has been secured.

C. INDIVIDUALS TO COLLECT THE PRICES.

1. **FOOD:** (See Form II). The food prices can be secured by the pupils in the high school home economics classes under the direction, guidance, and supervision of the teachers. Trustworthy and able pupils sent out in pairs during class time have found the securing of prices very interesting and worth while. The securing of prices could also be assigned as part of the regular home-work

In case there are no home economics classes, high school seniors could be used to collect the prices.

A careful checking of the prices turned in by the pupils should be made by each teacher. The teacher should question any prices that seem unusual and far from the prices given by other dealers. Another pupil should be asked to investigate the price of the article about which there was question to see that no misunderstanding exists about the article. Every price should be accurate and exact.

Each teacher should be sure that all of the information requested on each form has been secured and recorded.

2. **ROOM RENT:** . (See Form III)

The cost of room rent should be secured by adults.

In case the Room Registry method (see Part B of Form III) can be used, any teacher interested in living conditions of women would be competent. In case the teacher's room method is used, someone, who can see that the Standards for Rooms (see Part C of Form III) is submitted to each teacher, should be assigned to the task.

In case neither of the above methods furnishes the required number of rooms then some teacher or teachers interested in living conditions should undertake the task as suggested in Part B of Form III.

D. INFORMATION REQUESTED FROM EACH COMMUNITY.

FOOD: 13 articles. (See Form II)

Population up to 10,000	as many prices as possible
Population 10,000-50,000	at least 20 prices on each article
Population 50,000 up	30 or more prices distributed throughout the city

RENT: of a standard room for a woman. (See Form III)

Population up to 10,000	as many prices as possible
Population 10,000-50,000	at least 50 prices
Population 50,000 up	at least 75 prices

COST OF LIVING OF TEACHERS

Paul R. Mort, Associate Professor of Education, Teachers College, Columbia University

and

David P. Harry, Jr., Assistant Professor of Educational Administration, University of Pittsburgh

Form II—Food Prices

FORM TO BE USED IN SECURING PRICES OF FOOD*

(Adapted from D. P. Harry, Jr., Cost of Living of Teachers in New York State)
Bureau of Publication, Teachers College, Columbia University, 1928

COMMUNITY.....SCHOOL DISTRICT.....NAME OF INVESTIGATOR.....
DATE PRICES COLLECTED.....POSITION OF INVESTIGATOR.....
REPORT CHECKED BY.....

Directions—After each article write the price charged by the store. Be careful to secure prices on the exact article described. Be sure that the unit priced is the same as listed. Read the directions given on the reverse of this sheet.

1. Milk, fresh, bottled delivered, Best Grade other than certified per quart (.....) 1.
2. Eggs, strictly fresh, near-by gathered, whites, first per dozen (.....) 2.
3. Butter, creamery extra, (92 score) print per pound (.....) 3.
4. Hens, fowl, one to two years old, dressed, not drawn per pound (.....) 4.
5. Sirloin steak, best cut, good native per pound (.....) 5.
6. Round steak, best cut top round, good native per pound (.....) 6.
7. Pork chops, loin best per pound (.....) 7.
8. Potatoes, Irish or white, medium size, best grade per pound (.....) 8.
9. Bread, white, baked weight cold per pound (.....) 9.
10. Flour, wheat, Gold Medal or Pillsbury Best per 24½ lb. bag (.....) 10.
11. Coffee, ground, Astor or Maxwell House per pound (.....) 11.
12. Tea, Lipton's Finest Orange Pekoe, or Tetley's Orange Pekoe per ¼ pound (.....) 12.
13. Evaporated milk, Carnation evaporated, or Borden's unsweetened evaporated per 1 pound can (.....) 13.

WRITE NAMES OF STORES ON OTHER SIDE

NAMES AND ADDRESSES OF STORES.

MILK

BREAD

MEAT

GROCERIES

POTATOES

DIRECTIONS FOR INVESTIGATORS OF FOOD PRICES IN PENNSYLVANIA

1. The investigator should read carefully the description of each article of food.
2. Do not try to make copies of the list of articles. Always have the printed list before you and record the prices in the proper place on the recording form immediately.
3. Be sure that all the information requested at the top and bottom of the recording form is recorded.
4. Be sure to visit stores of all types, large and small, individual and chain, grocery, bakery, butcher, fruit and produce, milk and dairy, etc.
5. The telephone directory should help to locate the stores and should prevent any stores from being omitted.
6. The individuals who collect the food prices should be as experienced as possible with food articles. The dealers should be informed that the prices will not be published with names and that the prices are confidential. Do not allow any dealer to see the prices that the other dealers have quoted. Do not divulge the prices secured to anyone.
7. All the food articles may not be found in any one store. When a store is visited the investigator should secure the costs of as many of the articles as possible.
8. Since most stores have the price indicated on the price tags some of the prices can be secured without troubling the merchant. Try to go to the store at a time when the merchant is least busy. Do not go near the closing hour, just before noon, or when the store is crowded.
9. All the prices should be regular prices and not special sale prices. It is very important that the investigator should secure prices upon the articles as listed. The same quality, the same grade, the same size of container, all should agree with the description given in the standards.
10. In the case of bread have the loaf weighed. If it is not exactly a pound, record the weight in ounces and the price.
11. Articles which are trade mark goods, have full information, generally, upon the wrapper or package.
12. If it is impossible to secure prices on certain of the articles listed by brand, substitute other brands sold in the community. Indicate on the recording form very carefully the quality, grade, name and size of the brand substituted.
13. If the price quoted by a dealer on an articles is much higher, or much lower than that quoted by other dealers in the neighborhood be sure that the dealer understands the quality and size of the article required.

COST OF LIVING OF TEACHERS

BY PAUL R. MORT

Associate Professor of Education, Teachers College, Columbia University

AND DAVID P. HARRY, JR.

Assistant Professor of Educational Administration, University of Pittsburgh

FORM III—ROOM RENT

A. PLAN FOR RECORDING INFORMATION CONCERNING ROOM RENT

COMMUNITY.....SCHOOL DISTRICT.....DATE PRICES COLLECTED.....

NAME OF INVESTIGATOR.....POSITION.....

METHOD OF SECURING DATA.....

REPORT CHECKED BY.....

Directions—Record only those rooms that meet the standards in Part C of this form. Be sure to read the directions in Part B. Give room rent only—do not include board.

	ADDRESS OF ROOM	RENT PER WEEK
1. 1.
2. 2.
3. 3.
4. 4.
5. 5.
6. 6.
7. 7.
8. 8.
9. 9.
10. 10.
11. 11.
12. 12.
13. 13.
14. 14.
15. 15.
16. 16.
17. 17.
18. 18.
19. 19.
20. 20.

B. DIRECTIONS FOR INVESTIGATORS OF ROOM RENT

GENERAL DIRECTIONS.

1. The investigator should study the standards for rooms (See Part C of this form) and the following directions before proceeding to secure the cost of room rent.
2. Consider the cost of rent of a room for a young woman only.
3. Consider the room rent entirely separate from and without reference to the cost of board.
4. If the rooms are rented by the month, instead of by the week, indicate on the record form (Part A) that the rent is by the month.
5. If the room varies much from the standards (Part C) or seems to offer comforts and conveniences beyond the standards, do not list it. In case of any doubt on the part of the investigator do not list the room.
6. Record the address and the rent of all rooms meeting the standards. On each form there is a space for recording information on 20 rooms. Do not record any rooms that do not meet the standards.
7. In the larger cities (50,000 population up) at least 75 to 100 rooms that meet the standards should be listed.
8. In the smaller communities 25 to 50 rooms should be listed, if possible.

DIRECTIONS FOR CITIES THAT HAVE A ROOM REGISTRY.

1. Before proceeding to find rooms the investigator should visit any Room Registry that may be in the city.
2. The Y. W. C. A. has Room Registries in most of the large cities and in some of the smaller cities. Other social agencies may have on file a list of rooms for women.
3. For the purpose of this study an up-to-date list of rooms is needed. Each room should have been inspected and accepted by the Y. W. C. A. Room Registry secretary. The rooms should be in various parts of the city. Detailed descriptions of each room are found in the better room registries.
4. If such a list is found, discuss the standards (Part C) with the secretary of the room registry. If the local standards agree with the standards set up for this study, then select very carefully the rooms that meet the requirements. Record the address and the room rent on the record form (Part A).

DIRECTIONS FOR CITIES WITHOUT A ROOM REGISTRY.

1. Have each woman teacher who is not living at home read the standards for rooms (Part C) and compare her room with the standards.
2. Record the address and the room rent of each teacher's room which meets the requirements.
3. If this method does not secure at least 15 rooms that meet the standards, then the addresses of rooms to be rented should be secured from the local newspaper advertisements, from ministers, from rooms-to-let signs in house windows, and from individuals in the community who know of rooms for rent.
4. Three or four teachers should visit the rooms obtained in the above way until the desired number of rooms that meet the standards have been accepted. Do not use this method unless the teacher's room method has failed to secure fifteen rooms meeting the standards.

C. STANDARDS TO BE USED IN SECURING COSTS OF ROOM RENT

(Adapted from Y. W. C. A. Room Registry Standards by David P. Harry, Jr., for a study of the cost of living of teachers in New York State.)

NEIGHBORHOOD.

1. Preferably the house should be located in a neighborhood that is free from noises, dangers, polluted air and malodors. The immediate vicinity of railroad yards, dangerous railroad crossings, and offensive trades, and the congestion of business centers should be avoided.
2. The house should be located near local transportation facilities.
3. Preferably the house should be located on a street, or a section of a street, that is entirely residential.

THE INDIVIDUAL IN CHARGE OF THE HOUSE.

1. The house should be in charge of a person whose references as to personal character have been accepted by the Y. W. C. A. Room Registry or by the local school authorities. The recommendation of other social agencies is acceptable.
2. In general the house that habitually receives transient roomers without character references should not be listed.
3. These requirements limit the house to the private family home or to that type of boarding house that serves a relatively permanent group. Teacherages, women's dormitories, hotels that cater only to women, and other hotels in which groups of teachers are now residing can be accepted as satisfactory.

THE HOUSE.

1. The building should be kept in constant repair.
2. The building should be clean.
3. There should be provision for natural as well as artificial lighting.
4. The heating plant should be able to maintain a temperature of 65 to 68 degrees Fahrenheit on the coldest days.
5. The house should have adequate fire protection. If the room is on the third or higher floor there should be either fire-escapes or fireproof stairwells to which there is passageway. By fireproof stairwell is meant an enclosed stairway constructed of fireproof material.
6. There should be an indoor bathroom, completely equipped with superior sanitary equipment, toilet, porcelain bowl, porcelain or enameled iron tub, hot and cold water, mirror. The bathroom should not be located on a hall to which the general public has access. No more than six people should be expected to use one bathroom.
7. The roomer should have laundry and pressing privileges.
8. There should be a room in the building, other than a bedroom, in which the roomer may receive men guests. The common name for this room is parlor, living room, office, reception room.

THE ROOM.

1. The room should be occupied by one person.
2. The room should have a floor area of 120 to 150 square feet with at least one window of 12 square feet area communicating directly to outside air.

3. The next building should be at least 12 feet away from the window.
4. The room should have adequate heat, 65-68 degrees F. on coldest days, secured by means other than an oil stove in the room.
5. The room should have an adequate amount of natural as well as artificial light. Either type of light should permit close work at the desk.
6. Rooms opening on enclosed courts generally do not give adequate light.
7. Do not consider a room without doors which can be closed, or one which can be reached only through another sleeping room.
8. Emphasis should be placed on livableness rather than on specific articles of furniture. A comfortable bed at least three feet wide, sufficient covers, suitable dressing conveniences with a mirror, sufficient drawer and closet space, one straight and one low chair, a suitable floor covering, a table or desk with book shelves, and a reading lamp seem adequate.

LIST OF KANSAS CITIES OVER 1000 POPULATION

WHERE DATA WAS ASKED IN THIS STUDY

First Class 11

Kansas City
Wichita
Topeka
Hutchinson
Leavenworth
Pittsburg
Coffeyville
Parsons
Salina
Atchison
Fort Scott

Second Class 77

Arkansas City
Lawrence
Independence
Emporia
Winfield
Manhattan
Chanute
Eldorado
Newton
Ottawa
Iola
Wellington
Dodge City
Junction City
Abilene
Concordia
Galena
Great Bend
Baxter Springs
Pratt
Hays
Cherryvale
Clay Center
Horton
McPherson
Garden City
Herington
Marysville
Fredonia
Neodesha
Eureka
Goodland
Osawatomie
Olathe
Paola
Augusta

Hiawatha
Liberal
Frontenac
Columbus
Girard
Larned
Hoisington
Beloit
Osage City
Humboldt
Caney
Holton
Anthony
Garnett
Norton
Burlington
Council Grove
Kingman
Lyons
Sabetha
Yates Center
Belleville
Lindsborg
Seneca
Caldwell
Mulberry
Oswego
Marion
Kinsley
Florence
Osborne
Minneapolis
Sterling
Bonner Springs
Chetopa
Harper
Lincoln
Scammon
Weir
Nickerson

Third Class 51

Arma
Russell
Ellsworth
Colby
Madison
Ellis
Bedan
Cherokee

Blue Rapids
St John
Wamego
Peabody
Smith Center
Hillsboro
Phillipsburg
Stafford
Mankato
Frankfort
Pleasanton
Downs
Scott City
Burlingame
Kiowa
Washington
Baldwin
Greensburg
Erie
Howard
St Marys
Atwood
Medicine Lodge
Clyde
Halstead
Wakeeney
Valley Falls
Ashland
Stockton
Arkadia
Oberlin
Tonganoxie
Troy
Coldwater
Plainville
Meade
Ellinwood
Protection
Cedarvale
Ness City
Wilson
Solomon
Oakley

Total cities 139

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Abilene		Anthony		Arkansas City		Arma	
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	10	41.20	10	41.20	12	49.44	12½	51.50
2) Eggs 68 x 1 dz.	28½	19.38	27	18.36	27	18.36	26	17.68
3) Butter 75 x 1 lb	48	36.00	50	37.50	52	39.00	50	37.50
4) Hens dressed 25 x 1 lb.	34	8.50	35	8.75	35	8.75	31	7.75
5) Sirloin steak 27 x 1 lb	39	10.53	35	9.45	37	9.99	31	8.37
6) Round steak 27 x 1 lb	37	9.99	35	9.45	35	9.45	31	8.37
7) Pork chops 29 x 1 lb	32	9.29	34	9.86	33	9.57	33	9.57
8) Pota- toes 746 x 1 lb	33	24.87	3	22.38	3½	26.11	2 2/3	19.89
9) Bread 642 x 1 lb	9½	60.99	9½	60.99	9½	60.99	9	57.70
10) Flour 9.14 x 24½ lb bag	1.25	11.42	1.15	10.51	1.19	10.87	1.18	10.87
11) Coffee 33 x 1 lb	55	18.35	56	18.68	54	17.82	52	17.36
12) Tea 52 x 1 lb	29	15.08	31	16.12	25	13.00	29	15.08
13) Evap- orated Milk 95 x 1 lb	12½	11.64	11	10.45	11	10.45	10	9.50
Total weighted Prices		277.24		273.70		283.80		271.13

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

Food Art- icles with weights	Atchison		Augusta		Baldwin		Belleville	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	11	45.32	10	41.20	10	41.20	10	41.20
2) Eggs 68 x 1 dz.	32	21.76	27	18.36	26	17.68	28	19.04
3) Butter 75 x 1 lb	54	40.50	53	39.75	51	38.25	56	42.00
4) Hens dressed 25 x 1 lb.	33	8.25	27	6.75	35	8.75	25	6.25
5) Sirloin steak 27 x 1 lb	39	10.53	36	9.72	38	10.26	38	10.26
6) Round steak 27 x 1 lb	38	10.26	35	9.45	38	10.26	38	10.26
7) Pork chops 29 x 1 lb	35	10.15	31	8.99	35	10.15	35	10.15
8) Potatoes 746 x 1 lb	3 1/2	26.11	3	22.38	3 1/3	24.87	3 1/3	24.87
9) Bread 642 x 1 lb	10	64.20	10	64.20	10	64.20	10	64.20
10) Flour 9.14 x 24 1/2 lb bag	1.36	12.43	1.36	12.43	1.3	11.88	1.35	12.34
11) Coffee 33 x 1 lb	59	19.67	56	18.68	56	18.68	58	19.34
12) Tea 52 x 1 lb	31	16.12	25	13.00	30	15.60	28	14.56
13) Evap- orated Milk 95 x 1 lb	12	11.40	12	11.40	13	12.35	13	12.35
Total weighted Prices		296.70		276.31		284.13		286.82

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Burlington	Caldwell	Cherokee	Concordia
Food Art- icles with weights	Ave. Wtd. Price	Ave. Wtd. Price	Ave. Wtd. Price	Ave. Wtd. Price
1) Milk 1 qt. x 412	12 49.44	10 41.20	10 41.20	11½ 47.38
2) Eggs 68 x 1 dz.	28 19.04	27 18.36	29 19.74	27 18.36
3) Butter 75 x 1 lb	58 43.50	50 37.50	50 37.50	50 37.50
4) Hens dressed 25 x 1 lb.	24 6.00	27½ 6.67	22 9.50	39 9.75
5) Sirloin steak 27 x 1 lb	35 9.45	33 8.91	36 9.72	39 10.53
6) Round steak 27 x 1 lb	32 8.64	32 8.64	36 9.72	39 10.53
7) Pork chops 29 x 1 lb	27 7.63	33 9.57	30 8.70	35 10.15
8) Pota- toes 746 x 1 lb	2½ 18.79	22/3 19.89	2½ 18.65	3 22.33
9) Bread 642 x 1 lb	10 64.20	10 64.20	10 64.20	9 57.78
10) Flour 9.14 x 24½ lb bag	1.25 11.42	1.15 10.52	1.14 10.42	1.31 11.97
11) Coffee 33 x 1 lb	55 18.15	56 18.48	55 18.15	57 18.91
12) Tea 52 x 1 lb	25 13.00	30 15.60	25 13.00	26 13.52
13) Evap- orated Milk 95 x 1 lb	13½ 12.82	10 9.50	14 13.30	11 10.45
Total weighted Prices	260.28	269.24	269.81	279.11

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

Food Art- icles with weights	Dodge City		Downs		Ellis		Ellsworth	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412								
2) Eggs 68 x 1 dz.	10 27	41.20 18.36	10 29	41.20 19.74	11 24	45.32 18.32	12 23	49.44 14.96
3) Butter 75 x 1 lb	50	37.50	50	44.25	56	42.00	55	41.25
4) Hens dressed 25 x 1 lb.	29	7.25	23	5.75	23	7.00	30	7.50
5) Sirloin steak 27 x 1 lb	38	10.26	38	10.26	37	9.99	35	9.45
6) Round steak 27 x 1 lb	34	9.18	38	10.26	37	9.99	35	9.45
7) Pork chops 29 x 1 lb	33	9.57	30	8.70	32	9.28	30	8.70
8) Pota- toes 746 x 1 lb	3 1/3	24.87	2 1/2	21.51	4	29.84	3 1/2	26.11
9) Bread 642 x 1 lb	32	77.04	10	64.20	10	64.20	10	64.20
10) Flour 9.14 x 24 1/2 lb bag	1.05	9.60	1.3	11.88	1.15	10.52	1 1/4	11.42
11) Coffee 33 x 1 lb	57	18.91	60	19.80	60	19.80	55	18.15
12) Tea 52 x 1 lb	30	15.60	28	14.56	31	16.12	30	15.60
13) Evap- orated Milk 95 x 1 lb	13	12.35	14	13.30	14	13.30	15	14.25
Total weighted Prices		296.69		285.41		293.68		290.48

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

Food Art- icles with weights	Amoria		Florence		Frankfort		Fredonia	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	12	49.44	10	41.20	12	49.44	11½	47.38
2) Eggs 68 x 1 dz.	30	20.40	26	17.68	30	20.40	28	19.04
3) Butter 75 x 1 lb	54	40.50	54	40.50	53	39.75	49	36.75
4) Hens dressed 25 x 1 lb.	35	8.75	28	7.00	37	9.25	27	6.75
5) Sirloin steak 27 x 1 lb	40	10.80	36	8.72	37	9.99	35	9.45
6) Round steak 27 x 1 lb	39	10.53	36	9.72	33	8.91	34	9.18
7) Pork chops 29 x 1 lb	33	9.57	29	8.41	33	9.57	32	9.28
8) Pota- toes 746 x 1 lb	2½	21.51	3	22.38	3	22.38	2½	18.65
9) Bread 642 x 1 lb	10	64.20	10	64.20	10	64.20	9	57.78
10) Flous 9.14 x 24½ lb bag	1.32	12.06	1.17	10.70	1.25	11.42	1.2	10.86
11) Coffee 33 x 1 lb	56	18.48	48	19.34	58	19.34	54	17.82
12) Tea 52 x 1 lb	27	14.04	29	15.08	28	14.56	24	12.48
13) Evap- orated Milk 95 x 1 lb	12	11.40	13	12.35	13	12.35	12	11.40
Total weighted Prices		291.68		278.28		291.56		267.22

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Galena		Garden City		Girard		Great Bend	
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	10	41.20	10	41.20	13	53.56	10	41.20
2) Eggs 68 x 1 dz.	27	18.36	27	18.36	28	19.04	25	17.00
3) Butter 75 x 1 lb	57	42.75	50	37.50	50	37.50	50	37.50
4) Hens dressed 25 x 1 lb.	28	7.00	30	7.50	35	8.75	30	7.50
5) Sirloin steak 27 x 1 lb	32	8.64	33	8.91	40	10.80	31	8.37
6) Round steak 27 x 1 lb	32	8.64	34	9.18	40	10.80	33	8.91
7) Pork chops 29 x 1 lb	29	8.41	30	8.70	37	10.73	29	8.41
8) Pota- toes 746 x 1 lb	2½	18.65	3	22.38	2½	18.65	2½	18.65
9) Bread 642 x 1 lb	10	64.20	9	57.78	9	57.78	10	64.20
10) Flour 9.14 x 24½ lb bag	1.33	12.25	1.11	10.15	1.23	11.24	1.05	9.60
11) Coffee 33 x 1 lb	60	19.80	59	19.47	57	18.81	54	17.82
12) Tea 52 x 1 lb	27	14.04	25	13.00	30	15.60	30	15.60
13) Evap- orated Milk 95 x 1 lb	13	12.35	13	12.35	13	12.35	11	10.45
Total Weighted Prices		276.29		266.48		285.59		265.21

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Halstead		Hays		Horington		Hoisington	
Food Art- icles with weights	Ave.	Wtd. Price	Ave.	Wtd. Price	Ave.	Wtd. Price	Ave.	Wtd. Price
1) Milk 1 qt. x 412	11	45.32	10	41.20	12	49.44	10	41.20
2) Eggs 68 x 1 dz.	28	19.04	25	17.00	30	20.40	25	17.00
3) Butter 75 x 1 lb	54	40.50	56	42.00	49	36.75	52 $\frac{1}{2}$	39.38
4) Hens dressed 25 x 1 lb.	26	6.50	26	6.50	35	8.75	26 $\frac{1}{2}$	6.63
5) Sirloin steak 27 x 1 lb	37	9.99	38	10.26	40	10.80	35	9.45
6) Round steak 27 x 1 lb	37	9.99	36	9.72	40	10.80	34	9.18
7) Pork chops 29 x 1 lb	35	10.15	34	9.86	35	10.15	32	9.28
8) Pota- toes 746 x 1 lb	3 $\frac{1}{2}$	26.11	3	22.38	3 $\frac{1}{2}$	26.11	3 $\frac{1}{2}$	26.11
9) Bread 642 x 1 lb	10	64.20	10	64.20	10	64.20	3 $\frac{2}{3}$	55.64
10) Flour 9.14 x 24 $\frac{1}{2}$ lb bag	1.13	10.52	1.15	10.52	1.25	11.42	1.15	10.52
11) Coffee 33 x 1 lb	56	18.48	58	19.34	56	18.48	58	19.34
12) Tea 52 x 1 lb	27	14.04	28	14.56	26	13.62	28	14.56
13) Evap- orated Milk 95 x 1 lb	13	12.35	13	12.35	13	12.35	12 $\frac{2}{3}$	12.03
Total Weighted Prices		287.19		279.89		293.17		270.32

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Holton		Horton		Humboldt		Iola	
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 ct. x 412	10	41.20	10	41.20	10	41.20	10	41.20
2) Eggs 68 x 1 dz.	29	19.72	30	20.40	28	19.04	27	18.36
3) Butter 75 x 1 lb	51	38.25	50	42.00	51	38.25	52	39.00
4) Hens dressed 25 x 1 lb.	34	8.50	27	6.75	32	8.00	28	7.00
5) Sirloin steak 27 x 1 lb	40	10.80	35	9.45	35	9.45	31	8.37
6) Round steak 27 x 1 lb	38	10.26	34	9.18	35	9.45	30	8.15
7) Pork chops 20 x 1 lb	35	10.15	33	9.57	31	8.99	38	8.12
8) Pota- toes 746 x 1 lb	3½	26.11	3	22.38	3	22.38	2½	18.65
9) Bread 642 x 1 lb	9	57.78	10	64.20	10	64.20	9	57.78
10) Flour 9.14 x 24½ lb bag	1.15	10.51	1.25	11.42	1.2	10.97	1.3	11.88
11) Coffee 33 x 1 lb	54	17.82	60	19.80	55	18.15	57	18.91
12) Tea 52 x 1 lb	23	11.96	27	14.04	20	10.40	20	10.40
13) Evap- orated Milk 95 x 1 lb	12	11.40	14	13.30	12½	11.88	12	11.40
Total Weighted Prices		274.46		273.69		272.36		259.17

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Junction City		Kingman		Kinsley		Leavenworth	
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	12	49.44	10	41.20	10	41.20	11½	47.38
2) Eggs 68 x 1 dz.	28	19.04	27	18.36	25	17.00	30	20.40
3) Butter 75 x 1 lb	50	37.50	52	39.00	50	37.50	55	41.25
4) Hens dressed 25 x 1 lb.	34	8.30	28	7.00	30	7.50	35	8.75
5) Sirloin steak 27 x 1 lb	35	9.45	36	9.72	35	9.45	40	10.20
6) Round steak 27 x 1 lb	34	9.18	36	9.72	35	9.45	38	10.26
7) Pork chops 29 x 1 lb	31	8.99	33	9.57	30	8.70	35	10.15
8) Potatoes 746 x 1 lb	3½	27.98	3 1/8	24.87	3	22.38	3½	26.11
9) Bread 642 x 1 lb	9	57.78	10½	67.41	10	64.20	11	70.62
10) Flour 9.14 x 24½ lb bag	1.22	11.15	1.15	10.51	1.1	10.05	1.5	13.71
11) Coffee 33 x 1 lb	58	19.34	55	18.15	55	18.15	59	19.47
12) Tea 52 x 1 lb	25	13.00	28	14.56	26	13.52	30	15.60
13) Evap- orated Milk 95 x 1 lb	12	11.40	11	10.45	12	11.40	12½	11.88
Total Weighted Prices		282.75		280.52		270.50		306.38

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

Food Art- icles with weights	Liberal		Lindsborg		McPherson		Medicine Lodge	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 ct. x 412	10	41.20	9	37.08	9	37.08	10	41.20
2) Eggs 68 x 1 dz.	25	17.00	26	17.68	28	19.04	24	16.32
3) Butter 75 x 1 lb	53	39.75	51	38.25	47	35.25	50	37.50
4) Hens dressed 25 x 1 lb.	27	6.75	28	7.00	30	7.50	27	6.75
5) Sirloin steak 27 x 1 lb	33	8.77	35	9.45	35	9.45	30	8.10
6) Round steak 27 x 1 lb	33	8.91	34	9.18	33	8.91	30	8.10
7) Pork chops 20 x 1 lb	30	8.70	30	8.70	31	8.99	30	8.70
8) Potatoes 746 x 1 lb	3	22.38	3	22.38	3	22.38	3	22.38
9) Bread 642 x 1 lb	10	64.20	7½	48.15	8	51.36	10	64.20
10) Flour 9.14 x 24½ lb bag	1.2	10.97	1.19½	10.29	1.1	10.05	1.25	11.42
11) Coffee 33 x 1 lb	53	19.14	55	18.15	57	18.81	56	18.48
12) Tea 52 x 1 lb	28	14.56	26½	13.78	27	14.04	28	14.56
13) Evap- orated Milk 95 x 1 lb	12½	11.88	13	12.35	12½	11.88	13	12.35
Total weighted Prices		274.21		252.44		254.74		270.06

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Minneapolis		Dulvane		Neodesha		Ness City	
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 ct. x 412	11	45.32	10	41.20	11	45.32	10	41.20
2) Eggs 68 x 1 dz.	28	19.04	26	17.68	29	19.72	24	16.32
3) Butter 75 x 1 lb	50	37.50	50	37.50	56	42.60	53	39.75
4) Hens dressed 25 x 1 lb.	22	5.50	35	8.75	30	7.50	28	7.00
5) Sirloin steak 27 x 1 lb	37	9.99	40	10.80	34	9.18	35	9.45
6) Round steak 27 x 1 lb	37	9.99	40	10.80	35	9.45	35	9.45
7) Pork chops 29 x 1 lb	29	8.41	28	8.12	31	8.99	30	8.70
8) Pota- toes 746 x 1 lb	3	22.38	3 1/3	24.87	2 3/4	20.52	3	22.38
9) Bread 642 x 1 lb	10	64.20	9.6	61.83	10	64.20	15	96.30
10) Flour 9.14 x 24 1/2 lb bag	1.2	10.97	1.27	11.60	1.3	11.88	1.2	10.97
11) Coffee 33 x 1 lb	55	18.15	54	17.82	54	17.82	59	19.47
12) Tea 52 x 1 lb	28	14.56	25	13.00	30	15.60	24	12.48
13) Evap- orated Milk 95 x 1 lb	12	11.80	10	9.50	12	11.40	12	11.40
Total weighted Prices		277.81		273.47		283.58		304.87

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Newton		Norton		Ottawa		Osborne	
Food Art- icles with weights	Ave.	Wtd. Price	Ave.	Wtd. Price	Ave.	Wtd. Price	Ave.	Wtd. Price
1) Milk 1 qt. x 412	10	41.20	10	41.20	10	41.20	10	41.20
2) Eggs 68 x 1 dz.	26	17.68	26	17.68	28	19.04	30	20.40
3) Butter 75 x 1 lb	52	39.00	54	40.50	50	37.50	50	37.50
4) Hens dressed 25 x 1 lb.	35	8.75	35	8.75	33	8.25	25	6.25
5) Sirloin steak 27 x 1 lb	40	10.80	35	9.45	36	9.72	30	8.10
6) Round steak 27 x 1 lb	39	10.53	35	9.45	35	9.45	30	8.10
7) Pork chops 29 x 1 lb	34	9.86	35	10.15	33	9.57	35	10.15
8) Pota- toes 746 x 1 lb	2 ² / ₅	20.90	3 ¹ / ₂	26.11	3	22.38	4	29.84
9) Bread 642 x 1 lb	10	64.20	12 ¹ / ₂	80.25	9	57.78	10	64.20
10) Flour 9.14 x 24 ¹ / ₂ lb bag	1.23	11.24	1.27	11.60	1.15	10.51	1.25	11.42
11) Coffee 33 x 1 lb	54	17.82	56	18.48	55	18.35	60	19.80
12) Tea 52 x 1 lb	25	13.00	33	17.16	26	13.52	30	15.60
13) Evap- orated Milk 95 x 1 lb	11	10.45	13	12.35	12	11.40	15	14.25
Total Weighted Prices		275.43		303.13		268.67		286.81

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Oxford		Paola		Phillipsburg		Salina	
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	12	49.44	11	45.32	10	41.20	11	45.32
2) Eggs 68 x 1 dz.	25	17.00	23	19.04	25	17.00	23	19.04
3) Butter 75 x 1 lb	60	45.00	49	36.75	32	39.00	49	36.75
4) Hens dressed 25 x 1 lb.	30	7.50	29	7.25	24	6.00	32	8.00
5) Sirloin steak 27 x 1 lb	35	9.45	34	9.18	35	9.45	38	10.26
6) Round steak 27 x 1 lb	33	9.45	32	8.64	35	9.45	38	10.26
7) Pork chops 29 x 1 lb	38	11.02	30	8.70	30	8.70	32	9.28
8) Pota- toes 746 x 1 lb	3	22.38	3	22.38	31	26.11	3	22.38
9) Bread 642 x 1 lb	12	77.04	10	64.20	9	57.78	10	64.20
10) Flour 9.14 x 24½ lb bag	1.1	10.05	1.2	10.97	1.25	11.42	1.23	11.34
11) Coffee 33 x 1 lb	60	19.80	57	18.81	60	19.80	54	17.82
12) Tea 52 x 1 lb	30	15.60	25	13.00	32	16.64	28	14.56
13) Evap- orated Milk 95 x 1 lb	12	11.40	12	11.40	14	13.30	11	10.45
Total Weighted Prices		305.13		275.64		275.85		279.56

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

Food Art- icles with weights	Scammon		Seneca		Smith Center		Stafford	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 ct. x 412	15	41.20	10	41.20	10	41.20	10	41.20
2) Eggs 68 x 1 dz.	27	18.36	25	17.00	28	19.04	26	17.68
3) Butter 75 x 1 lb	55	41.25	60	45.00	55	39.75	50	37.50
4) Hens dressed 25 x 1 lb.	28	7.00	29	7.25	35	8.75	28	7.00
5) Sirloin steak 27 x 1 lb	30	8.10	40	10.80	33	8.77	35	9.45
6) Round steak 27 x 1 lb	30	8.10	38	10.26	32	8.64	30	8.10
7) Pork chops 20 x 1 lb	31	8.99	35	10.15	31	8.99	33	10.15
8) Pota- toes 746 x 1 lb	2 $\frac{1}{2}$	18.65	3	22.38	3	22.38	3 $\frac{1}{2}$	24.07
9) Bread 642 x 1 lb	13	63.46	10	64.20	10	64.20	10	64.20
10) Flour 9.14 x 24 $\frac{1}{2}$ lb bag	1.11	10.15	1.2	10.97	1.33	12.25	1.25	11.42
11) Coffee 33 x 1 lb	60	19.80	65	21.45	60	19.80	55	18.35
12) Tea 52 x 1 lb	27	14.04	30	15.60	28	14.56	26	13.52
13) Evap- orated Milk 95 x 1 lb	13	12.35	15	14.25	13	12.35	10	9.50
Total Weighted Prices		291.45		290.51		280.68		272.04

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

Food Art- icles with weights	St. John		Topeka		Valley Falls		Wichita	
	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	10	41.20	10	41.20	10	41.20	12	40.44
2) Eggs 68 x 1 dz.	26	17.68	30	20.40	29	19.72	27	18.36
3) Butter 75 x 1 lb	53	39.75	51	38.25	55	41.25	52	39.00
4) Hens dressed 25 x 1 lb.	32	8.00	35	8.75	35	8.75	31	7.75
5) Sirloin steak 27 x 1 lb	34	9.18	40	10.80	37	9.90	41	11.07
6) Round steak 27 x 1 lb	30	8.10	39	10.53	32	8.64	38	10.26
7) Pork chops 29 x 1 lb	35	10.15	33	9.57	30	8.70	34	9.86
8) Pota- toes 746 x 1 lb	3½	26.11	3	22.38	3	22.38	3½	26.11
9) Bread 642 x 1 lb	10	64.20	9½	57.78	10	64.20	11	70.62
10) Flour 9.14 x 24½ lb bag	1.15	10.51	1.33	12.25	1.2	10.97	1.25	11.42
11) Coffee 33 x 1 lb	59	19.47	56	18.48	58	19.34	54	17.32
12) Tea 52 x 1 lb	30	13.60	27	14.04	26	13.52	24	12.40
13) Evap- orated Milk 95 x 1 lb	13	12.35	11	10.45	13	12.35	10½	9.98
Total weighted Prices	282.30		274.80		281.01		294.17	

Worksheet B

AVERAGE AND WEIGHTED PRICE OF FOOD BY COMMUNITIES

	Wilson		Winfield			
Food Art- icles with weights	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price	Ave. Price	Wtd. Price
1) Milk 1 qt. x 412	10	41.20	10	41.20		
2) Eggs 68 x 1 dz.	26	17.08	37	18.36		
3) Butter 75 x 1 lb	55	41.25	51	38.85		
4) Hens dressed 25 x 1 lb.	28	7.00	30	7.50		
5) Sirloin steak 27 x 1 lb	31	8.37	37	9.09		
6) Round steak 27 x 1 lb	30	8.10	37	9.09		
7) Pork chops 29 x 1 lb	31	8.99	34	9.86		
8) Pota- toes 746 x 1 lb	3	22.38	3	22.38		
9) Bread 642 x 1 lb	10	64.20	10	64.20		
10) Flour 9.14 x 24½ lb bag	1.1	10.05	1.2	10.97		
11) Coffee 33 x 1 lb	59	19.47	55	18.35		
12) Tea 52 x 1 lb	27	10.04	26	13.52		
13) Evap- orated Milk 95 x 1 lb	11	10.45	11	10.45		
Total weighted Prices		273.18		275.02		