## A COMPARISON BETWEEN THE 1939 AND 1948

SHOPPING HABITS OF STILLWATER RESIDENTS BY INCOME AND OCCUPATIONAL GROUPS

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## PREFACE

To those who aided in any manner, the author wishes to express the appreciation he so deeply feels. Especially does he wish to acknowledge the cheerful assistance and helpful aid of Prof. George H. Hill for his critical readings and suggestions and for his prompt and willing assistance in every way. Also, valuable aid was received from suggestions and discussions of Dean Raymond D. Thomas through the graduate seminar.
A. N. Harrison

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## CHAPTER I

## INTRODUCTION

In studying the present shopping habits of Stillwater consumers, as compared to their habits of 1939 , a number of questions are of utmost importance. (1) Why are Stillwater business men losing some trade to other cities? (2) Where do they go when they shop out of town? (3) How much trade goes out of town? (4) What do people buy out of town? (5) Which classes of residents do most of the out-of-town shopping? (6) What can Stillwater business men do to retain their trade?

These are all matters of practical interest to local merchants. This study was prepared to answer these questions with a minimum of bias. Cooperating in the study were the Stillwater Chamber of Commerce and the Market Research class of the School of Commerce at the Oklahoma Agricultural and Mechanical College.

Little scientific research has been used by organizations of business men in the study of consumer buying habits. This report will attempt to show the merchant how and to whom he is losing his trade. Throughout this study many references are made to the "Consumers Shopping Habits by Income and Occupational Groups" by Perham C. Nahl and a comparison of results of the two surveys. is made. (It was my purpose to see if there has been a change in buying habits in the past nine years.)

Stillwater, Oklahoma, with a population of about $18,000^{1}$ (1940 census 10,097 ) is the county seat of Payne county and the home of Oklahoma Agricultural and Mechanical College. It is situated in the north central part of the state near the metropolitan centers of Tulsa and Oklahoma City.

Stillwater is served by State Highways No. 40, and No. 51 and is approximately

[^0]75 miles gouth of the 0rlawaemansas border and apmoxinately 160 miles north of the Oklahoweweras border. Oklahona Gity (estimated population, 300,000) is about 67 miles southmest, and tulsa (estimated population, 169,780 ) is epprorimetely 72 miles east of Stillutater.

The Directory of Senufacturors and Wholesalers in Stillwater, Oklanome, shors 78 Itrms with an employment of 726 persons thich have an annual payroll of $1,256,800$. The annual payroll of the OHlahomagricultaral and Mechanical College is ${ }^{6,000,000 \text {. Industries located in Stillwater include llour nillinge, }}$ feed and seeds, floor fumaces, a cotton gin, and swall wholesalers. There are more then 300 buciness firms of all kinds located in Stillwater for the convenience of shoppers froa a wide area.

Stillwater is sexved by one railroad, the Santa Fe, and two bus lines, the Tumer Bua Company and the. . $\&$. 0 . The railroad is manly a freight line, and the two bus Ines sun shuttle buses between Perkins Gorner and Billg Corner. The only direct connection betweon Tulsa and Oklahoma Gity is trice a day by the ${ }^{2}$. R 0 ; the rest of the comections are houxly by the shuttle buses. In case of private hire it is possible to go by air because stillwater oms a modern airport located just two miles north or the city.

The city of Stillwator operates its orm light and water plants. These utilities bxing in an amual city revenue in excess of $\$ 600,000$, providing the operating revenwes to support the general govemment. The Municipal Honpital and $\begin{aligned} & \text { micipel Jibrary provide Stillvater vith civic facilities. these buildings }\end{aligned}$ were finance? by the electric and water revenues. The post office receipts for $194 \%$ were 144,676 as compared to 779,715 in 1940 ond 951,102 in 1930. This increase is die in part, no doubt, to the increase in the 0klahowa Agricultural and Hechanical College enrollneat.

The city of Stillweter has four grade schools, one junior high, one senior high, and a progress.ve seperate school for negroes. Preseatly the city is
planning to build more schools. There are about 2,200 students in the Stillwater puolic schools. Stillwater maintains five parks equipped with playground facilities. It also has five theaters within the city limits, with a drive-intheater to be built gouth of the KSPI-AM and Fin radio station. There is a Cetholie church which maintains a parochial school through the first six grades.

In the Stillwater area there are two banks, a building and loan company, and several investment companies to offer banking and investment facilities. The approximgte number of stores selling each of the commodities analyzed in this report is shom in Table 15A.

Exhibit 1
Stillwater Trading Area (Ink Shaded)


## Number of Stillwater Stores Selling Commodities Anslyzed in This Survey



Source: *Perham C. Nahl, "Consumer Shopping Habits by Income and Occupational Groups," Sept., 1939.
**A. N. Harrison, "Inventory of Stillwater Retail Businesses, " Oct., 1948. ***College staff not included.

## CHAPTER II

## SUMMARY OF FINDINGS

The survey made by Perham C. Nahl of the Stillwater out-of-town shoppers in 1939 showed that $56 \%$ of the people at that time shopped in other cities. In this survey there were $51.9 \%$ of the residents who indicated that they shop out-of-town. This may be accounted for to a large extent by the decrease over the nine year span in out-of-town shopping done by men, the women taking their place. For further information refer to the Analyses of Survey, part V, page 23.

An interesting phase of this study concerns Mail Order house buying. The average family of Payne county is $3 \frac{1}{2}$ persons to the family. Using this method to determine the approximate number of family units, Stillwater has 5,143 units. The 300 questionnaires showed that approximately $52.3 \%$ of those interviewed bought from mail order firms, while in 1939 there was only $44.6 \%$ that bought through this media. This increase can partly be accounted for by the improvement of mail order catalogues and availability of a local mail order office.

In this survey, as compared to the Nahl Survey, a new question was added to the questionnaire endeavoring to derive a reliable estimate of the minimum yearly amount of out-of-town buying from Mail Order houses. For the 157 families who buy by mail, the dollar volume amounted to $\$ 10,299$. Projected to the total 5,143 family umits, the yearly out-of-town mail order purchases from Stillwater would be estimated at an absolute minimum as $\$ 175,013$. This means that the merchants of Stillwater are losing some sales to people who normally buy locally.

Various remarks of those interviewed indicated that it would represent a decided gain if the local merchants were to promote a local modern department store. This would not only increase the local merchants' volume; but would also help to increase the size of the trading area. Adequate variety, as point--
ed out in this study, is not found in the local stores as they are now operating.


## CHAPTER III

PLANNING AND EXECUTING THE SURVEY

The background material for this survey was provided by such recognized texts as Lyndon 0. Brow's Market Research and Analysis, How to Conduct Consumer \& Oninion Research by Albert B. Blankenship and Marketing Handbook by P. H. Nystrom.

Interviews were made in 300 homes of the Stillwater area. In all 300 homes, the housewife or an adult female was asked questions on the entire family's purchasing habits.

Classification of residents into occupational groupings necessitated a preliminary reading of background material from similar surveys and in several texts. ${ }^{2}$ After determining the classification of income groupings, the problem arose as to how the occupations of Stillwater residents may be grouped. ${ }^{3}$

As a result of these investigations, a chart was made to show the income groups and the various occupational groups of the city, classified as to the approximate income bracket into which each $W_{a} s$ most likely to fall.

| Upper | Middle | Lower |
| :--- | :--- | :--- |
| Executive | Skilled Labor |  |
| Merchant | Retired | Store Clerk |
| Lawyer | Teachers | Unskilled Labor |
| Physician | Clerical (Office) | Domestic Labor |
| Other Professional | Ministers | Unemployed |
|  | Salesmen |  |
|  | Government employees |  |
|  | (Federal and Local) |  |

2 References: Paul H. Nystrom, Economic Principles of Consumption, (New York, 1931), pp. 173-175: C.H. Sandage, Advertising Theory and Practice, (Chicago, 1936), pp. 160-162: Time, Incorporated, Markets by Incomes, (New York, 1932), Vol. I, II.

3 For this work, was taken from Perham C. Nahl, "Consumer Shopping Habits by Occupation and Income Groups."

The sample used was divided into three socio-economic income groups, as follows: the upper group, consisting of 25 per cent of the families; a middle group containing 50 per cent of the families; and a lower group containing 25 per cent of the families. 4 These elassifications, of course, are not absoluteIy accurate, for in many of the cases any attempt to place the occupational group into a certain income bracket is at best largely a matter of opinion.

In attempting to set up these classifications no definite income levels have been designated, for a classification of this type is more or less a relative matter. 5 The highest 25 per cent in terms of type of home, occupation, educational level, etc., are listed as upper. In one community this might represent an annual cash income of $\$ 5,000$ or more, whereas in another community it might represent an annual cash income of only $\$ 3,000$. Regardless of the absolute level, the highest 25 per cent is classified as upper income families. Representatives of several of the occupational groups such as "teachers," could be classified into two different groups. Specific cases taken in either the upper or middle group may be found to have either high or low income for those particular occupations. In a like manner the middle group and the lower group were determined and designated.

A map designating the city areas in terms of these three socio-economic groups was made to aid in conducting the interviews and to assist in determining the income level. Exhibit 2 and 3 reflect this arrangement and classification. This "scatter" is made with the help of the socio-economic map and has achieved from the start a rough but effective combination of area and quota sampling. As an added safeguard in the measurement of trends, accurate records were

[^1]
kept of streets and blocks surveyed in this study. In any succeeding studies it is recommended that adjacent streets or blocks, and odd or even-numbered homes should be used.

The mapping of rental districts in this survey followed that of "Consumer Shopping Habits," the Nahl survey of 1939, in which stillwater real estate agents helped to obtain the rental information. For the purpose of this survey, the 1939 mapping of rental districts seemed adequate although the general rental level may have considerably increased. This decision was reached in view of the following statement:
"Indications are that rents on building, housing, housing units and apartments, are still on the increase," Selph said. "This of course applies to newly constructed units, and properties decontrolled. Since removal of controls, rents have continued to advance in this area, and the trend still seems to be inclined upward. Please understand properties still subject to control still remain at practically the same rent levels." 6

Some effect on the results of a study of the buying habits of Stillwater might result from interspersed new and old rental units, but the margin of error is insignificant in the writer's judgment from the point of view of the study.

## Field Force and Field Supervision

Three students from the market research class at Oklahoma Agricultural and Mechanical College helped in making the survey interviews. Each student before making interviews was instructed orally and in writing. There were 100 usable interviews made by each interviewer. Under the guidance of Professor George R. Hill, Department of Business Administration, the interviewers were selected and approved. The following market research students, with my assistance, conducted the interviews: W. F. Haynes, Stillwater, Oklahoma, A. H. Lobsits, Perry, Oklahoma, and P. H. Bryan, Sentinel, Oklahoma. Instructions

[^2]given to interviewers were:
"It is urgently requested that, before starting the actual survey, you study the questionnaire as well as the instructions, so thoroughly that you practically memorize both. Be sure that no questions remain unanswered in your mind as to how to properly handle all situations during actual interviewing. Following is a digest of the points discussed orally. It is given to you in this form as a reminder of each item and as a guide to you in your work in the field.

1. This work has no publicity connected with any phase of it; it is not to be followed by any sales literature from any merchant and there is positively no selling scheme involved. It is merely a study project. The interviewer should exercise care in making his opening remarks in such a manner as to lead the respondent at ease to emphasize names and addresses are not needed.
2. You are to call respondents living on the street assigned to you, in order to have a representative sample. Remembering that the sample is to be proportionate, and that each district should be covered in such a manner that an adequate selected sample is taken. Interview one family living in the first and third houses in the first block and in the second block cross to the opposite side of the street and interview likewise one family living in the first and third houses. This is designed to avoid selection of all the best or worst appearing homes on the street.
3. Ask for the lady of the house, and try to see her, on the theory that she is the one best qualified to answer your questions. If she is not at home, the man may undertake to answer the questions. In the majority of cases it is not difficult to procure an interview. A few persons may refuse to cooperate, but thank them and go on to the next interview. Try to make the respondent understand that this work is for study purposes only; that her help is extremely necessary to the success of your efforts; that it will take no more than ten minutes; that it entails no efforts on her part aside from answering a few simple questions.
4. APPROACH: The approach must help to make the person being interviewed as relaxed as possible. It is necessary that you give your name such as "Good afternoon, I am Miss Jones, a student of Oklahoma A. \& M. Market Research Class, which is making an investigation of the buying habits of Stillwater residents."
5. OPENTNG: After the approach is made, ask if she has a few minutes to spare and tell her that there are to be 300 families interviewed and you would like her opinions about local stores. Be sure that she is told that it will require about ten minutes of her time. Try to take as little time as possible in introduction because she might become impatient.
6. QUESTION: Introduce each question in a natural easy conversational manner. Don't "fire" your questions at the respondent like so many explosives. A pleasant, confident, assured, and conversational attitude will prove more effective. Do not dominate the conversation. Let the respondent do most of the talking. This will facilitate a more whole-hearted cooperation from the respondent. Throughout, the interview must be systematic and avoid any hint of bias.

## QUESTIONS:

1. Fill in closest number of years, unless respondent has lived here less than 6 months (has moved since last March). In this case,
continue with question 2 and skip all the rest of the questions except the ones underlined, i.e., (14,17, 20-26).
2. Fill in name of city (and name of state, if outside of Oklahoma.)

3-4.If answer is "Yes," check proper blank and ask where respondent shops out of town. If Tulsa or Oklahoma City, check proper blank following question 4, or fill in other in third column. Then, if answer to 3 is "No," skip all questions except underlined ones, namely ( $14,17,20-26$ ) which must still be answered.

5-7.The questions should be asked as given and the proper column checked. Y is "Yes, " $\mathbb{N}$ is "No," S is "About the Same." If respondent answers "No," be sure to find out if she believes (prices) are cheaper in Stillwater. If she does not, check "S." First colum is for Oklahoma City only; second column is for Tulsa only; third column for other outside center, whichever is applicable to shopping practices of respondent.

8-10. Same instructions as to checking columns. A "social trip" will include such things as concerts, plays, expositions, special trips to visit friends, etc. A business trip for business purposes is normally made by the man of the family and does not include special trips for shopping purposes. Special shopping trips will not be considered as either seciel trips or business trips.
11. Check "yes" or "no." If "yes," fill in number after "Q."
12. I is "Increased;" D is "decreased;" $S$ is "About the Same."

13-14.Self-explanatory. If the family owns a truck only, indicate under "remarks" at the end of the questionnaire.
15. Ask this question and let the respondent tell you the items which she normally buys out of town. Then ask about all other items which she has not mentioned. Women's apparel-coats, suits, dresses, hats, etc. Women's accessorieshosiery, lingerie, gloves, purses, etc. Men's furnishings-socks, shirts, ties, underwear, etc. Men's clothing-ocoats, suits, hats. Dry goods--piece goods, notions, " ${ }_{\text {white }}$ goods." Drugs and toilet articles-include cosmetics. Large electric items--refrigerators, radios, stoves. Small electric itemsfans, toasters, irons, food mixers, lamps. Amusementstheaters, plays, fairs, expositions, concerts. The foregoing will enable us to definitely determine that such items are or are not purchased.
16. Check--regularly, occasionally, or never. Ask if purchased from a mail order house, and fill in city name. Do the same for mail order purchases from department stores.
17. Be very careful about this question, it may be personal. Attempt to secure an estimate of average annual purchases.

If they appear reluctant to give an answer, do not urge then but rather pass on to the next question.
18. Ask this question as given, for each outside shopping center. Chock turice the P1rst reason given; cheek once all other reasons. Do not suggest answers or ask leading questions.
19. Check elosest of the six eategories, e.g., if answer is "every two weeks, " check "Twice a month."
20. Be sure to check all newspapers read.
21. Be sure to check all radio stations tuned in to regularly by respondent.

22-23.Self explanatory.
$21 /-25$. Try to get occupation as clearly as possible so as to ald in estimating the income. If more than one person is employed, PInd out the oceupations of others, and their approximate ages. By careful questioning try to determine whether it is full-time or part-time employment.
26. Insert all remarks which you believe will be helpful in tabulations. After asking this question check the column as to your opinion of whether they think it is Satisfactory, Good, or Poor If any other remarks put them into the line left for remarks.

Do not fake an answer but be truthful. You are the sole judge as to the truth in their answers. At the conclusion of an interview but before going to the next home it is imperative that you enter the address at mich the interviev was eonducted on the upper right hand margin of the interview form.

After leaving the home and before making the next interview look over the questionnaire that you have just taken and see if all questions have been answered. If you have left a question blank, fill it in from memory, then hurry on. It is better to have no answer than the wrong one."

A careful study was made to choose the proportion of interviews to be made in Stillwater on the basis of the approximate population in each distriet. There were 300 interviews taken from a comanity of 18,000 population. This means approximately 6 per cent of the family units. After consideration, it was decided to use the "selected sample" method. The published cross classification directory of Stillwater was used to find the most uniformiy residential streets which would give a good cross section where possible running through the several rental levels of the tomn. The streets selected are shown in Exhibit 2A, page 11.

The writer made follow-up checks on the work of interviewers. This testchecking, of course, was unknown to the original interviewers. It was considered important to establish the fact that interviews were properly made at the homes assigned and with the proper person to insure soundness of the sample. The interviews were made during the last two weeks in October and the first week in November, 1948.

## The Questionnaire

The questionnaire was mimeographed and limited in length to one side of an " $8 \frac{1}{2}$ by $14^{n}$ sheet of paper. This allowed for the asking of 25 questions.

The questionnaire follows the pattern of that used by Mr. Perham C. Nahl's "Consumer Shopping Habits by Occupation and Income 1939." Three additions were made and one question was omitted. By following this plan greater validity results in comparisons of this study and that of 1939. The additions made to the questionnaire were designed to cheok the influence of the recently installed local radio station upon buying habits, and to ascertain the extent of mail order buying. The questionnaire used in this study follows Exhibit \#3.

## Exhibit 3 <br> QUESTIONNATRE USED IN STILLMATER BUYTNG HABITS SURVEY

1. How long have you lived in Stillwater? Years
2. Where did you live before moving to Stillwater?
3. Do you ever shop outside of Stillwater $\mathrm{I}_{\mathrm{H}} \mathrm{N}$ - Where
4. Where do you prefer to shop? O.C. Tulsa Other
5. Do you believe the PRICRS of the articles you buy in (oity) are less than the prices of the same articles in Stillwater O.C. TULSA
stores? $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$
6. Do you think that the stores at which you trade in (city) carry a greater VARIBTY of goods then are carried in Stillwater

7. Do you think that these stores in (city) carry better QUALITY goods than Still-
 Y_N_S_ Y -N_ $^{\mathrm{S}}$
8. Do you have relatives or acquaintances whom you visit in or near (city)?
9. Do you make social trips to (city)?
 $\xrightarrow{\mathrm{Y}-\mathrm{N}^{\mathrm{N}}-\mathrm{S}}$ ${ }^{\mathrm{Y}-\mathrm{N}^{\mathrm{N}}-\mathrm{S}}$
10. Do you make business trips to (city)?...... I_N_

11. How of ten do you buy by mail? Reg._, Occ._Never_, MO House?_Dept. St?
12. What would you estimate as to the probable yearly amount of out-of-town buying from Mail Order Stores? \$_ By mail from dept. stores? \$
13. For which of the following reasons did you buy the item listed under question 15 which you have last purchased out of Stillwater?

More con- Better Wider Better Make trip anyway Other reasons venient Prices Variety Quality Business Social (specify)

## O.C.

## Tulsa

Other
19. About how of ten do you shop in (eity)?

Once a Week Twice a month Once a Month $3-4$ times a yr. Less frea. Never
O.C.

## Tulsa

Other
20. What newspapers do you read regularly? Stillwater Press_ Daily Oklahoman Okla. City Times_Tulsa Tribune_Tulsa World___Other Papers_
21. What radio station do you listen to regularly? Stillwater Oklahoma City Tulsq Others (specify)
22. How many persons in household? Adults_Children (15 or under) Total
23. How many in household are employed?
 More than 3
24. What is occupation of head of family?

Nature of Occupation Industry or Company
25. Occupation of others gainfully employed?
26. What do you think of Stillwater as a place to shop? S__ Poor__ Remarks

Interviewer $\qquad$ Date

## CHAPTER IV

## TABULATION OF RESULTS

The completed questionnaires were checked for adequacy and accuracy. When major errors or omissions were discovered, the questionnaire was discarded and additional interviews were scheduled to complete the interviewers' assigned quota. There were 300 complete schedules which were used as the basis for conclusions.

## Division Into Occupational Groups

The questionnaires were divided into occupational groups. There were sixteen sub groups: Executive, Merchant, Lawyer, Physician, Other Professional, Skilled Labor, Retired, Teachers, Clerical (Office), Ministers, Salesmen, Government Employees (Federal and Local), Store Clerk, Unskilled Labor, Domestic Labor, and Unemployed. These were regrouped into nine-Merchants, Executive, Professional, Skilled Labor, Retired, Clerical, Saleswork, Common Labor, and Unemployed.

While it is recognized that the above grouping lacks homogeneity within certain groups (e.g., the combination of "inside" and "outside" salesmen into the saleswork category), such a scheme was necessary for adequate statistical sample. Only groups of fifteen or more would give any valid trends. Hence it was felt that a smaller number of classifications, while losing some internal homogeneity, would facilitate the analysis and would not detract from the validity of the results.

Division Into Income Groups
The major problem was to separate the returns according to incomes. For this survey half of the returns were considered in the middle group and one-fourth in each of the other two. This separation was made giving weight to the following indicative factors: occupation, ${ }^{7}$ number employed in the family, and rental dis-

[^3]trict. This scheme of income group classification encountered disturbing factors such as large dollar income individuals who because of scarcity in housing facilities may be found living in low rental areas. Too, high income families may be located in low rental areas, awaiting better accomodations. However, these abnormal cases were not of sufficient importance to justify excepting them in the general scheme of income classification. It is true that classifying under this method is somewhat arbitrary, but what is sought is "normal trends," and such a method seems justifiable for this purpose. ${ }^{8}$

In the process of classification, street addresses were marked on each interview schedule as a check on the proper rental district, although, of course, the identity of the person interviewed was in no way disclosed. 9

## Checking for Consistency

The completed questionnaires were mixed in a random manner and numbered from I to 300. There were certain statistical tests used to test for consistency showing the entire sample and the same test applied to part-samples, as show in Exhibits 5-10. The methods used to show the validity of the results were "cumulative frequency method" and the "group rotation method."10

The entire group of 300 questionnaires was tested for reliability, as shown in Exhibit 5. A graph is shown in Exhibit 5 indicating that after the first 150 questionnaires, little variation in results would be found with the addition of a larger number of interviews.

[^4]As another check for consistency sub-groups were tabulated in a similar fashion, using different questions for each table. This step was also taken to avoid the error of assuming that a check on the entire sample will validate all statistical conclusions although drawn from smaller and smaller sub-samples. An analysis was made of the sub-group "out-of-town shoppers," using 150 cases as shown in Exhibit 6. Conclusions drawn from this portion of the study appeared to be reliable. ${ }^{11}$

For additional reliability a third check was made to the sub-sub-group "shoppers who prefer Oklahoma City." Exhibit 7 shows that any conclusions dram from these 90 cases appeared statistically reliable. Out-of-town shoppers in each income group were next checked. There were 60 families in the upper income group; 60 eases in the middle; and 10 cases in the lower group who shopped outside of Stillwater. Exhibits 8, 9, and 10 show that results will be statistically valid for the upper and middle income groups, but that there are too few "shoppers" in the lower income group for adequate analysis. Consequently, conclusions dram on the basis of the 10 eases of the lower income shoppers will be only indicative, rather than conclusive.

Although these same validity checks, which were applied to certain occupational groups (professional, skilled labor, and retired) showed that these three smaller groups would be reliable, it is felt that probably any group containing fewer than fifty cases should not be accepted as conclusive. The reader should keep in mind that results based on smaller groups are merely indicative because of the high proportionate variation in results which would occur if even one answer were changed.

11
Fxhibit 5 is included in the text of this report as an illustration of the method of checking for reliability. Exhibits $6-10$ may be found in the Appendix.

Checking for Reliability
(Entire Sample)
(300 questionnaires)
A-Table of Cumulative Frequencies (Cumulative Frequency Method)


| Frequency <br> of <br> Occurrence |
| :--- |
| 13 |
| 11 |
| 15 |
| 15 |
| 15 |
| 12 |
| 12 |
| 14 |
| 12 |
| 12 |


| Cumulative <br> Frequency of <br> 0ccurrence |
| :--- |
| 13 |
| 24 |
| 39 |
| 54 |
| 69 |
| 81 |
| 93 |
| 107 |
| 119 |
| 131 |


| Cumulative <br> Number of <br> Cases |
| :--- |
| 30 |
| 60 |
| 90 |
| 120 |
| 150 |
| 180 |
| 210 |
| 240 |
| 270 |
| 300 |

Cumulative
Percent of
Qccumrences
43.3
40.0
43.3
45.0
46.0
45.0
44.3
44.5
44.0 43.7


Cumulative Number of Questionnaires
B-Table of Differences (Group Rotation Method)


There were other methods used to check the reliability of the sample that gave similar results but details are not included in this thesis.

## Tabulation Procedure

A tabulation work sheet was made on each question asked. In order to eliminate errors in tabulation, it was possible to check results in at least three ways, through separate tabulation by income groups, by occupational groups, and by totals. This helped to make unnecessary additional checks for errors.

## A Comparative Ranking of Goods Purchased By Out-of-Town Shoppers of Pive Cities

(Percentages indicate proportion of out-of-town shoppers buying each commodity.)


## Sources:

(1) David S. Lindeman and others, A Survey of the Greensboro Retail Trading Area (Greensboro, 1933), p. 16.
(2) Eaton Van Wert Read, An Analysis of the Retail Trading Relationships of Elcin, Illinois: A Satellite City (Chicago, 1938), p. 66.
(3) Oberlin College, Survey of Consumer Buying Habits in Elyria, Ohio (Elyria, 1930), p. 4.
(4) Perham C. Nahl, Consumer Shopping Habits by Income and Occupational Groups (Stillwater, 1940).
(5) A. N. Harrison, A Comparison Between the 1939 and 1948 Shopping Habits of Stillwater Residents by Income and Decupational Groups (1948).

## CMABTM

## DWASETS OF SURVTE

This section deals with a detailed breakdow of the principal results shom in this study. In the section on conclusions there will be foud a sumarization taken from this study. For further details refer to the Appendix for different tebuletions.

## Total Out-0 -Tom Shopring

In thig survey theve were a little over half of the people that shopped out-of-tom, $51.9 \%$. This, compered with the 1939 survey which showed $56 \%$, Indicating that in spite of the nine year spen results are quite comperable. Results indieate that as income per capity increases, the percentage of outwoftown shoppins increases. Sable 3 show that there are 76.8 of the people in the upper groun who shop ont of tom, as compared to the lower-incone group figure of $20.5 \%$. This shows that as income decreases, so does the out-of-tom shopping.

In enalysis of the occupational groups it is well to notice thet the largest percentage of out-of-tom shoppers fall in the professional group, $73.5 \%$ and the lomest percentage of out-of-town shoppers is found in the comon-labor class, 24.3\%. The 1939 survey report showed that 86 of the professional people shopped out-of-tom while only 2ft of comon labor group shopped out-of-town. In the other occupational groups it is well to notice thet approxinately $34 \%$ to $75^{\circ}$ of these people surveyed, shop out-of-tom. There were 14 people who stated that they did not shop out-of-town. This means that the Stillwater business district retains the entire trade of just under half of the fanilies buying, although almost half of those who do not buy out-or-town are in the lover-income group.

## Outside Trade Genters Patronized By Shoppers

Of the 156 shoppers who shop outside of Stillwater there are $62.6 \%$ that

Table 3
Do You Ever Shop Outsl $\begin{gathered}\text { Table }{ }^{3}\end{gathered}$ of Stillwater?


Table 4
Where Do You Prefer to Shop Outside of Stillwater?

prefer Oklahoma City to other outside trade centers. This is a $13.3 \%$ decrease in this preference over the 1939 report which showed $76.1 \%$. Factors which might affect the larger portion going to 0klahoma City are its locality, less traffic hazards, and size. People seem to prefer to go to a larger city to shop. The people living in Oklahoma City of the upper income group may go to Dallas to trade and so on.

Table 4 shows Tulsa is a strong second contender for out-of-town shoppers as it won about one-fifth of the shoppers' preference. Oklahoma City is the choice of the upper income group by a large margin. The same tendencies were found for the middle and lower classes.

Cushing is the third city favored by out-of-town shoppers. Here the middle and lower groups predominate in the buying. Out of the 7 who shop in Cushing only 3 preferred it to others. Nearly one-third of the lower-income group prefer to shop to some extent in nearby shopping centers, three for cushing, one for Perkins, one for Perry, one for Pawnee, one for Ponca City, one for Guthrie, and the remainder of this group shopped in distant towns for some such reasons as relatives whom they visit regularly. Of this group only $24.3 \%$ preferred to shop out-of-town. Common laborers and retired persons trade in Cushing and other closeby cities, because of friends and relatives. Many of the common labor groups have moved to Stillwater for jobs on construction work on new college buildings and city jobs. In the middle class there were $4.9 \%$ who shopped in Cushing and only $4.3 \%$ who preferred to shop there. The foregoing indicates very little change in the buying habits in these groups since 1939.

## Newspaper Reading Habits of Shoppers

Another factor which may influence the outside trade center is the newspaper read by a family. Table 20A shows the number of people who are out-oftown shoppers according to their preferred metropolitan newspaper. It is interesting to note that the number of out-of-town papers purchased in 1948 is much
less then in 1939. This may be accounted for by the improvement in the Stillwater newspaper, by the merger of the Stillwater Press and the Stillwater News. In this survey there were only two people who subscribe to Tulsa papers who shop in Oklahoma City and only 14 people who shop in Tulsa that take the Oklahoma City papers.

It is interesting to note that out of the 300 people surveyed $63.2 \%$ took 0klahoma City papers. If you multiply $63.2 \%$ (the percentage of people taking the Oklahoma City Times and Daily 0klahoman Newspaper) by 5,143 (the family unit in Stillwater) the result is $3,2490 \mathrm{klahoma}$ City papers which would be sold in Stillwater. By checking with the newspaper office it was disclosed that there were actually 3,225 Oklahoma City papers sold in Stillwater. The above analysis proves the validity of the process to be used.

## Table 20A

Newspapers Read by Out-of-Town Shoppers

| Newspapers Read | Shoppers <br> who shop in <br> Oklahoma City <br> (98) | Shoppers <br> who shop in | Shoppers <br> Tulsa | Who Shop in |
| :--- | :--- | :--- | :--- | :--- |
|  |  | (25) | other centers |  |

*Totals are greater than $100 \%$ because some families take more than one "outside" paper.

## Reasons For Out-of-Tow Shopping

There are many reasons for out-of-town shopping. An attempt has been made to answer the following questions: (1) Why are Stillwater business men losing some trade to other cities? (2) What do people buy out-of-town? (3) What

Relative Importance of Conscious Reasons for Out-of-town
Shopping, By Incoae and Occupational Groups
(Veighted*; and Expressed as Per Cent of Total Reasons)

|  | Total | $\frac{\text { Inco }}{\text { Upper }}$ | Middle | Lower | Merchants | Executive | Professional | Ocoupati <br> skilled <br> Labor | Retired | Clerical | Saleswork | Common Labor | Unenployed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shoppers | 156 | 60 | 81 | 15 | 16 | 21 | 36 | 16 | 24 | 15 | 11. | 37 | 23 |
| Reasons Givent |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Better Prices | 16.5 | 11.8 | 17.8 | 28.6 | 15.0 | 5.5 | 14.8 | 24.9 | 27.1 | 12.3 | 5.4 | 23.9 | 19.5 |
| Greater Variety | 50.9 | 63.4 | 41.5 | 31.6 | 40.1 | 52.6 | 64.3 | 32.8 | 33.2 | 46.8 | 53.9 | 11.2 | 29.9 |
| Better Quality | 6.2 | 7.4 | 4.2 | 12.3 | 12.2 | 5.2 | 7.5 | 5.7 | 2.9 | - | 21.1 | 22.3 | 32.6 |
| Businese Trip | 8.5 | 4.1 | 12.3 | 5.4 | 6.3 | 20.1 | 4.9 | 5.1 | 3.1 | 6.1 | 1.4 | 3.7 | $\square$ |
| Social Trip | 14.4 | 7.0 | 18.5 | 22.1 | 26.4 | 6.1 | 6.9 | 26.8 | 24.1 | 31.9 | 12.5 | 29.6 | 9.7 |
| 0 ther | 3.5 | 1.3 | 5.7 | - | - | 10.5 | 1.6 | 4.7 | 4.6 | 2.9 | 5.7 | 9.3 | 8.3 |
| Total | 100.9 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 5A-11A
Answers to Questions thi oh Might influence Out-of-Town Shopping (Expressed in Per Cent Answer ng "Yeswi)

can Stillwhtor business man do to retala that trade? Ouentions 5 trough 11 of the guestionalye mer designed to determino the answers to the above cueption. The questioneire makes no direct attempt to ask point blenk why." Rather, the anamen is derived from antyses and trends.

Weighe wese assigned to each reason given for shopping in the preferred centers and the relptive Amportance on ench was calculated ac te thow in Table 17A. Greater raviety gecounted for onemal of the reasonct for dintwh shopping. As the pore arithe income decreases, botter price becomes a major lactor in out-Of-tom buying. Executive, professional and clerical paple felt thet Stillwater lacked varicty, whereas the 1939 survey showed that merchant and clesical groups felt that warlety wes the main fector. Lack of variety scems a notural reascn fox it may not be profitable for the Stillwater nerchant to stock many occasional items upon their shelves as can be done by metropolitan stores.

The executive group is least affected by the price factor, and retired individuals are most affected by the price factor. The price influence is inereasingly evident as a factor in the lower income groups, and is relatively of small influence say the upper group. Better auality was comparatively unimportant as a conscious reason accounting for less than $7 \%$ of all answers. In the 1939 surrey this fator accounted for only $4.5 \%$ of all answers.

Socisl trips affect consumer out-of-tom buying nore than business trips. This also mes the conclusion of the 1939 survey. A few more people buy out-oftom now for social reesons (14.4\%) than they did in 1939, (10.0\%). As variety becomes less important es a reason for out-of-tobs buying, so do social reasons, and the price factor plays a more predoninat role.

Table 5A-11A answers the questions which might influence out-of-tow shopping. The sncters cone from these questions in the questionnaire: (5) Do you believe the prices of the articles you buy in (preferred eity) are less than the prices of the articles in Stillwates stores? (6) Do you thini that
the stores at man yor trede (preferrod city) are less than tho prioes of the artheleg so Stinweder storost (r) Do you that that theoe stores in your profered city oary better quality goods then Stillwater stores? (8) Do you have relebtes on sequandances mon you isit in or neax your preforred city? (9) Do you wric gocial trips to your preserred exty? (10) Do you mabe bustoess trips to four greferred city: (11) Do you have any charge accounts in Jour preserred city?

It is interesting to note thot there are meny differences between the "conscious", Pable 1Et, and the "wnonscious" shopper, ancwers Table 5A-114. 12 In gencral both tables show that vartety derinitely is a mar factor in Ghoppers' reasoms bor buydry outwof-tom. The vnoonscious answer shows that price actually playen a lerger role thon is indicoted in conscions ancmerc. Also, it is notemorthy that the business trips (10) actually played a more wital role then indicated by conecions answers, Table 18A. A smaller portion of merchants geve the "woonscioust answer to the fact that they shoppod out-ofform for business than they did, in the conscious ancuer. Bettor gulity tends to remain the suallast roason for out-of-tom shopping. This is shom by able 5A-11A. In comparison vith the 1930 ehart, the findings are alrost identical.

Charge accomts mere ved as a fector in considering the ressons for out-of-town buying, bat wero proven to be a regul and not $a$ cause except in one case. That case was an educatod negress who said that Oklahome City stores wore moch more willing to extend hex credit then Stillvater stores. From this

12 geighting was done by: Then the respondent gave only one reason, it was weighter 100.0 . When more than one reason was given, the double checied reasons were weighted twice as much as each other on given, e.g., in two reasons were giver, thon the preferred reason was $67.0 \%$ and the other was $33.0 \%$. Thus, fif four reasons were given, they were weighted $40.0 \%, 20.0 \%, 20.0 \%$, and $20.0 \%$, and 50 on.
survey, it is clear that the upper income group uses charge accounts 2 to 1 over the middle or lower groups. The lower group had only four people that charged. Two of the four people who charged were students. People are still following the same practice in the use of charge accounts as they did in the 1939 study.

The factor of reading metropolitan newspapers may affect the out-of-town shopping. This was discussed in connection with the type of newspapers read by out-of-town shoppers, but a closer correlation was shown by newspapers read for those who do and do not shop out-of-town. Table $20 A$ shows this study. Twothirds of the people who shop out-of-town read the metropolitan daily newspaper, while only one-third of the local Stillwater shoppers read metropolitan newspapers. This trend was shown by the 1939 survey, and in other surveys which have found that people who shop out-of-town take more metropoliten newspapers. 13

Table 20B


## Shopping and Automobile Ownership

The automobile, associated with out-of-town shopping plays a role in the

[^5] lationchin of cex whership and out-at-tom shopine of all pople interniemed. There are 59.7 on the people who shop out-or-tom who om passenger caxs. Only 40.3 the on cars do not shop out of town The fanilies who do not omn cars tend to purchase nore in Stillwater. Only 33.7 of the families oming no cars trace in other citates, the 66.3 do not shop out-or-tom at all. Of the 156 people tho chop out-of-tom, $70.5 \%$ use their om cars. This leaves only amall percentage using other nethods of trensportation. Reforence to thin can be had in Table 13 of the Appendix. A study of the "Coneumer Shopping Fiabits of 1939" reflects approxinately the seme proportions.

Clessificetion of shoppers by the age of the car omed shows thet people goine out-of tom have the later model cars by two-thirds majority. Table $14 B$ shoms that those tro-therds oming 1010 or 2 ater modols do sone buyins outside of Stillvater white only $45.1 \%$ of those people with 1939 or earlier nodel cars do their ghopping out-or-tom, she doss not mean that only people with latormodel cares go out-of-tom to shop but it does indicate one factor in out-orman buying. Alse, this points out the fect that those samilies oming later model ears are linely to be in higher-income groupe and denand higher atyle articles.

Table 14A

## Relationship of Car Onership and Out-of-Tom Shopuing

|  | 0 m |  | Do Not OmaPassencerCax |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Per Cent | No. | Fer Cent | No. | Per Cent |
| Do shop out of tom | 126 | 59.7 | 30 | 33.7 | 156 | 51.9 |
| Do not shop out of tom | 85 | 40.3 | 59 | 66.3 | 144 | 45.1 |
| Total families | 211 | 100.0 | 89 | 200.0 | 300 | 100.0 |

Table 14
Dut-of-Town Shopping and Age of Car oyed

|  | 1940 or Later Hodel Gar |  | $\frac{1930 \text { or } \operatorname{tarlier}}{\text { Modeg }}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Per Cent |  | Pex Cent | No. | Per Cent |
| Do shop out of toms | 97 | 69.3 | 32 | 45.1. | 129 | 42.7 |
| Do not shop out of tow | 43 | 30.7 | 39 | 54.9 | 83 | 57.3 |
| Total Fanilies | 140 | 100.0 | 71 | 100.0 | 211 | 100.0 |

## Frequency of Out-of-Tom Shopping

This study is found in the Appendix and in Table 18. In the table on mov often do you shop out-of-tom, " is is shom that the lower-incone groups tend to purchase more often, in proportion, than do the upper or madle group. This is just the opposite to the 1939 survey. The average number of times people shop out-of-tom today is onea a month while nine years ago it was four times a year. Skilled labor tende to shop more often than do any of the other accupetional groups. This may be aecounted for by somewht lower prices on grocerdes and the Montgonery ward store which is located in Gushing.

It would be of interest to the merchant to know that there is a decrease In the percentage of people that buy out-of-tom. Table 12 in the Appendix shows that of the 156 people trading outside of $S t i l l w a t e r ~ 21.2 \%$ are increasing their out-of-tom buying, 50.6 of the shoppers still buy the seme as they did In the past, and $25.3{ }^{2}$ have decreased their out-of-tom buying. In pomparison to the 1939 survey there is an ancrease in the amount of purchases in the nineyear span amounting to $9.8 \%$.

Out-of-Tow Shopping According to Length of Residence
Table IA shows the relationship of out-of-tow shopping according to length of residence in Stillwater. This table shows nearly a fifty-fifty split on the buying of items out-of-town for those who have lived here less than five years. People who have moved to Stillwater more recently have been accustomed to more variety and prices and seem unwilling to accept the situation in Stillwater. In the 1939 survey $60.7 \%$ of the newcomers buy out-of-town. This indicates that the merchants have made some headway in getting newcomers to trade locally. Stillwater being a college tow the turnover of residents is larger and this means that there will be a large amount of out-of-town buying.

As people grow older they buy less from other towns. This is borne out by Table 1 A. This may be explained by the fact that their needs become less in the way of clothing and luxury items as well as the fact that their ability to travel is more restricted.

## Table 1A

## Out-of-Town Shopping According to Length of Residence

| Length of Residence | Shoppers |  | Non-Shoppers |  | Total No. | Per Cent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Per Cent | No. | Per Cent |  |  |
| Less than 5 years | 58 | 50.4 | 57 | 49.6 | 115 | 100.00 |
| 5-9 years | 28 | 51.9 | 26 | 48.1 | 54 | 100.00 |
| 10-14 years | 11 | 50.0 | 11 | 50.0 | 22 | 100.00 |
| 15-19 years | 16 | 61.5 | 10 | 38.5 | 26 | 100.00 |
| 20-24 years | 14 | 51.9 | 13 | 48.1 | 27 | 100.00 |
| More than 24 years | 29 | 51.8 | 27 | 58.2 | 56 | 100.00 |
| Totals | 156 | 51.9 | 144 | 48.1 | 300 | 100.00 |


| Total | Upper | Midde | Lower | Merchante Executive Professional Skional Groups Retired Clerical Saleswork Conmon Unemployed |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sheprecs 156 | 60 | 31 | 15 | 16 | 21 | 36 | 16 | 24 | 15 |  |  |  |
| Wowents Mo. 110 | 38 | 62 | 10 | 11 | 14 | 20 | 13 | 21 | 11 | 8 | 7 | 5 |
| apoarel \% 70.5 | 63.3 | 76.4 | 66,6 | 63,9 | 66.7 | 55.5 | 81.3 | 87.6 | 73.3 | 72.8 | 77.8 | 62.5 |
| Tomen's No. 86 | 35 | 42 | 9 | 9 | 11 | 23 | 9 | 11 | 10 | 6 | 3 | 4 |
| shoes \% 55.1 | 58.1 | 51.8 | 60.0 | 56.3 | 52.5 | 63.3 | 56.3 | 45.9 | 66.6 | 54.6 | 33.3 | 50.0 |
| iroments accesso-No. 57 | 23 | 28 | 6 | 6 | 8 | 13 | 5 |  | 4 | 4 | - 2 | 4 |
| ries \& 36.5 | 38.2 | 34. 5 | 40.0 | 37. 5 | 38.0 | 36.2 | 31.3 | 45.9 | 26.6 | 35.4 | 22.2 | 50.0 |
| Children's INO. 69 |  | 34 | 6 | 7 | 12 | 17 | 6 | 2 | 6 |  | 5 | 2 |
| clothing \& 44.2 | 48.13 | 31.9 | 40,0 | 43.8 | 57.2 | 46.8 | 37.5 | 8.3 | 40.0 | 54.6 | 55.5 | 25.0 |
| Men's Mo. ${ }^{\text {W }}$ | 16 | 17 | 1 | 3 | 5 | 11. | 3 | 3 | 4 | 4 | . | 2 |
| slothins \% 21.8 | 25.5 | 21.0 | 6.6 | 18.8 | 23.8 | 30.3 | 18.8 | 12.5 | 20.0 | 36.4 |  | 25,0 |
| Vents No. 29 |  | 16 |  | 2 | 6 | 8 | 2 | 2 |  | 4 | 2 | 1 |
| shaes \% 18.6 | 16.7 | 19.7 | 20.0 | 12.5 | $2{ }^{2} .6$ | 22.0 | 12.5 | 8.3 | 6.7 | 36, 4 | 22.2 | 12.5 |
| Men's fur- 10.81 | 16 | 22 | 3 | 4 | 6 | 9 | 5 | 2 | 3 | 3 | 3 |  |
| nishings \& 26.3 | 26.6 | 27.1 | 20.0 | 25.0 | 28.6 | 24.8 | 31.3 | 8.3 | 20.0 | 27.3 | 33.3 | 12.5 |
| Furni ture No. 34 | 17 | 16 |  |  | 7 | 10 | 4 | ${ }^{6}$ | ${ }^{2}$ | 2 | 1 | - |
| - 81.8 |  | 19.7 |  | 6.3 | 33.3 | 27.5 | 25.0 | 25.0 |  | 18.2 |  |  |
| Rugs, No. 29 | 16 | 8 | 5 | ${ }^{2}$ | 5 | 9. | 1 | 2 |  | 3 |  | 4 |
|  | 26.6 | 9.9 | 33.3 | 12.5 | 28.6 | 24.8 | 6.3 | 8.3 | 6.7 | 27.3 | 11.1 | 50.0 |
| $\begin{aligned} & \text { Dry gcods } \quad \text { you } \\ & \hline \end{aligned} 17.3$ | $\begin{aligned} & 13 \\ & 21.6 \end{aligned}$ | $\begin{aligned} & 13 \\ & 16.0 \end{aligned}$ | $6.6$ | $6.3$ | $\begin{gathered} 6 \\ 28.6 \end{gathered}$ | $\begin{gathered} \hline 8 \\ 22.0 \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ 18.8 \end{gathered}$ | $\begin{gathered} 5 \\ 20.9 \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ 13.3 \end{gathered}$ | $\begin{aligned} & 1 \\ & 9.1 \end{aligned}$ | $11.1$ | - |
| Jewelry \% No. 17 | 8 |  | 2 | 1 | 3 | 5 | , | - | 4 | 2 |  | 1 |
| Silveruare \% 10.9 | 13.3 | 8.6 | 13.3 | 6.3 | 14.3 | 13.8 | - | - | 26.6 | 18.2 | 11.1 | 12.5 |
| $\begin{aligned} & \text { Orugs \& } \\ & \text { tollet } \end{aligned}$ | 1 | 3 | 2 | - | 1 | - | - | 2 | 1 |  | - |  |
| artic!es 8 3.8 | 1.6 | 3.7 | 13.3 | $=$ | 4.8 | - | - | 8.3 | 6.7 | 9.1 |  | 12.5 |
| Goceries No. II | $\stackrel{+}{-}$ |  | 3 | - | 5.8. | - | - | 6 | 2 | 9 | 3 |  |
| a meats \& 7.1 | - | 9.9 | 20.0 | - | - | - | - | 25.0 | 13.3 | - | 33.3 | - |
| Hardware Mo. 5 | $\underline{-}$ | 5 | - | - | - | - | 2 | 2 | - | 1 | - | - |
| - \% 3.2 | - | 6.2 | - | - | - | - | 12.5 | 8.3 | - | 9.1 | - | - |
| La ge electric No. 7 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | $1.2$ | $13.3$ | $6.3$ | $\frac{1}{4.8}$ | $\begin{aligned} & 2 \\ & 5.5 \end{aligned}$ |  | $4.2$ |  | $\begin{aligned} & 1 \\ & 9.1 \end{aligned}$ |  |  |
| Small |  |  |  |  |  |  |  |  |  |  |  |  |
| electric Mo. 4 | 1 | 3 | - | 1 | - | - | 1 | - | - | 2 | - | - |
| itens \% 2.6 |  | 3.7 | - | 6.3 | - | $\cdots$ | 6.3 | - |  | 18.2 |  |  |
| Automobiles No. 3 |  | 2 | - | - | 1 | 1 | - | - | - | 1 | - | - |
| 8 1.9 |  | 2.4 | - | - | 4.8 | 2.8 | - | - | - | 9.1 | - | . |
| Auto tires \& No 03 | 2 | 1 | - | - | - | 2 | - | - | - | 1 | - | - |
| parts \% 1.9 |  | 1.2 | - | - | $-$ | 5.5 | - | - |  |  |  | - |
| Amuse- No. 10 |  |  | - | ${ }^{2}$ | 3 |  | - | - | 2 |  | - | - |
| Medical No. 41 | $\frac{18}{18}$ | 20.9 | 3 | $\frac{12.5}{4}$ | $\frac{148}{5}$ | 11 | 4 | 9 |  |  |  |  |
| service \% 26.3 |  |  |  |  |  |  |  |  |  |  | 11.1 | $\stackrel{2}{2}$ |

Commodities Purchased by Shoppers in Other Cities
The next step is to see what people buy when they go out of town. The question used in this survey was What are the commodities purchased out-oftown by Stillwater shoppers?" The larger cities attract people for "shopping goods" while the home-town attracts them for "convenience goods." The National Marketing Review gives the definition of shopping goods as, "those consumeris goods which the customer in the process of selection and purchasing characteristically compares on such bases as suitability, quality, price and style. In contrast convenience goods are consumer's goods which the customer usually desires to purchase frequently, immediately, and with a minimum of effort and time such as tobacco, soap, grocery items, etc. ${ }^{1 / 4}$

The larger and more expensive specialty items may influence the consumer In his decision to buy out-of-town. Products which require service after their purchase will be purchased as close to home as possible. Bulky or perishable commodities tend to be purchased near the home of the consumer.

Standardized articles are bought closer home than those items belonging to the fashionable group. This will not always be true if price is a major factor. Fashion goods might often justify a special trip to purchase, while there would be no particular advantage to be gained from making special trips to secure standardized comomodities.

Table 15 was made to show what commodities predominate in influencing out-of-towm shopping. It is apparent from this table that women's apparel leads in out-of-town purchases. The tabulation shows that $70.5 \%$ per cent of all families buy women's coats, dresses, and hats while shopping out-of-town. Women's shoes and women's accessories follow with $55.1 \%$ and $36.5 \%$ respectively.

Fhis ocmpores elocely to the figures of tha 299 survey shoring wonen's accessories vith 40. Chilower clothing is next in the ronking with 4 . 2 .
 finaing elothes for children of frow 12 to 16 years of age in Stillmater. Len's fursisinge followed with 26.3 of those interviewed buying guch itoms in other cities. Dub-othom fumbure buyine played a much more important role in 1939 thom it did in 1948 , 29 in 1939 compered to 21.8 in 1948. Nen's clothing showed 21.8 bought out-oi-4om, wile in 1939 it showed $3 \times 2$. This might be explainea by the fact tingt there has been on increase in the nuniber of men's clotning storea in Stillwater since 1939. Fixas, drapes, men's shoes, modicet serviee all play a mejor sole in contributing to out-of-tom shophing - Aato tires mid parts produced only three definite responses renking this Iten lest on the list. Groceries and meate are being boucht more out-of-tom not then in 1939 .

An oxamination of the kind of buying done by income groups shoms that the more the income the greater percentage of buying of certain axticles. The upperincome groups aurveyec did not buy grocerles, meat and hardware out-of-tow. In the lower-income groups small electrie accessories were the only item they did not purchase oxt-of-tom, secoruing to the survey. An for the midale-income groups, respoase showed some purchases out of town for each category of nerchandise. This was true regandess of occupation.

Table 15 shows further facts about the trend of out-ot-tom shoping. This table is a comarative study of four cities including Stillwater. Note the comparicon of comporable articles histed in the 1939 and 1945 Stillwater surveys with shanar resolte from threo other cities in the United States. Trom this comprison ik can be seea that people usamly rank the gane comodities as leading the list of ont-of-tow purchases, with others folloming closely behind.

Although these cities are not the same size, vary as to location or accessibility, and do not have the same percentage of each comnodity purchased, they do reflect the same order ranking of the commodities.

Clothing items rank number one in out-of-town buying in all three cities, women's clothing being in the lead. This fact is of ten the case with fashion goods, because shoppers want distinctiveness--to be a little different than the next person.

Table 150, using the exact data of Hahl's 1939 survey, shows that the tendency in out-of-town trade buying is the same with Stillwater rural trade areas as in the city of Stillwater. Quoting from this survey:

> "The rural resident normally makes trips. to town for goods which are not found in the cross-roads store, or for merchandise in which town stores offer wider selections, To the town resident, that same width of selection seems meager, and to satisfy his wider and more sophisticated requirements he often travelis to a larger town, the residents of which, in turn, finding its provisions of goods too narrow for them, look to the city to provide certain wants. Those people who live in larger cities frequentiy make shopping trips to the very large metropolitan districts. This tendency has been called "shopping up." Each center loses some siles to larger centers, which in turn lose trade to still larger ones."15

## What Methods of Transportation Are Used?

In the Appendix, Table 13 shows that $70.5 \%$ of the people use their own cars, $19.9 \%$ of the people use the bus, and $8.9 \%$ go with friends for their out-of-town buying excursions. During 1939 there were $7.5 \%$ more people going in their own cars and $\%$ less of the people went by bus for this purpose. After checking with the bus company, I find that there are more buses running now than in 1939, a fact no doubt attributable to heavier enrollment at the college.

In Table $1 / 4$ of the Appendix is presented an analysis of the ownership of cars. As is expected more people in the upper income bracket own cars of a later model. The make of cars owmed by Stillwater residents is presented in Table 14C.

15 References: Agriculture and Mechanical College, Consumer Shopping Habits by Income and Occupational Groups of Stillwater by Perham C. Nahl. (1939), p. 34 .

## Averace Number of Miles Traveled by Farm Families To Purchase Various Commodities (Arranged in approximate decreasing order of distance traveled)

| Commodity | Study and Year | Converse 1935 (1) | Jones 1932 (2) | $\begin{aligned} & \text { Car- } \\ & \text { roll } \\ & 1929 \\ & \text { (3) } \end{aligned}$ | Canon 1928 (4) |  | sbury 1936 <br> (6) | Nahl 1938 <br> (7) | $\begin{array}{r} 1938 \\ (8) \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Women's Clothing |  | --- | 22.9 | --- | --m | --- | --- | $\cdots$ |  |
| Dresses and Coats |  | 14.9 | --* | 12.9 | 17 | --- | --- | 11.5 | 12.8 |
| Shoes |  | 9.6 | --- | --- | 12 | --- | --- | 11.6 | 12.1 |
| Other |  | 8.9 | --- | 7.8 | 10-14 | --- | - | -- |  |
| Children's Clothing |  | 8.3 | 20.3 | 8.4 | $8-14$ | --- | --- | --- | --- |
| Men's Clothing |  | --- | 19.5 |  | --- | --- | --- | -- | --- |
| Overcoats and Suits |  | 6.3 | --- | 11.8 | 12.13 | --- | --- | 11.8 | 13.9 |
| Shoes |  | 8.1 | -- | - | 7 | --- | --- | --- | --- |
| Furnishings |  | 6.7 | --- | --- | 7-9 | --- | --- | --- | --- |
| Work Clothing |  | 6.3 | $\cdots$ | 7.5 | 7 | --- | --- | 10.2 | 10.3 |
| Automobiles |  | --- | --- | 10.4 | --- | 6.8 | 10.6 | 10.9 | 14.5 |
| Pumiture |  | 12.1 | 18.6 | 9.1 | 8-12 | 6.6 | 10.1 | 11.9 | 15.8 |
| Home Furnishings |  | 9.2 | --- | - | 8-13 | --- | --- | --- | --- |
| Dry Goods |  | 8.6 | 15.3 |  | 8-12 | --- | --- | 10.9 | 11.8 |
| Variety Store Articles |  | --- | --- | - | --- | --* | --- | 10.8 | 11.1 |
| Auto Tires and Parts |  | 7.2 | 11.1 | 6.8 | --- | 5.0 | 7.6 | 10.1 | 11.4 |
| Radio |  | -- | --- | 8.2 | --- | --- | --- | 9.7 | 12.3 |
| Amusements |  | 6.1 | 13.0 | -- | --- | -- | --- | 9.2 | 9.5 |
| Farm Implements |  | 6.4 | 7.7 | 5.8 | --- | 4.9 | 7.3 | 8.5 | 12.4 |
| Paints and Varnishes |  | --- | --- | 6.1 | --- | 4.9 | 6.8 | 8.5 | 10.4 |
| Drugs and Toilet Articles |  | 5.4 | 7.0 | 6.5 | --- | --- | --- | 7.5 | 8.2 |
| Hardware |  | 5.2 | 6.5 | 5.4 | -- | 4.6 | 6.7 | 7.1 | 8.0 |
| Groceries |  | 5.2 | 4.8 | 4.9 | 4-5 | 4.0 | 4.9 | 7.0 | 7.4 |
| Fresh Meat |  | 5.3 |  |  | 5 | --- | --- | 6.9 | 7.9 |
| Feed |  | 3.9 | 4.5 | --- | --- | --- | --- | 7.4 | 7.6 |
| Gasoline, Oil, Kerosene |  | 4.5 | --- | 5.1 | 4 | 4.0 | 4.9 | 6.2 | 6.8 |
| Lumber and Building Materials |  | 3.4 | 4.5 | 5.0 | --- | --- | --- | 6.4 | 9.1 |
| Coal |  | 9.6 |  | --- | -- | --- | --- | 5.2 | 9.6 |

## Sources:

(1) Paul D. Converse, "Analysis of Retail Trading Areas," National Marketing Review, I. No. 4 (1936), 321.
(2) F.M.Jones, A Study of a Retail Trading Area (Urbana, 1932), p. 24.
(3) Jean F. Carroll, "Study of Farm Trading Areas," NATMA-Bulletin, Jen. 1929, p. 5.
(4) Helen Canon, Sizes of Purchasing Centers of New York Farm Families (Ithaca, 1928) . p. 10.
(5) and (6) Philip Salisbury, "How Far--And For What--Does the Farmer Travel Today?" Sales Management, XL. No. 9 (1937), 846.
(7) and (8) Perham C. Nahl, Application of the Interview Method to a Frading Area Survey of Stillwater, 0klahoma (Stillwater, 1939), p. 38. Entire table reprinted from this survey.

| Make of Car | Table 146 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Makes of Cars Owned br Stillwater Residents |  |  |  |  |
|  | No. of Ommers | $\begin{aligned} & \text { Per } \\ & \text { Cont } \end{aligned}$ | Hate of Car | No. of Omers | Per <br> Cent |
| Chevrolet | 39 | 15.5\% | 01dsamole | 10 | 10.0 |
| mord | 41 | 19.4 | Chrysles | 7 | 3.3 |
| Prgouth | 30 | 14.2 | Willys | 1 | 1.5 |
| Dedze | Is | 6.6" | Wusson | 3 | I. 4 |
| Pontiac | 15 | 7.1 | Prazex | 2 | .9 |
| Erick | 16 | 7.6 | Nash | 4 | 1.9 |
| Merevery | 8 | 3.8 | Studebaker | 2 | . 9 |
| Lincoln $Z$ | 1 | .5 | Destoto | 3 | 1.4 |
| Gadillac | 1 | . 5 | sruek | 3 | 1.4 |
| Total |  |  |  | 211 | 100.9* |

*One fanily had tro cars.

## aid Order Eurobsinc

Whe conelustims of this themis in agerd to mail order buyng were presemted in Chapter II. Tables 16 and 17, Appendix, substantiate the enclusions reached.

## Gorments kade by Besidents

Fech intorgiewer was recuested to place the porson being internewed at ease and asir respondent to fecl eree to moke suy romark she wished. These eoments were aumariged and classified into the sollowing hoadings: (1) wo comnents, (2) Goaerally farorable amment, (3) hiscellaneons, (1) Service through salesperson and marchant, (5) Prices, (6) Variety and cuatity. Incluced in trmber 3, (niscollaneous), were such things as trangortation woak-
nesses and general complaints about the city government itself.
The preceding chart shows that all but $13.5 \%$ had some kind of comment to make. There were $22.3 \%$ of the people that made favorable conments. In the previous survey of 1939 there were only $48 \%$ of the respondents who made comments. This survey showed $22.3 \%$ of the respondents offered favorable remarks. Hembers of the lower-income group directed a greater proportion of their criticisms at the higher price of goods found in Stillwater stores. In 1939 the lowerclass group directed criticisms chiefly at lack of cleanliness of stores. The upper-income respondents were more vociferous than either the middle or lower families, with the professional people expressing themselves most freely.

Service was a complaint given by the clerical worker more than anyone else. Some of this may be explained by the limited time in which they have to shop. In 1939 the salesworker objected to service most. General remarks or comments give further evidence that the upper-income group object to lack of variety and that the lower-income groups object to high prices.

It may be reasonably assured that the people who were interviewed in 1948 were pushed a little harder for comments than was the case of the 1939 survey which represents an improvement in interviewing technique.

Radio Listening by Out-of-Tom Shoppers
Tables 21A and 218 have been added to this study to determine how radio affects the buying habits. Radio does not have the influence on buying habits that other factors do, as is indicated by Tables 21A and 218. However, the radio tends to influence people who shop in Oklahoma City more than it does Tulsa shoppers.

## Table 21A

## Radio Listening by Out-of-Tom Shoppers

| Radio Listening | Shoppers <br> Who Prefer <br> Oklahoma City (61) | Shoppers <br> Who Prefer <br> Tulsa <br> (22) | Shoppers <br> Who Prefer Other Centers (21) |
| :---: | :---: | :---: | :---: |
|  | No. Per Cent | No. Per Cent | No. Per Cent |
| Stillwatex | 64.36 .6 | $22 \quad 34.9$ | $28 \quad 86.1$ |
| Oklahome City | $65 \quad 37.7$ | $18 \quad 28.6$ | $19 \quad 29.2$ |
| Tulsa | $39 \quad 22.6$ | 2234.9 | $16 \quad 24.6$ |
| Others | $5 \quad 3.0$ | 11.6 | 23.1 |
| Totals | 173\% 100.0 | 63100.0 | $65 \quad 100.0$ |

*Total is larger than 156 because some people listen to more than one radio.


## CHAPTER VI

## RECAPITULATION OF TRENDS IN BUYING HABITS

It is of interest to make some comparisons in the results of two surveys as similar as the survey done by Perham C. Nahl (1939) and the present study. Such a comparison should disclose whether or not significant trends or changes have taken place in the buying habits of resident citizens of Stillwater over the span of nine years separating the two studies. The following conclusions are drawn from this comparison.

1. In 1939, there were $56.4 \%$ of the people surveyed which preferred to shop outside of Stillwater. This survey (1948) showed only $51.9 \%$ of the residents that shopped out-of-town. The Stillwater merchants seemed to be holding more of their trade area customers than they did nine years ago. Some of the factors that may have an influence upon this may be:
(1) The metropolitan newspaper subscriptions have decreased since 1939. The Oklahoma City Times had $46.7 \%$ coverage in 1939 and only 16.6\% in 1948, while the Daily Oklahoman had 57.5\% coverage in 1939, and only $46.6 \%$ coverage in 1948. The same decline in coverage is true for the Tulsa papers which dropped in subscriptions by one-half. The subscriptions of the Stillwater paper showed only 7 $72.7 \%$ coverage in 1939, and it now services $89 \%$ of the Stillwater residents. The reading of metropolitan papers is associated to a significant degree with out-of-town shopping.
(2) In 1939, the merchant and salespeople occupational groups claimed that Stillwater stores lacked variety. This survey brings about a change in their reasons for shopping out-of-town. The executive, professional, and clerical occupational groups had strong convictions that Stillwater lacked variety. An increase in the number of stores has helped to increase to some extent the variety of merchandise locally obtainable.
(3) It appears that out-of-town shoppers are buying more often but in less volume than was the case in the earlier survey. The 1948 survey indicates that the out-of-town shoppers are now shopping on an average of once a month, while in the 1939 survey the out-of-town shopping occurred only once every three months. Due to the improvement of transportation and the increase in the per capita income of the individual many trips out-of-town have become pleasure trips.
(4) Changes in transportation facilities to some extent have made it
possible for residents to travel by bus more easily now than in 1939 as shown belows

|  | $\frac{1939}{78.18}$ | $\frac{1918}{70.58}$ |
| :--- | :--- | :--- |
| Own Cars | $\frac{12.9}{}$ | 19.9 |

(5) The length of residence in Stillwater of the people surveyed is another factor that may help to influence this decrease in out-of-town buying. In 193960.76 of the residents Ifving in Stillwater less than five years shopped in other cities, while now only $50.4 \%$ admitted that they shopped out-of-tom. A frequent comment was that Stillwater had just about as many stores as did the cities from which they came.
2. Mail order buying has shom an increase since the 1939 study. The figure for that year was 36.48 of all the residents surveyed who bought by mail, while in 1948 the study showed that 52.36 of the people are buying from mailorder houses. The improvement of the typography in the mail order catalogs and the presence of order-taking agencies in Stillwater are factors in this increase. See Section II, page 6, of this thesis Por additional data.
3. Other noteworthy results of this survey compared to the 1939 survey are brought to the reader's attention belows
(1) Decrease in buying in 0klahoma City: 1939-76.1\%, 1948-62.8\%.
(2) Decrease in men's clothing being bought out-of-tomn: 1939-32.3\%, 1948-21.8\%.
(3) Decrease in momen's apparel, shoes, and accessory buying out-oftom:

|  | 1939 | $19 / 8$ |
| :--- | :--- | :--- |
| Apparel | $85.3 \%$ | $70.5 \%$ |
| Shoes | 59.4 | 55.1 |
| Accessorles | 40.6 | 36.5 |

(4) Decrease in the out-of-tom furniture buying: 1939-29.7, 1948$21.8 \%$.
(5) Inerease in the smount of out-of-town buying of groceries and meats: $1939--3.9 \%, 1948--7.1 \%$.
(6) There is an increase in the amount of buying for chfldren's clothes out-of-town: 1939-18\%, 1948-44.2\%.
(7) Dearease in the percentage of people going out-of-tom for arusementss 1939-40.6\%, 1948-6.4\%.

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## APEEDIX

Complote tabulation of all guestions is shom on pages 45-58. For conventence, a list is also included of tables which appeared in the text. Tablea are headed by tho question anked and are numbered acoording to the question nomber in the interviem schedule. TABTE
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4 Where do you prefer to ghop?................................... 25


## Table 5 Cheaper than Stillwater?



Table 6
Is Variety in Your Preferred Conter Greater than in Stiliwater?


Table 7
Is Quality Better in Your Preferred Center than in Stillwater?


Table 8
Do You Have Relatives or Acquaintances whom You Visit in or near Preferred Center?


Table 9
Do You Wake Social Trips to Preferred Center?


Table 10
Do You Make Business Trips to Preferred $C_{\text {enter? }}$


Table II
Accounts in Preferred Center?


How Many Charge Accounts?

| 1. | 11 | 7 | 4 | 0 | 1 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 2. | 21 | 6 | 12 | 3 | 2 |
| 3. | 14 | 9 | 5 | - | 2 |
| 4. | 5 | 4 | 1 | - | - |
| 5. | 4 | 1 | 2 | 1 | - |
| 6. | 75 | 2 | 3 | - | - |
| 7. | 2 | 1 | 1 | - | - |


| 1 | 1 | 3 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 2 | 1 | 3 | 2 |
| 2 | - | 1 | 4 | - |
| 3 | - | 1 | 1 | - |
| 1 | - | - | 1 | - |
| 4 | - | - | - | - |
| 1 | - | - | $1-$ |  |

Table 12
Has Vour Out-of-Town Shopping Increased, Deereased, or Remained About the Sane in the Past Two Years?



Table 14
Does Your Fanily Oun a Passonger Car?

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Table 16 A
Do You Patronize a Regalar Mail Order House? Where Located?


Table 16 B
De You Buy by Mafl from Department Storea? 爵here Located?


# Table 17 

what would you astiacte an to the probatble yoarly amount of
Outrof-tom buying from dail Order buacest


| Total number of Purchases Yesrly | 157 | 44 | 95 | 18 | 10 | -19 | 27 | 21 | 30 | 27 | 13 | 12 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | 27 | 16 | 32 | 9 | 5 | 6 | 4 | 5 | 12 | 11 | 6 | 1 | 5 |
| \$10 to \$49.93 | 36.3 | 36.4 | 33.7 | 59.0 | 50.0 | 42.1 | 14.9 | 23.6 | 60.0 | 40.7 | 46. 1 | 9.3 | 62.3 |
| No. | 57 | 11 | 40 | 6 | 1 | 4 | 8 | 11 | 5 | 12 | 6 | 8 | 2 |
| \$50 to \$ $\$ 9.95$ | 36.3 | 23.6 | 42.1 | 33.3 | 10.05 | 21.1 | 29.6 | 52.4 | 25.0 | 4.4.5 | 46.2 | 66.3 | 25.0 |
| No. | 22 | 13 | 11 | 1 | - | 3 | 8 | 2 | 2 | 4 | 1 | 1 | 1 |
| \$100 to \$199.99 | 14.0 | 22.7 | 11.6 | 5.6 | - | 15.8 | 29.6 | 53.5 | 10.0 | 14.0易 | 7.7 | 8.3 | 12.3 |
| No. | 13 | 4 | 5 | 1 | è | 1 | 3 | 2 | 1 | - | - | 1 | - |
| \$260 to 299.33 | 6.4 | $3:$ | 5.3 | 5.6 | 20.0 | 5.3 | 11.2 | 9.5 | 5.0 | $\cdots$ | $\cdots$ | 8.3 | - |
| No. | 2 | 1 | - | 1 | $\cdots$ | - | -- | 1 | - | - | $\cdots$ | 1 | - |
| \$300 and up | 1.3 | 2.3 | - | 5.3 | $\cdots$ | - | - | 4.8 | - | - | - | 3.3 | - |
| Did not answer | 9 | 2 | 7 | $\cdots$ | 2 | 3 | 4 | $\cdots$ | $\cdots$ | - | $\cdots$ | $\cdots$ | - |
|  | 5.7 | 4.5 | 7.3 | - | 20.0 | 15.7 | 14.3 | * | $\cdots$ | - | $\infty$ | $\cdots$ | - |

Table 17 A
What would you estigate as to the probable yearly anount of Dut-af-tom buying from Departaent Storee?

Total number
and angunt by
year
No.
$\$ 25$ to $\$ 49.99$
Mo.
$\$ 50$ to $\$ 9.99$
Ho.
$\$ 100$ to $\$ 199.99$
$\$ 0$.
$\$ 200$ to $\$ 299.99$


| Shoppers |  | 156 | 60 | 81 | 15 | 16 | 21 | 36 | 16 | 24 | 15 | 11 | 9 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Twice a Month | No. | $\frac{156}{23}$ | $2$ | $\frac{17}{17}$ | $\frac{13}{4}$ | - | $4$ | $3$ |  | $16.7$ |  |  | $\begin{gathered} 2 \\ 22.2 \end{gathered}$ | $\begin{gathered} 1 \\ 12.5 \\ \hline \end{gathered}$ |
| Once a Month | $\begin{aligned} & \text { No. } \\ & \text { \& } \end{aligned}$ | $\begin{aligned} & 14.7 \\ & 49 \\ & 31.4 \end{aligned}$ | $\begin{aligned} & \frac{3 \cdot 3}{17} \\ & 23,3 \end{aligned}$ | $\begin{aligned} & 21.0 \\ & 25 \\ & 30.9 \end{aligned}$ | $\begin{gathered} 7 \\ 46.7 \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ 37.5 \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ 28.6 \end{gathered}$ | $\begin{gathered} 8.3 \\ 9 \\ 25.0 \end{gathered}$ | $\begin{gathered} 50.3 \\ 3 \\ 18.8 \end{gathered}$ | $\begin{gathered} 6 \\ 25.0 \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ 40.0 \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ 54.5 \\ \hline \end{gathered}$ | $\begin{gathered} 2 \times 4 \\ 3 \\ 33.3 \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ 50.0 \\ \hline \end{gathered}$ |
| 3-4 Times <br> a. Year | No. | $\begin{aligned} & 71 \\ & 45.5 \end{aligned}$ | 38 63.3 | $\begin{aligned} & 31 \\ & 38.3 \end{aligned}$ | $\begin{gathered} 2 \\ 13.3 \\ \hline \end{gathered}$ | $\begin{aligned} & 10 \\ & 62.5 \end{aligned}$ | $\begin{aligned} & 10 \\ & 47.6 \end{aligned}$ | $\begin{aligned} & 21 \\ & 28.0 \end{aligned}$ | $6.2$ | $\begin{aligned} & 10 \\ & 41.7 \end{aligned}$ | $\begin{gathered} 9 \\ 60.0 \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ 45.5 \\ \hline \end{gathered}$ | $\begin{array}{r} 2 \\ 22.2 \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ 37.5 \\ \hline \end{array}$ |
| Less | $\mathrm{N}^{\circ}$ | ${ }^{10} 6.4$ | 3 <br> 5.1 | $\begin{aligned} & 7 \\ & 8.6 \end{aligned}$ | 13.3 | . | $4.8$ | $\begin{aligned} & 3 \\ & 8.3 \end{aligned}$ | $\begin{gathered} 3 \\ 18.7 \end{gathered}$ | $12.5$ | 60, |  |  |  |
| णйce a | ${ }_{8}^{8 \%}$ | 3.0 |  | 1.2 | $1 \frac{2}{2}, 3$ | - | - |  | - | $4.1$ | - |  | $\begin{gathered} 2 \\ 22.3 \end{gathered}$ |  |

Table 20
What Newspapers Do You Read Regularly?
(Nuabers and Percentages of Regular Readers of Various Newspapers)



Table 21
Data Relating to Megular Radie Listening嵧施 rade atation do you liston to rogularly?


Tablo 22
size of Family

| Total Interviews | Incone Groua |  |  |  | Occupational Eroup |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Total } \\ \hline 300 \\ \hline \end{array}$ | Upper <br> 73 | Tidde $144$ | Lover <br> 73 | $\begin{gathered} \text { herchante } \\ \hline 28 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Executive } \\ & 2 \hat{3} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Frofessionat } \\ & 49 \end{aligned}$ | skilled Labor 33 | $\begin{aligned} & \text { Retired } \\ & 57 \end{aligned}$ | $\begin{aligned} & \text { Clerical } \\ & 36 \end{aligned}$ | $\begin{aligned} & \text { Seloswork } \\ & 15 \end{aligned}$ | Comman Labor 37 | Uneime <br> ployed <br> 23 |
| Wumber in Fagity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. | 37 | 1 | 18 | 13 | - | - | 1 | $\cdots$ | 31 | - | - | 3 | 3 |
| 2. | 72 | 15 | 40 | 17 | 3 | 4 | 11 | 6 | 19 | 13 | 3 | 5 | 8 |
| 3. | 77 | 22 | 39 | 16 | 9 | 7 | 11 | 13 | 5 | 9 | 6 | 9 | 9 |
| 4. | 63 | 24 | 33 | 6 | 7 | 12 | 11 | 9 | 2 | 9 | 4 | 6 | 3 |
| 5. | 8 | 15 | 11 | 9 | 4 | 4 | 13 | 2 | - | 5 | 1 | 6 | 1 |
| 6. | 12 | $\cdots$ | 6 | 6 | - | 1 | 2 | 2 | $\cdots$ | - | - | 7 | * |
| 7. | 2 | 1 | 1 | - | - | $\cdots$ | - | 1 | - | - | 1 | $\because$ | $\cdots$ |
| B. | 1 | - | - | 1 | - | - | - | - | $\cdots$ | $\cdots$ | - | 1 | $\cdots$ |
| Average Size of family |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3.1 | 3.6 | 3.4 | 2.5 | 3.5 | 3.5 | 3.6 | 3.5 | 1.6 | 3.2 | 3.5 | 3.3 | 2.9 |



Total


## Checking for Reliability

("Shoppers")

## ( 156 questionnaires- -150 used)

A-Table of Cumulative Frequencies (Cumulative Frequency Method)

| Group Number | Frequency of Occurrence | Cumulative Frequency of Occurrence | Cumulative Number of Cases | Cumulative Percent of Occurrence |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 9 | 9 | 15 | 60.0 |
| 2 | 10 | 19 | 30 | 63.3 |
| 3 | 10 | 29 | 45 | 64.4 |
| 4 | 7 | 36 | 60 | 60.0 |
| 5 | 11 | 47 | 75 | 62.7 |
| 6 | 10 | 57 | 90 | 63.3 |
| 7 | 9 | 66 | 105 | 62.9 |
| 8 | 10 | 76 | 120 | 63.3 |
| 9 | 8 | 84 | 135 | 62.2 |
| 10 | 6 | 90 | 150 | 60.0 |



B-Table of Differences (Group Rotation Method)

| Frequency of Occurrence | Groups | Frequency of Occurrence | Difference of Occurrence | Smallest <br> \% of <br> Occurrence | Allowable <br> Differ- <br> ence of <br> Occurrence |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - 47 | 6,7,8,9,10 | 43 | 4 | 57.2 | 13 |
| 48 | 7,8,9,10,11 | 142 | 6 | 56.0 | 13 |
| 47 | 8,9,10,1,2 | 43 | 4 | 57.2 | 13 |
| 47 | 9,10,1,2,3 | 43 | 4 | 57.2 | 13 |
| 48 | 10,1,2,3,4 | 42 | 6 | 56.0 | 13 |

Checking for Reliability
（＂Shoppers＂Preferring 0klahoma City）
（92 questionnaires－－90 used）

## A－Table of Cumulative Erequencies（Gumulative Frequency Method）

|  | Prequency | Cumulative | Cumulative | Cumulative |
| :--- | :--- | :--- | :--- | :--- |
| Group | of | Frequency of | Number of | Percent of |
| Number | Occurrence | Occurrence | Cases | Occurrence |

ロャめンのルかんかっ

| 8 | 8 | 9 | 89.0 |
| ---: | ---: | ---: | ---: |
| 8 | 16 | 18 | 89.0 |
| 8 | 24 | 27 | 89.0 |
| 9 | 33 | 36 | 91.7 |
| 7 | 40 | 45 | 89.0 |
| 9 | 49 | 54 | 90.9 |
| 9 | 58 | 63 | 92.1 |
| 8 | 66 | 72 | 91.7 |
| 9 | 75 | 81 | 92.6 |
| 8 | 83 | 90 | 92.1 |




Cumulative Number of Questionnaires
B－Table of Differences（Group Rotation Method）

Frequency
of
Occurrence
40
41
42
42
42

Frequency of of $\%$ of Occurrence Occurrence Occurrence Occurrence

| Groups | Frequency of <br> Occurrence | Groups | Frequency of Occurrence | Difference of Occurrence | Smallest \％of Occurrence | Allow－ able Diff． of Occurrence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I 1，2，3，4，5 | 40 | 6，7，8，9，10 | 43 | 3 | 88.8 | 6 |
| II $2,3,4,5,6$ | 41 | 7，8，9，10，1 | 42 | 1 | 91.1 | 6 |
| III $3,4,5,6,7$ | 42 | 8，9，10，1，2 | 41 | 1 | 91.1 | 6 |
| IV $4,5,6,7,8$ | 42 | 9，10，1，2，3 | 41 | 1 | 91.1 | 6 |
| V 5， $6,7,8,9$ | 42 | 10，1，2，3，4 | 41 | 1 | 91.1 | 6 |

43
42
41
41
41
3
1
1
1
1

| Groups | Frequency of <br> Occurrence | Groups | Frequency of Occurrence | Difference of Occurrence | Smallest \％of Occurrence | Allow－ able Diff． of Occurrence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I 1，2，3，4，5 | 40 | 6，7，8，9，10 | 43 | 3 | 88.8 | 6 |
| II $2,3,4,5,6$ | 41 | 7，8，9，10，1 | 42 | 1 | 91.1 | 6 |
| III $3,4,5,6,7$ | 42 | 8，9，10，1，2 | 41 | 1 | 91.1 | 6 |
| IV $4,5,6,7,8$ | 42 | 9，10，1，2，3 | 41 | 1 | 91.1 | 6 |
| V 5， $6,7,8,9$ | 42 | 10，1，2，3，4 | 41 | 1 | 91.1 | 6 |

88.8
91.1
91.1
91.1

Allow－
able Diff． of


## Ghecking for Reliability (Upper Income Group "Shoppers) <br> (50 questionnaires)

A-Table of Cumulative Frequencies (Cumulative Frequency Method)

|  | Group <br> Number | Frequency <br> of <br> Occurrence | Cumulative <br> Frequency of <br> Qcourrence |  | Cumulative <br> Number of <br> Cases | Cumulative <br> Percent of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Occurrence |  |  |  |  |  |  |



B-Table of Differences (Group Rotation Method)

| Frequency of <br> Occurrence | Groups | Frequency of Occurrence | Difference of Occurrence | Smallest <br> \% of <br> Occurrence | Allowable <br> Difference of <br> Occurrence |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | 6,7,8,9,10 | 17 | 5 | 40.0 | 8 |
| 11 | 7,8,9,10,1 | 18 | 7 | 36.6 | 8 |
| 11 | 8,9,10,1,2 | 18 | 7 | 36.6 | 8 |
| 15 | 9,10,1,2,3 | 14 | 1 | 46.6 | 8 |
| 19 | 10,1,2,3,4 | 10 | 9 | 33.3 | 8 |

Checking for Rellability
(81 questionnaires--80 used)
A-Table of Cumulative Frequencies (Cumulative Frequency Method)

| Group Number | Frequency of Occurrence | Cumulative <br> Frequency of Occurrence | Cumulative Number of $\mathrm{Ca}_{\mathrm{a}} \mathrm{Se}_{8}$ | Cunulative Percent of Occurrence |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 3 | 3 | 8 | 37.5 |
| 2 | 6 | 9 | 16 | 56.3 |
| 3 | 3 | 12 | 24 | 50.0 |
| 4 | 4 | 16 | 32 | 50.0 |
| 5 | 3 | 19 | 40 | 47.5 |
| 6 | 3 | 22 | 48 | 45.8 |
| 7 | 4 | 26 | 56 | 46.4 |
| 8 | 6 | 32 | 64 | 50.0 |
| 9 | 3 | 35 | 72 | 48.6 |
| 10 | 3 | 38 | 80 | 47.5 |



0


Cunulative Number of Questionnaires
B-Table of Differences (Group Rotation Method)

Groups Occurrence
I 1,2,3,4,5
19
II $2,3,4,5,6$ 19
III $3,4,5,6,7$
IV $4,5,6,7,8$
17
V $5,6,7,8,9$
20
19

Frequency of
Groups Occurrence

| $6,7,8,9,10$ | 19 |
| :--- | :--- |
| $7,8,9,10,1$ | 19 |
| $8,9,10,1,2$ | 21 |
| $9,10,1,2,3$ | 18 |
| $10,1,2,3,4$ | 19 |

Allowable Difference of Occurrence

## Ghoekine Lox Rolishllity

(Lower Income Group "Shopperg")
(15 Guestionnairesmu 10 used)
S-Table of Gumlative Frequencies (Gualative Frequoncy Hothod)

Cumulative Percentage of Lower Income Group "Shoppers"

| Gromp | Frequency of | Cumbative <br> Frequancy of |
| :---: | :---: | :---: |
| Mumber | Decursence | Occurrence |
| 1 | 0 | - |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
|  | 2 | 1 |
| 6 | - 3 | 2 |
| 7 | 0 | 2 |
| 8 | 0 | 2 |
| 9 | 0 | 2 |
| 10 | 0 | 2 |

Tumatative Number of Gases

1
2
3
4
5
6
7
8
9
10

Quruative Percent of Occursuce
0.0
0.0
0.0
0.0
20.0
33.3
23.5
25.0
22.2
20.1


B-Table of Differences (Group Rotation ifethod)

| Groups |  | -20 | Groups | ? | drad |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency of <br> Dcerurgace |  | Freanency of <br> Occurrence | Difference of Decurrence | Smallest <br> ${ }^{5}$ \% of <br> Occurrence | Allowable <br> Difference of Qeeurence |
|  | 1,2,3,4,5 | 1 | 6,7,8,9,10 | 1 | 0 | 20.0 | 1 |
|  | 2,3,4,5,6 | 2 | 7,8,9,10, 1 | 0 | 2 | -- | 1 |
| III | 3,4,5,6,7 | 2 | 8,9,10,1,2 | 0 | 2 | - | 1 |
|  | 4,5,6,7, 5 | 2 | 9,10,1,2,3 | 0 | 2 | - | 1 |
| $V$ | 5,6,7,8,9 | 2 | 10,1,2,3,4 | 0 | 2 | - | 1 |

# WEw TECOHDS SET TM EUSTHRSS AND BUTEDTNG IN OTTY <br> Population is 20,000; 200 New Homea 

Business ectuity, wich set a new high in 211 lines in $19 / 8$ in Stillwater, is expected to be improved in 1949.

A cheok of stinnoter's business index indicates a 1,000 population as the city continued toward its goal of at least 20,000 residents $19 y 1950$. The present pomlation is estinated at a minimum of 18,000 compared to 10,097 in 1940.

Construction of nem homes and buriness buildings here in 1948 was at the fastest pace in Stillwater's history. Building permits issued for the year were for $\$ 352,505$ as compared to $\$ 1,617,528$ in 1917 and 304,014 in 1933. These figures do not include the $\$ 17$ million construction program on Abla canpus.

Wore than 200 new homes were built here in 1948 and builders expect to at least equal that figure in 1949. Builders point out that the building materials market is more steady and in better supply than it has been in a number or years.

Constmuction of new apartment houses and duplex units was also at a new high. During the last six months 19 apartments valued at 5508,250 were built and six duplex units at 50,500 .

New buainess buildings constructed in the last six months totaled 20 with a valuation of 691,600 . However, construction of two new theaters, the oklam homa Natural Gas Co. office building and several others were started in the early part of the year.

Besides these accomplishments were others of equal importance to stillwater's steady groyth.

Extensive remodeling is underway on two of the eity's grade schools and repairs were made to other school buildings. These projects account for \$245,346 being spent by the district school board in an erfort to meet the needs of a growing school population from the first grade through senior high school. Construction of new grade school building is scheduled this year.

Stillwater residents on December 21 approved a 7781,000 bond issue for six projects including enlarging the hospital, power plant, sewage plant, new sewer lines and a new electrical distribution system throughout the city,

Better roads for Stillwater were high on the agenda for 1948 resulting in a new approach from the south being started on state highway 40 and the lapse paving on that road between Stillwater and Ponca City scheduled for completion this year. The city chamber of comerce's road comittee indieated that one of its major tasks this year will be to seak the improvement of highray 15 west of Stillmater to the state line.

In the closing months of 1948 the Santa Fe made needed improvements of
its freight handing facilities here. Santa Fe officials stated that the business for Stillwater was one of the highest in this division. Inproved passenger and freight service for Stillwater is reported to be one of the chamber's major projects this year.

Checks draw on Stillwater amounted to to $\$ 7,436,294$ for the same month in 1947. In this business index classirication it is interesting to compare the $19 / 48$ total of $883,466,135$ to thet of 1947 of $875,413,480$ and to that of 1938 of $\$ 24,886,783$.

Postal receipts in December were at an all-time high of $\$ 22,562$ compared to $\$ 20,409$ for December, 1947. For the year postal receipts mere $\$ 165,959$ as compared to 3144,676 for 1947 and $\$ 72,831$ for 1936.

Gity revenue for the calender year of 1948 was 8009,372 , a new high. The 1947 total was $\$ 518,198$ and the 1938 total $\% 266,813$.

An increase of 547 electrical meters in use was reported bringing the total number to 5,257 at the close of 1943. At the end of 1947 there were 4,710 electrical meters in use and in 1938 but $3,257$.

Telephones in use at the end of 1948 totaled 6,380 as compared to 5,747 fot the end of 1948 and 3,428 at the end of 1938.*

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[^0]:    1
    This figure was checked with the Chamber of Commerce and with realtors who gaged the increase of building and multiplied it by the average family unit.

[^1]:    4 References: P. D. Converse, "Consumer Buying Habits in Selected South Illinois Communities," No. 6.
    ${ }^{5}$ Marketing Handbook by P. H. Nystrom.

[^2]:    ${ }^{6}$ Reference: Stillwater Oklahoma News Press, Friday, Oct. 15, 1948.

[^3]:    7 See the classification of occupations according to incomes, p. 12 .

[^4]:    ${ }^{8}$ For a more thorough discussion of income groups see Perham C. Nahl's, Retail Trading Area Analysis.

    9 Interview schedules were not available to anyone except the writer who tabulated the results.

    10 No attempt will be made here to explain the mechanics of these checks for consistency. For a brief explanation, refer to Lyndon 0. Brown's Market Research and Analysis, pp. 311-323, or to any standard text on statistics.

[^5]:    13 In other studies this relationship has also been shown. See especially Eaton Van Wert Read, An Anslysis of the Retail Trading Relationships of Elgin, Illinois-A Satellite City (Chicago, 1939), page 71.

