

1-1-1971

A study of selected factors related to the turnover of public school superintendents in Connecticut.

Wayne Smith Porter

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation

Porter, Wayne Smith, "A study of selected factors related to the turnover of public school superintendents in Connecticut." (1971).
Doctoral Dissertations 1896 - February 2014. 2545.
https://scholarworks.umass.edu/dissertations_1/2545

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

18-2330
A STUDY OF SELECTED FACTORS RELATED
TO THE TURNOVER OF PUBLIC SCHOOL
SUPERINTENDENTS IN CONNECTICUT

A Dissertation Presented

by

Wayne S. Porter

Submitted to the Graduate School
of the University of Massachusetts
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

January 1971

Educational Administration

A STUDY OF SELECTED FACTORS RELATED
TO THE TURNOVER OF PUBLIC SCHOOL
SUPERINTENDENTS IN CONNECTICUT

A Dissertation

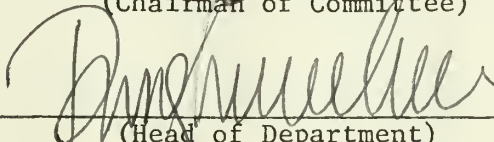
by

Wayne S. Porter

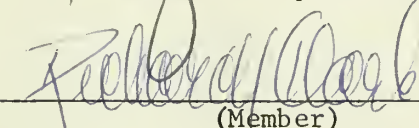
Approved as to style and content by:



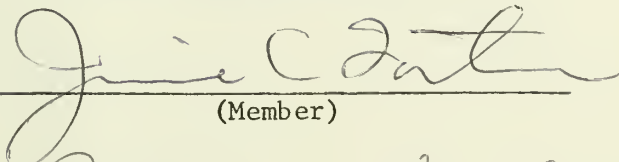
(Chairman of Committee)



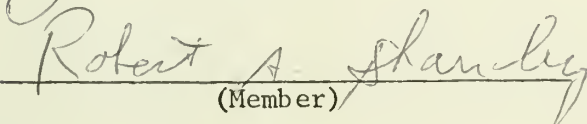
(Head of Department)



(Member)



(Member)



(Member)

January 1971

ACKNOWLEDGEMENT

This dissertation has been in preparation for more than two years. I am grateful for the understanding of my wife and family who have suffered through the ordeal of my involvement with the project.

I gratefully acknowledge the help I have received from my advisor, Assistant Professor, Ray Budde, and the encouragement rendered in the year of my residency at the University of Massachusetts by Professor Orvid F. Parody, my former advisor.

The East Longmeadow School Committee has been most generous in permitting me time for consultation with members of my dissertation committee thus permitting me to finish this project.

TABLE OF CONTENTS

Chapter		Page
I	SIGNIFICANCE OF STUDY, STATEMENT AND DELIMITATION OF PROBLEM	1
	Importance of Study Statement of Problem Delimitation of Problem	
II	REVIEW OF RELATED RESEARCH	8
III	DESIGN OF STUDY	19
	Basis of Study Hypotheses Method of Study Definition of Terms Description and Classification of Data	
IV	THE FINDINGS	33
V	SUMMARY AND CONCLUSIONS	63
	Recapitulation Recommendations Needs for Further Research	
	APPENDIX	68
	LITERATURE CITED	70

LIST OF TABLES

Table		Page
1	Annual Percentage of Turnover	33
2	No Turnover Cities and Towns	39
3	One Turnover Cities and Towns	41
4	Two Turnover Cities and Towns	44
5	Three Turnover Cities and Towns	47
6	Four Turnover Cities and Towns	48
7	Size of Community vs. Turnover	50
8	Population Growth vs. Turnover	51
9	Population Density vs. Turnover	52
10	Type Government vs. Turnover	53
11	Party Competition vs. Turnover	54
12	Party Affiliation vs. Turnover	55
13	Per Pupil Valuation vs. Turnover	56
14	Per Pupil Cost vs. Turnover	58
15	Superintendents Salaries vs. Turnover	59

LIST OF ILLUSTRATIONS

Figure		Page
1	Graph of Turnover	35
2	Map of Connecticut Showing Turnover Towns . .	49

C H A P T E R I

SIGNIFICANCE OF STUDY, STATEMENT AND DELIMITATION OF PROBLEM

Importance of Study

This study of the turnover of public school superintendents in Connecticut is an attempt to clarify the status of the stability of the public superintendency in the state. While a high rate of turnover in the superintendency is indicated in recent years, there has not been a comprehensive assessment of the magnitude of the problem nor an attempt to ascertain if a turnover problem exists. A high rate of turnover in the profession might indicate a rejection of the leadership role of the public school superintendent in local communities. It may herald a transition in his role requiring different sets of skills and understandings than formerly considered essential. Consideration of the community forces influencing educational policy is important to the superintendent in facilitating support of the schools in the community and essential to his professional survival.

The difficult role of the superintendent has been recognized by a number of writers and their findings are presented in the following pages. The problem of turnover is not confined to Connecticut as can be seen from studies cited. McCarty spoke of the superintendency as the "uneasy profession" because of its instability.¹ The 1960 study of the

¹Donald J. McCarty, "How Community Power Structures Influence Administrative Tenure," American School Board Journal, 148: pp. 11-13, May, 1964.

American Association of School Administrators revealed that the percentage of superintendents with ten or more years of service in the same position varied from thirty-three to forty percent, depending on the size of the school district.²

Many superintendents have spent several years in other educational capacities and the superintendency is the apogee of their professional careers, often coming late in life. Measuring mobility in terms of length of service, thus, does not tell the whole story, nor does it account for the frequent changes in position by superintendents indicated in many parts of the country today. The AASA study revealed that some superintendent had held as many as six superintendencies. However, the vast majority, eighty-five percent, had held three or fewer such positions.³

The superintendency is characterized by short tenure as established in the 1960 study of the AASA. The median length of service was set at 7.7 years and mean 9.1 years.⁴ According to Dr. Thomas J. Pullen, Jr., former State Superintendent of Schools of the state of Maryland,

It is an obvious fact that the school superintendency is a precarious position and possibly is becoming a more trying and difficult one than it has been in its whole history. It would probably be unfair to say that there is a designed attack upon the men and women who occupy it. It happens that we are in a period in which more and more segments of our national life are interested in

²American Association of School Administrators and Research Division of National Education Association, Profile of the Superintendent. (Washington, D.C., 1960). p. 14.

³Ibid.

⁴Ibid.

education and are touched by it, and everyone wants to do something about it. Naturally everyone wants to change things to suit his interests and those of his group. The result is a constant conflict, and the superintendent (and the college and university president) is in the center of all of these pressures. It is not possible to say which factor plays the greatest influence in the disturbance of a superintendent. Sometimes it is one of the major movements, and frequently it is a minor thing that throws a monkey wrench into the works. Regardless of the single factor or the combination of factors, the superintendent has to bear the brunt of the pressure.⁵

Commissioner of Education of the state of Connecticut, William J. Sanders, in a letter to the author of this paper, indicated his concern over the rapid rate of turnover in the superintendency and its significance in these words,

I think the turnover in the superintendency is of great significance, not only in Connecticut, but throughout the country. As a matter of fact, this is a matter of extreme interest to the AASA's Committee on the Advancement of School Administration, of which I am chairman this year. . .

I hope that the study would get into matters to which we might address ourselves in the pre-service and in-service preparation of superintendents.

What I am saying is that we know there is a large turnover, and the rate of turnover seems to be increasing. I hope you can find certain factors indicating changes that should be made in the preparation of superintendents in order to make them more durable.⁶

In his study of the superintendency in New York state, McCarty noted the difficulties of determining the reasons for turnover.⁷ Perhaps, it is more important to address ourselves to the phenomenon of

⁵Thomas J. Pullen, "Superintendents Authority Undermined," American School Board Journal, 153: p. 60. (November, 1966).

⁶Letter from William J. Sanders, Commissioner of Education of the State of Connecticut, Hartford, Connecticut. March 19, 1970.

⁷D. J. McCarty. "How Community Power Structures Influence Administrative Turnover," American School Board Journal, 148: pp. 11-13, (May, 1964).

turnover itself rather than be concerned with causation. Regardless of reasons, school systems change one way or another when a superintendent leaves. For this reason a study such as this of turnover and the factors associated with turnover is justified.

A look at the anatomy of the community will, perhaps, shed some light on the problem of turnover in the superintendency. It is through the board of education that community policies in respect to education are formulated but, according to Lieberman, community values play a great role in determining the nature of schools and their policies. He says,

In most states the purposes and content of education are left to local school boards to determine. Undoubtedly, there are constitutional limits to the purposes for which communities operate public schools. However, these limits have never been spelled out, and there is great latitude in what a community might require of its schools. Since the purposes of education are set forth locally, the predominant groups in the community tend to establish purposes which accord with their particular religious, political, economic, or social points of view. . .⁸

Carlson has somewhat the same concept of local constraints on the schools. He says,

Propositions are needed in administrative science about the impact of environmental factors upon organizations. We need to know the ways in which organizational structures and behavior are constrained and facilitated by forces in the environment of the organization. Some are quite obvious, such as financial ties, material dependencies, recruitment limitations; others are less obvious such as prestige. The area of organizational environmental relations, however, is one of the least developed areas in the study of organizations. This is true in the case of the public school systems as

⁸Myron Lieberman. The Future of Public Education. (Chicago: University of Chicago Press, 1965). p. 38.

well as in that of other kinds of organizations.⁹

The period 1960 to 1969 were years of turbulence in American Society. The sixties were years of unprecedented violence, rebellion, and social upheaval as well as economic progress. In this decade the United States' involvement in the longest conflict in its history has shaken the unity of society. Since the schools have become the focal point of controversy in many communities, and the job status of superintendents has been affected, it is important that we understand these local influences. Such enlightenment may permit superintendents to cope with the types of problems often encountered and may result in more effective educational leadership.

Robert L. Katz, writing in the Harvard Business Review, identified three dimensions of administration: the job, the man, and the social setting.¹⁰ The importance of the social setting in respect to the public school superintendency has been overlooked. The study will be centered on the community influences related to the turnover of public school superintendents. This relationship represents a neglected area of research in public school administration and will be concerned with a number of factors considered relevant to the problem. The establishment of certain relationships between turnover and the forces at work in the school community environment will add to the knowledge of

⁹R. O. Carlson. "The Public School and Its Clients." Environmental Constraints and Organizational Consequences, Sixty-Third Yearbook of the National Society for the Study of Education. (Chicago: University of Chicago Press, 1964). p. 262.

¹⁰Robert L. Katz. "Skills of Effective Administrators." Harvard Business Review, 33: pp. 33-42. (January-February, 1955).

school administration. This knowledge may be useful to practicing superintendents, aspirants to the profession, and may contribute to administrative theory generally.

Statement of Problem

The superintendency of schools is a position of relatively short tenure throughout the country. In Connecticut the turnover rate in the profession rose to twenty-two percent in 1969 as determined from preliminary consideration of data related to this study.¹¹ This increase in turnover raises many questions about the continuance of the superintendent's role as leader and policy maker. While certain changes in the superintendency are normal and essential, a sustained rate of the magnitude established in 1969 does not auger well for public education in Connecticut. Further analysis of statistical data on turnover during the period 1960 to 1969 show a decided increase in the number of vacancies and percentage of turnover in the late years of the decade. Based on this preliminary examination of the data, this study seeks to answer the following question:

Are selected factors related to the nature of the community and population associated with the turnover of public school superintendents in Connecticut?

Ten selected factors will be examined in this study: size of community, population growth, population density, type of government, party affiliation, party competition, property value per pupil, per

¹¹From comparison of listings of superintendents in the Connecticut Educational Directories published annually by the Connecticut State Department of Education.

capita income, per pupil expenditure increase, and expenditures for superintendent's salaries.

Delimitation of Problem

This study will be limited to consideration of the turnover of public school superintendents in Connecticut during the period 1960 to 1969. It will be further limited to the study of ninety-eight cities and towns, that in 1969 constituted independent school districts employing a full time superintendent appointed by the local board of education. It will deal with selected factors, common to all communities, that may be statistically analyzed and compared.

C H A P T E R II

REVIEW OF RELATED RESEARCH

Sources utilized in researching this study were The Readers Guide to Periodical Literature, The New York Times Index, and The Educational Index. The School Research Information Service of Phi Delta Kappa was utilized as well as the ERIC system. Data was secured from the Connecticut State Department of Education, Connecticut State Tax Department, and the Connecticut Department of Labor. A number of other agencies were contacted and data from these agencies incorporated in this study. These agencies were the Educational Research Service of the American Association of School Administrators and the National Education Association, the Ontario Institute for Studies in Education, the Connecticut Education Association, and the Connecticut Public Expenditure Council.

Commissioner of Education in Connecticut, William J. Sanders, was contacted and correspondence carried on with him. Veteran superintendents of Connecticut were consulted on particulars related to turnover and retirement where information could not be secured from established sources.

The Superintendency and Mobility

A number of studies dealing with the turnover of superintendents were found which are reviewed here as background for this study. A study by Bair characterized the personal background, training, and

experience of the superintendent of that time. According to his findings, the typical superintendent held a master's degree, his political views were either Republican or Independent, and he had held only two superintendencies during his career. His mobility in the profession was mostly confined to one state.¹²

The most recent published study widely referred to in the literature is the AASA study, Profile of the Superintendent. This study embraced 3812 superintendencies in all sections of the country. The typical superintendent was reported to be in his first or second superintendency. Of the sample studied, thirty-eight percent of respondents had held their positions for more than ten years. The mean tenure was set at nine years. Some superintendents had held as many as six superintendencies in the course of their professional careers.¹³ A study by Snow was concerned with constraints placed on superintendents by virtue of social skills of school board members as determined by the socio-economic level of the community. Lack of leadership skills in low socio-economic communities inhibited the administration of the schools by professionals. School boards in high level socio-economic communities were found to be less concerned with administrative detail, leaving the administration of the schools in the hands of professional educators.¹⁴

¹²F. H. Bair. The Social Understandings of the Superintendent of Schools. Teachers College Contributions to Education, No. 625. (New York: Bureau of Publications, Columbia University, 1934).

¹³American Association of School Administrators, Profile of the Superintendent. (Washington, D.C.: 1960). p. 14.

¹⁴R. J. Snow. Community Resistance and Conflict Propensity as Sources for Constraints on the Local School Administrator. (Eugene, Oregon: Center for the Advanced Study of Administration, University of Oregon, 1967).

The relationship between power structure types of boards of education in New York state and the turnover of superintendents was studied by McCarty and Ramsey. They reported a positive relationship between turnover and changes in power structure types in communities studied.¹⁵

An in press manuscript by Hickcox and Snow is the latest comprehensive study of the superintendency. In this study the mean age of superintendents was placed at 49.3 years. The authors reported that the mean age of members of the profession had risen steadily from forty-three in 1921 to 51.8 in 1960. Some confusion as to the meaning of the lower age of superintendents was expressed because other aspects of the study indicated later entry into other administrative positions held earlier by superintendents, hence a more advanced age upon entry into the superintendency itself. The mean tenure was found to be 7.5 years. Superintendents with long tenure were found to be higher paid than superintendents of shorter length of service.¹⁶

A study by Walden showed a positive relationship between the defeat of school board incumbents and turnover in the superintendency in 117 school districts in four Southern California counties.¹⁷ Another study by Carlisle pointed up the difficulties of the superintendency

¹⁵D. J. McCarty and C. E. Ramsey. A Study of Community Factors Relating to the Turnover of Superintendents - Community Power, School Board Structure, and the Role of the Chief Officer. (Unpublished doctorate dissertation, Cornell University, 1967).

¹⁶E. S. Hickcox and R. J. Snow. Profile of the Superintendent. (Unpublished manuscript, Ontario Institute for Studies in Education, 1970). p. 5.

¹⁷John C. Walden. "School Board Changes and Superintendent Turnover." Administrators Notebook, 15-5: January, 1967.

and a consequent high rate of turnover in the profession.¹⁸ Hair conducted a study of the Wyoming superintendency indicating a recent upward trend in the turnover rate.¹⁹ An article by Mosier and Baker published in 1951 indicated the size of the community was related to turnover. They described medium sized districts as safer than small and large districts.²⁰

A poll of superintendents was reported in the Nations Schools in 1965. According to this survey, superintendents are not generally interested in long tenure. Forty-six percent of those polled said that six to ten years was a reasonable tenure period. Twenty-four percent preferred a tenure period of eleven to fifteen years, while only fourteen percent indicated lifetime tenure desirable.²¹

Methodology for these studies of the superintendency varied only slightly from each other. The AASA study employed a sample survey technique. Questionnaires were sent to superintendents in different parts of the country and responses collated. Answers to particular questions were analyzed for frequency of response. Numerical data were

¹⁸William T. Carlisle. Turnover and Demand by Public School Administrators. CPA Digest Series. (New York: Teachers College, Columbia University, 1953).

¹⁹Hair, Donald. Tenure and Turnover of Wyoming Superintendents. (Larime, Wyoming: Curriculum and Research Center, College of Education, University of Wyoming, 1965).

²⁰Earl E. Mosier and John E. Baker. "Midwest Superintendents on the Move Typify the Hazards of School Administration, Medium Sized Districts offer Greatest Security." The Nations Schools, January, 1951.

²¹"Six to Ten Years in Long Enough in One Place, Schoomen Say." Nations Schools, 76: November, 1965. p. 57.

statistically treated.²² In the study of McCarty and Ramsey, criteria describing types of power structures were developed. Data for the study were secured by visiting school board meetings and recording the interaction of members in meetings. Personal interviews with certain people associated with the systems studied were conducted and recorded on tape. School boards were typified by playing back the recordings of meetings and interviews applying the criteria previously determined. Turnover of superintendents was noted and, over a period of time, tabulated. The data on turnover and type of power structure were subjected to the chi square test and null hypothesis assumption.²³ The study of Hickcox and Snow was similar in design to that of the AASA previously mentioned. The identical questionnaire used in the 1960 study was sent to selected school administrators. A more refined sampling of 12,229 superintendents from different sized districts and sections of the country was made. Responses were collated and reported in the same manner of the study previously mentioned in which this questionnaire was used.²⁴

In Walden's study of turnover and the defeat of school board incumbents in towns of Southern California, data was secured by questionnaire. Hypotheses were tested by applying the null hypothesis and chi square test.²⁵

²²AASA, Profile of the Superintendent.

²³D. J. McCarty and C. E. Ramsey. A Study of Community Factors Relating to Turnover of Superintendents.

²⁴E. S. Hickcox and R. J. Snow. Profile of the Superintendent.

²⁵J. C. Walden. "School Board Changes and Superintendent Turnover."

Little has been written about mobility in other professions. According to Boyden the ambition and drive of business and industrial executives is a factor related to their mobility. Closely related to ambition and drive is desire to earn higher salaries.²⁶ Salaries is one of the factors being tested in this study.

Politics and Education

Until recent years people associated with the public schools have rejected the idea of connecting education with politics. Burkhead attributed the abhorrence of politics by school people to the concept of politics of some years ago personified by the big city bosses.²⁷ A number of studies have documented the relationship between politics and public education. One such study describing the influence of politics on public educational policy was made by Dahl. This study reveals that underlying economic and social problems dictate educational policy through a complicated political process.²⁸ Political scientists at Syracuse University have spearheaded investigation of the politics of education. Under a grant from the Carnegie Corporation of New York, Martin studied school politics in the suburbs. He reported that community forces operate in support or opposition to schools as they do for

²⁶Sidney Boyden. "The Reasons Top Executives Change Jobs." Nations Business. February, 1968. pp. 84-88.

²⁷Jessie Burkhead. Public School Finance, Economics and Politics. (Syracuse: Syracuse University Press, 1964). p. 141.

²⁸Robert A. Dahl. Who Governs? (New Haven: Yale University Press, 1961). p. 152.

other local governmental bodies. Martin found that council-manager type government was responsive to the needs of suburban communities. He reported on the rapid growth of the suburbs and predicted complications in financing schools resulting from continued growth.²⁹ Another study at Syracuse University was done by Bailey et al. It was concerned with the politics of state aid to education in the northeastern states. Both economic and political factors limit improvement in the sharing of educational costs according to this study.³⁰ This study is important in understanding the politics of education at the local level in Connecticut communities. Iannaccone and Lutz studied the politics of education at the local level. They reported that the politics of school district elections was a most important determinant of policy-making in public education.³¹

Political scientists have studied voting behavior, political structures, parties, and many other aspects of politics in their search for an explanation of the outputs of political systems. Such studies might serve to show the differences in various communities in respect to the quality of education. More pertinent than quality to this particular study is discovering relationships to explain the historical differences of the turnover of superintendents in different towns in Connecticut.

²⁹Roscoe C. Martin. Government and the Suburban School. (Syracuse: Syracuse University Press, 1962).

³⁰S. K. Bailey et al. Schoolmen and Politics. (Syracuse University Press, 1962).

³¹L. Iannaccone and F. W. Lutz. Politics, Power and Policy: The Governing of Local School Districts. (Columbus, Ohio: Charles E. Merrill Publishing Company, 1970).

A number of studies relating to political parties, types of government, and voting behavior are cited here that suggested relationships to be tested in hypotheses of this study. Kessler related type of government to population growth of cities. He reported a trend toward the establishment of council-manager government as communities grow in size. This trend he attributes to the need of professionally oriented government.³² East characterizes council-manager government as professionally oriented and reformed in describing its philosophical basis.³³

Lipset points out the relationship between social class and political affiliation. According to him people of higher socio-economic classes tend to be Republican, while people of the laboring class gravitate toward the Democrat party.³⁴ Lipset's work relates to the testing of the per capita income hypothesis of this study and is important to an understanding of the socio-economic factors underlying party affiliation.

Competition between political parties influences the output of political systems according to Fenton. In his study of state politics he found greater support of health and welfare programs in states with competitive political parties.³⁵ In this study, party competition at

³²John H. Kessler. "Government Structure and Political Environment." Politics in the Metropolis. Edited by T. R. Dye and B. W. Hawkins. (Columbus, Ohio: Charles E. Merrill Book Company, 1967).

³³John P. East. Council-Manager Government: The Political Thought of its Founder, Richard S. Childs. (Chapel Hill, N.C.: University of North Carolina Press, 1965).

³⁴Seymore Lipset. Political Man, The Social Basis of Politics. (Garden City, New York: Doubleday & Company, Inc., 1960). p. 303.

³⁵John H. Fenton. People and Parties in Politics. (Glenview, Illinois: Scott, Foresman and Company, 1966). pp. 30-49.

the local level is one of the hypotheses being tested. Competition ratios for the various communities have been computed in a manner similar to Fenton's state competition ratios.

Urban problems are a frequent topic in the discussion of municipal government problems. Population size, growth, and concentration are hypotheses related to this study. Thus, an understanding of population phenomenon of the city and suburbs is essential in interpreting data concerned with population factors. Carver emphasized the need for metropolitan planning in the development of the suburbs. He considered such planning essential to the providing of community services and for the sake of economy.³⁶

Future urbanization trends are discussed by Gottman in an article in his book Megalopolis: The Urbanized Northeastern Seaboard of the United States. He sees a continued urbanization trend along the Eastern seaboard, a continuing decline of large cities, and a need for the cooperation of governmental bodies at the various levels to provide services required in these concentrated areas. Ultimately he expects the Eastern seaboard to be a continuous metropolitan region stretching from Virginia to New Hampshire.³⁷ The problems he describes are significant in understanding the effects of suburban growth on educational policy, especially school finance.

³⁶Humphrey Carver. Cities in the Suburbs. (Toronto: University of Toronto Press, 1965).

³⁷Jean Gottman. Megalopolis: The Urbanized Northeastern Seaboard of the United States. (New York: The Twentieth Century Fund, 1961).

Economic and Social Influences

Dye reported that economic development variables are more important than political systems in shaping educational policy in the state.³⁸ His study relates to the hypotheses concerned with politics and economics that are being tested in this study.

The socio-economic status of cities and suburbs is discussed by Schnore. He reported that suburbs in larger and older urban regions have higher socio-economic status than in smaller and more recently developed urban areas, and lower socio-economic status in the smaller and newer regions.³⁹ Socio-economic status as determined by per capita income and property valuation are factors to be tested in this study in relation to the turnover of public school superintendents.

The presence of substantial numbers of non-whites in Connecticut's largest cities is a factor to be counted in the consideration of educational problems. According to the 1960 census, the cities of Bridgeport, Hartford, New Haven, and Waterbury do have such non-white populations.⁴⁰ Racial problems relate to the hypotheses of this study involving politics, economics, and sociological phenomena. Horton and Leslie consider racial problems to be many-sided, involving social values, economics,

³⁸Thomas R. Dye. Politics, Economics, and Educational Outcomes in the States. Final Report. (Athens, Georgia: University of Georgia Press, 1967).

³⁹Leo F. Schnore. "The Socio-economic Status of Cities and Suburbs." American Sociological Review, 28: pp. 76-85. February, 1963.

⁴⁰United States Department of Commerce. Statistical Abstract of the United States, National Data Book and Guide to Sources, 89th Edition. (Washington, D.C.: U.S. Government Printing Office, 1968). p. 21.

and education. The confinement of non-whites in the ghettos, due to the social barrier of prejudice, and to unfair rental policies, intensifies racial conflict according to the authors.⁴¹

The consequences of increasing costs of education are related in an article by Webb. He sees a growing disaffection of the public in general toward public education. He cites instances of the defeat of school bond issues and reduced budgets as indication of such a trend.⁴² One hypothesis of this study relates to comparative educational expenditures.

A number of studies pertaining to the superintendency were cited in this chapter, establishing a conceptual reference for the study. Other studies related to economic, political, demographic, and other factors were cited, that relate to the hypotheses being tested in subsequent chapters of this paper. The factors associated with the turnover of public school superintendents in Connecticut were set forth in Chapter I. They represent important criteria associated with the school community environment which can be quantitatively measured. Their importance as factors has been further established by virtue of the concern demonstrated by researchers and writers in this review of related research.

⁴¹Paul B. Horton and Gerald R. Leslie. The Sociology of Social Problems. (New York: Appleton-Century-Crofts, 1965). pp. 468-484.

⁴²Harold V. Webb. "The Public is Restless," American School Board Journal, 155: p. 32. (May, 1968).

C H A P T E R I I I

DESIGN OF STUDY

Basis of Study

An analysis of turnover data computed for this study is included in this paper as Appendix A. The annual rate of turnover in 1960 was fourteen percent. By 1969 the rate of turnover had increased to twenty-two percent. For the purpose of this paper the data on turnover will be concerned with two periods, 1960-1964 and 1965-1969. The early years of the sixties represent a period when turnover rates from year to year remained relatively stable, whereas in the late years of the decade, turnover in the superintendency in Connecticut took a sharp upward turn. Data presented in Appendix A and the trend lines established, thus, represent an empirical basis of statistical analysis. Data have been collected from ninety-eight of 169 towns in Connecticut. This representative data will be tested and results applied in assessing the turnover situation in the superintendency in the state as a whole.

This study does not presume to explain all changes in the public school superintendency, imply that change is good or bad, nor try to establish a causation relationship. It simply seeks to clarify the turnover situation and discover possible relationships that may exist between turnover and the selected school environmental factors.

The ten factors being tested in this study were determined from a number of factors considered. Factors that might influence public

policy are those concerned with the nature of the community, its demographic make-up, the socio-economic level of the community, the political beliefs and behavior of people in the community, how people make a living, and the aspirations of people. Many statistics regarding communities and people are gathered by the Bureau of the Census and other agencies. Some factors are more important than others and relate more to studies involving a number of communities. Thus, these ten factors judged to be important, relevant to all communities, and measurable quantitatively were selected.

The size of the community, population growth, and population density are all factors related to people. The size of community determines the complexity of the school system, the number of children enrolled in the schools, and number of teachers employed. In large communities a larger administrative organization is needed in running the schools. More schools, children, parents, taxpayers, and teachers create more problems requiring decisions and the establishment of school policy. Population growth is a phenomenon requiring changes in the community and the schools to meet the needs of growing numbers of students. Growth requires building new schools or otherwise providing for the housing of children. The financial burden of the community increases, affecting the tax rate and the tax contributions of the home owner. Approval or disapproval of school policy is a monetary concern to many citizens influencing his voting behavior. Density of population measures the degree of concentration of people in the different communities. Presumably the attitude of individuals is affected by whether they are

tenement house dwellers or lavish in the wide open spaces of a rural community.

Three factors were related to government and politics. Type of government determines the structure through which the problems of the community are channeled and translated into community policy. It is quite conceivable that an annual town meeting will generate different policies from a town council meeting weekly, or that a professional town manager will have a better conceptual basis of dealing with town governmental problems than the board of selectmen who spend one night a week administering the business of the town. Party affiliation and party competition are important factors in determining public policy. At times the traditional views of the party dominate policy and the members of local governmental bodies vote along party lines. Local leaders of either party conceivably represent particular views about the schools or other community matters, which are accepted as local party dogma. Such party philosophy may have far reaching implications in all community matters, including the schools. Competition between the political parties is important because such competition often moderates the policies generated by government bodies. Better policies and the needs of more people are served by governmental bodies when there is competition between parties. Local government dominated by one party is often graft-prone and fails to respond to community needs.

A community's resources determine to a great extent the kind and character of its commitments. One measure of community wealth is the value of taxable property. In relation to schools, the value of property in relation to the number of children enrolled in the schools

is a basis of judging the ability of a community to support schools. One might expect a reluctance on the part of people in a community with a low per pupil valuation base to support schools. In such a community there would be resistance to budgets, bond issues, and other school expenses. Whereas in communities with a more favorable per pupil valuation base, support of education would come more easily. Another such measure of resources is per capita income and the ability to support schools would be indicated by its level.

School costs have soared in the sixties. A comparison of cost increase is possible by dividing the expenditures per pupil of 1969 by that of 1960. A high cost ratio represents significant changes in the level of financing education. For whatever reason per pupil costs may have risen, at some point the community may resist paying taxes for schools. Such resistance might be translated into their attitude toward school officials and the election of members to the board of education. Salaries paid superintendents are reflected in per pupil expenditures. This factor is doubly important, however, since the level of salaries paid may influence the superintendent to be attracted to or remain in a community. Presumably turnover is less frequent in communities paying higher salaries and more frequent in low paying communities. This factor is thus worthy of being tested.

Hypotheses

Major Hypothesis: The turnover of public school superintendents in Connecticut is associated with the nature of communities and population in the towns and cities of the state.

- Minor Hypothesis I: The turnover of public school superintendents in Connecticut is independent of the size of the community.
- Minor Hypothesis II: The turnover of public school superintendents in Connecticut is independent of growth of the communities of the state during the sixties.
- Minor Hypothesis III: The turnover of public school superintendents in Connecticut is independent of the density of population.
- Minor Hypothesis IV: The turnover of public school superintendents in Connecticut is independent of the type of government of the community.
- Minor Hypothesis V: The turnover of public school superintendents in Connecticut is independent of competition between the two major political parties of the state.
- Minor Hypothesis VI: The turnover of public school superintendents in Connecticut is independent of party affiliation or non-party affiliation.
- Minor Hypothesis VII: The turnover of public school superintendents in Connecticut is independent of the wealth of the community based on the value of taxable property per pupil enrolled in local public schools.

Minor Hypothesis VIII: The turnover of public school superintendents in Connecticut is independent of the per capita income of people making up the community of the school district.

Minor Hypothesis IX: The turnover of public school superintendents in Connecticut is independent of increases in per pupil expenditures by communities for education during the sixties.

Minor Hypothesis X: The turnover of public school superintendents in Connecticut is independent of salaries paid superintendents in the various cities and towns.

Method of Study

This study will be of the analytical research type. Data have been collected from a number of sources which periodically assemble data for their own use and as a service to the general public. The use of archival data sources was the choice of the author. Agencies supplying data were: Connecticut State Department of Education, the Connecticut Public Expenditure Council, and the Connecticut Education Association. Data on government, politics, and voting were obtained from the Connecticut Registry and Manual published annually by the Secretary of State's Office. The raw data from these various sources were put in usable form and classified according to the plans set forth in the description of data section of this chapter.

Data on turnover of superintendents were tabulated from a comparison of the listings of names of superintendents in the annual Educational Directory for the years 1959 to 1970. These publications were examined in the library of the State Department of Education in Hartford.

A significant increase in retirement rate in the late years of the sixties would account for the increase in turnover. The refusal of the Teachers Retirement Board of the State of Connecticut to permit access to retirement records necessitated making a telephone survey of school districts concerned. From the seventy-eight school districts involved in turnover, a stratified random sample of twenty districts was selected and phone calls made to these districts. The sampling consisted of seven towns experiencing one turnover, seven towns experiencing two turnovers, three towns with three turnovers, and three towns which turned over four times. Based on this sampling of data, the percentage of retirees for the two periods representing the early and late years of the decade of the sixties was ascertained.

The plotting of data on annual turnover revealed a change in the rate of turnover between 1964 and 1965. This break in the data offered a natural point of division of data for statistical testing. The year 1965 was the year of least turnover during the entire decade. Its significance is important to this study, and historical facts related to the year 1965 will be presented.

Several statistical procedures were considered for the testing of data. The instrument chosen was the chi square test. In testing

the data the null hypothesis of non-relationship is presumed and ten hypotheses are tested.

Factors chosen were those associated with the community which were of such importance that data associated with them were available from official and other sources. Factors previously identified were described and data will be explained in the description of data section of this chapter.

The formula for chi square is $\chi^2 = (o - e)^2 / e$. In this $\chi^2 =$ chi square, o = observed frequency (turnover), and e = expected turnover (computed).

Data for this study were set in tables which appear in the next chapter. Turnover data are included in the text and the communities comprising this study are identified by name. Turnover data related to the various factors are set in contingency tables. Computations related to factor and level of significance accompany each table in the text.

Definition of Terms

Community -- The town or city included within the geographical confines of a school district.

Council-Manager Government -- Any of several types of local government characterized by administration of local governmental functions by a professional manager employed by and under the direction of the council.

Grand List -- The 1968 list of real estate valuation of the various cities and towns of Connecticut published by the State of

Connecticut Tax Department.

Major Political Parties -- The Democrats and Republicans.

Mayor-Council Government -- A type of local government characterized by an elected mayor who generally serves as executive head of the city or town government, and a council elected at large or by city district. The mayor-council government includes the so-called "weak mayor" and "strong mayor" types.

Party Competition -- The relative strength of major political parties expressed as a percentage ratio computed by adding the percentage of minority party enrollment in relation to total community enrollment in the major parties, and the percentage of votes cast for major party candidates for Attorney General on November 8, 1966 (the 1966 election being closest to mid-60's).

Per Capita Income -- The aggregate earnings of the people of a given community divided by the number of inhabitants.

Percentage of Turnover -- The number of changes in superintendencies of the state in a given year divided by the number of superintendencies constituting this study. Vacancies were determined by comparing the names of superintendents listed in the annual directory of the Connecticut Department of Education.

Per Pupil Cost -- The aggregate annual operational expenditure of a school district divided by the number of public school pupils enrolled in the district.

Selected Factors -- Any of the ten factors set forth in the hypotheses of this study.

Superintendents Salaries -- The contract salary of the school superintendent exclusive of expense accounts and fringe benefits.

Town-Meeting Government -- Any of the local governments of Connecticut not employing a professional manager or electing a town council, governed by a meeting of all qualified voters, or elected representatives, who choose officers and make basic policy. The administration of policy is delegated to a Board of Selectmen and other elected officers.

Turnover -- Refers to the incidence of change in the persons who serve as superintendents of public schools in Connecticut communities.

Description and Classification of Data

Data for this study were collected from the sources indicated previously. Data associated with community size are based on the projections of population of the Connecticut State Department of Health as of March 31, 1969.⁴³ For the purpose of this study these data have been divided into four categories: population under 5,000; 5,000-9,999; 10,000-29,999; and over 30,000. These population categories were determined by combining categories established by the Connecticut Education Association in reporting professional salary data.⁴⁴

The growth factor was computed by dividing the population of

⁴³Connecticut Education Association, Educational Administrative Salaries 1969-1970, (Hartford: 1970). p. 1.

⁴⁴Ibid., pp. 1-18.

the community per Connecticut State Department of Health of March 31, 1969 indicated above, and the population as reported by the U.S. Census Bureau in 1960.⁴⁵ The mean and standard deviation of growth data was computed, and three population growth categories were established at one standard deviation below the mean, between one standard deviation below and one standard deviation above the mean, and beyond one standard deviation above the mean.

Population density has been established as an important factor in population studies. Categorizing data associated with it presented a different situation than with other variables because of the extreme range of data. In setting up the test of this hypothesis, two categories of density were established: communities with densities falling at or below the median, and communities with densities falling above the median of density data for all communities being studied.

Three categories of government types have been established: mayor council, council-manager, and town meeting. The basic forms of government were discussed by Adrian and Press as follows:

There are three basic forms of city government in the United States: the mayor council, commission, and council-manager plans. To this must be added the New England Town Meeting and its accommodations to modern urban conditions, the representative town meeting. There are many variations of these plans, and especially of the mayor-council plan.⁴⁶

There are no commission type local governments in Connecticut and for the purpose of this study all town meeting type towns, including

⁴⁵Secretary of State, Connecticut Registry and Manual, (Hartford: 1967). pp. 592-597.

⁴⁶Charles Adrian and Charles Press. Governing Urban America. (New York: McGraw Hill Book Company, 1968). p. 185.

the representative town meeting, are grouped into a single category.

The relationship of party competition and output of political systems was established by Fenton.⁴⁷ Levels of competition inspired by his work were established by dividing the enrollment of the minority party of the community by total enrollment of voters in the two major political parties.⁴⁸ The percentage obtained was added to the percentage computed of the minority party vote for Attorney General in the election of November, 1966.⁴⁹ The mean and standard deviation of this data was computed and three categories of competition established: at one standard deviation below the mean, between one standard deviation below and above the mean, and beyond one standard deviation above the mean.

Data on party affiliation were secured from the Connecticut Registry and Manual.⁵⁰ Three categories were established: Democrats, Republicans, and independents. The categories were established by computing the percentage of registered voters associated with each major party and the percentage not affiliated with either party. Based on the highest percentage towns were labeled Democrat, Republican, or independent.

The value of property per pupil enrolled in the public schools

⁴⁷J. H. Fenton. People and Parties in Politics, (Glenview, Illinois: Scott Foresman and Company, 1966). p.

⁴⁸Secretary of State, Connecticut State Registry and Manual, 1967. pp. 731-736.

⁴⁹Ibid., pp. 629-639.

⁵⁰Ibid., pp. 731-736.

of each community was determined by dividing the value of taxable property per the 1968 Grand List published by the State Tax Department by the number of pupils enrolled in the public schools of Connecticut in 1969.⁵¹ Three levels of property valuation per pupil were established and used in the testing of this hypothesis. The three levels were determined by finding the mean and standard deviation of the valuation data for all communities. Categories were set according to the standard deviation as explained for the testing of other hypotheses of this study.

Per capita income for all the communities being studied was not available from the Connecticut Labor Department. The testing of the hypothesis on per capita income, therefore, will be based on the statistics of the thirty-five larger communities on which data were available.⁵² The three classifications of per capita income used in testing this hypothesis were determined by finding the mean and standard deviation of the data on per capita income and setting up the three categories based on one standard deviation below and above the mean as explained in categorizing data for other hypotheses.

The per pupil expenditures, representing operating expenses as determined from data of the Connecticut Public Expenditure Council compiled for 1969-1970, were divided by per pupil expenses of 1959-1960

⁵¹Connecticut Public Expenditure Council, Local Public Expenses and State Aid in Connecticut, (Hartford: 1970). pp. 6-31.

⁵²Connecticut Labor Department, mimeographed data listing per capita income of thirty-five towns in Connecticut, 1969.

determined by the same agency.⁵³ The mean and standard deviation of these percentage ratios was then computed and three levels of increase in cost categorized according to the standard deviation of the data. Categories were established at one standard deviation below the mean, between one standard deviation below and above the mean, and beyond one standard deviation above the mean.

Salaries of superintendents are reported each year by the Connecticut Education Association.⁵⁴ Data on salaries of superintendents were statistically analyzed finding the mean and standard deviation. Three salary levels based on the standard deviation were, thus, established in order to test the hypothesis of salary relationship.

⁵³Connecticut Public Expenditure Council, Local Public School Expenses and State Aid in Connecticut, (Hartford, Connecticut: publications of 1959-1960 and 1969-1970).

⁵⁴Connecticut Education Association, Educational Administrative Salaries, 1969-1970, (Hartford, Connecticut: 1970). p. 1.

C H A P T E R I V

THE FINDINGS

The turnover of superintendents in the ninety-eight towns and cities comprising this study was determined by comparing the listings of superintendents in the annual Educational Directory published by the Connecticut State Department of Education for the years 1959 to 1969. During this period there were 145 turnovers of superintendents in these cities and towns. There were sixty-five turnovers in the first five years of the decade compared to eighty during the last five years. The annual rate of turnover for the period 1960-1969 is presented in Table 1.

TABLE 1

ANNUAL PERCENTAGE OF TURNOVER

Year	Percentage	Year	Percentage
1960	14.3	1965	8.2
1961	13.3	1966	14.3
1962	12.2	1967	18.4
1963	9.2	1968	18.4
1964	17.3	1969	22.4

The graph of the trend lines for the data in Table 1 appears in Figure 1 on the following page. The trend line was established by the least squares method of linear regression computed as described by Hernik.⁵⁵ The equation of the turnover trend line for the period 1960 to 1964 is $y = .5x + 11.3$ and for the trend line 1965 to 1969 is $y = 3.2x + 6.2$. The slope of the line representing the data of the first five years is .5 and for the trend line of the last five years of the decade 3.2. Computations of trend lines may be found in Appendix A of this paper.

In order to authenticate data in respect to the portion of turnover attributable to retirement a telephone survey was conducted sampling twenty-five percent of school districts experiencing turnover in the sixties. The basis of selection of communities was described in the previous chapter. Calls were made to the office of the superintendent of schools of these districts. Three questions were asked of the superintendent or his secretary:

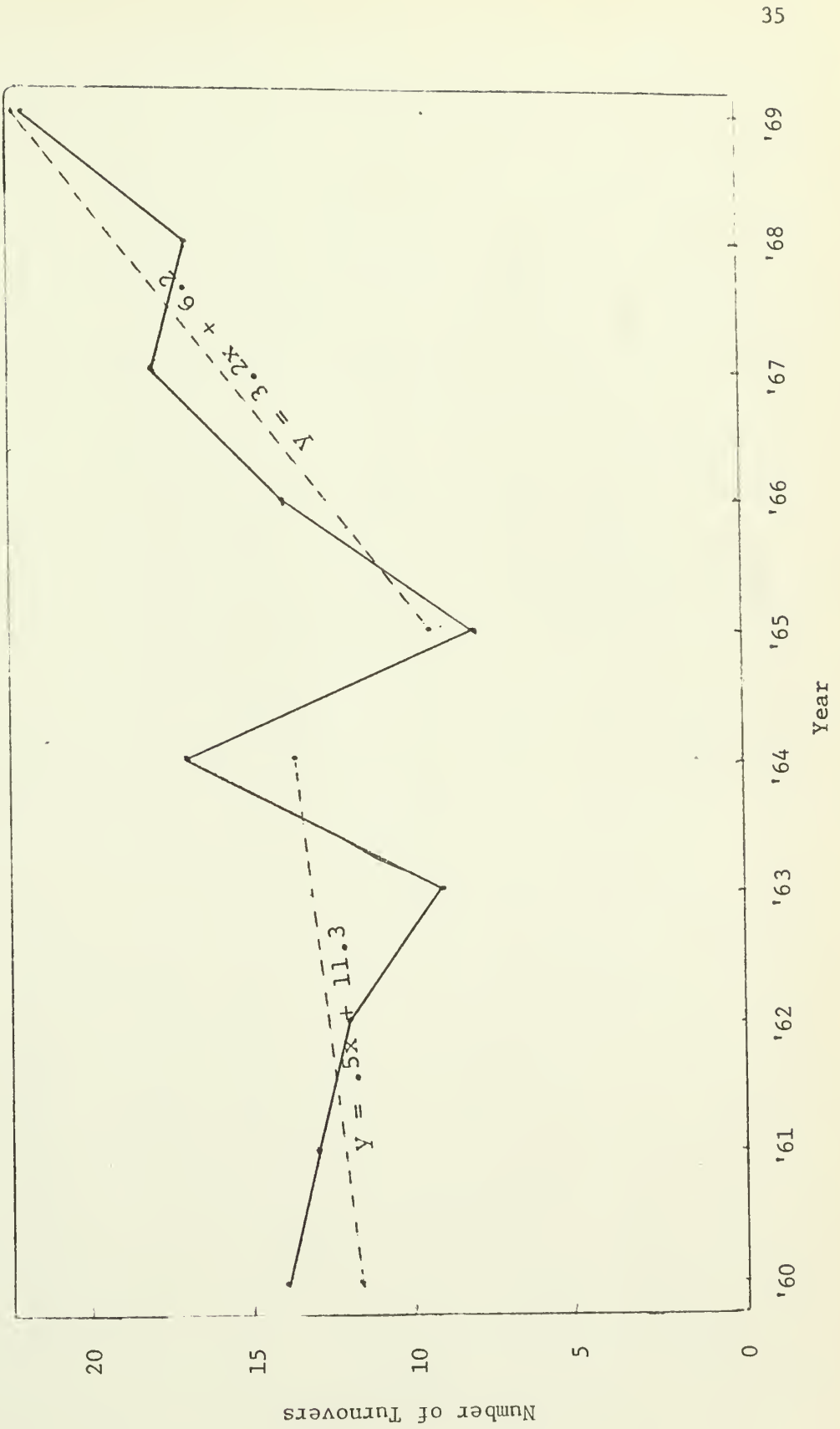
1. Is it correct that Superintendent _____ left your system in x years?
2. Did Superintendent _____ retire?
3. How old was he at the time he left the system?

Responses were made by all school districts contacted, although callbacks were necessary in several cases. In the towns contacted in this survey there were twenty-one turnovers in the five year period

⁵⁵Reinhard Herink. College Level Statistics, (New York: Monarch Press, Inc., 1965). p. 97.

FIGURE 1

Graph of Turnover



1960 to 1964 and twenty-one turnovers from 1965 to 1969. In the first five years of the decade the survey revealed that eight superintendents of the twenty-one who left their jobs retired. Of these eight, one was reported to have been in his late fifties. Since the mandatory retirement age is seventy, any superintendent who retired in his fifties is presumed to have retired early. In the last five years of the sixties, nine superintendents were reported as having retired. Of these nine people, four were reported to have been in their late fifties at retirement.

Based on the above reported survey the retirement rate remained constant during the ten year period. The slight difference noted in the last five years of the decade is due to early retirement. A trend toward early retirement was noted by Hickcox and Snow in their study.⁵⁶ Thus, the increase in turnover in the late years of the sixties must be attributed to other factors.

As reported in the previous chapter, the year 1965 was a low year of turnover in the superintendency in Connecticut. Explanations for the low turnover were sought by researching back issues of the Hartford Times, Hartford Courant, and the New York Times. The year end issues of the two Connecticut publications reported healthy economic conditions in the closing days of 1965 and early 1966. The Hartford Courant reported that the state's economy was up ten percent over the previous year on January 1, 1966.⁵⁷ On the following day the Dow-Jones

⁵⁶E. S. Hickcox and R. J. Snow. Profile of the Superintendent. (Unpublished manuscript, Ontario Institute for Studies in Education, 1970). p. 4.

⁵⁷Hartford Courant, January 1, 1966. p. 7.

industrial average stood at 969.26, the highest in its history.⁵⁸

Several significant pieces of legislation were passed by the Connecticut Legislature in 1965. Among these were the teacher negotiation law, an act improving retirement allowances under certain conditions, and an act improving the proportioning of state aid to towns.⁵⁹ The year 1965 was the year Congress passed the Elementary and Secondary Education Act granting aid to deprived children, funds for library books, federal aid to stimulate innovation, and aid to state departments of education.⁶⁰

It may be purely coincidental that the events mentioned above and turnover in the superintendency reached a low point in 1965. These events may well have prompted superintendents to retain their positions for another year. If, as supposed, the decision of turnover is largely in the hands of Connecticut boards of education, these events may have influenced them to go along with their superintendent another year. Conceivably there might have been less pressure from a community fully employed, that expected tax relief by virtue of more state and federal aid. Such explanations are pure conjecture and the reasons for the uniqueness of the year 1965 can only be established by other comprehensive studies. As a milestone in the turnover of public school superintendents, some explanation of this phenomenon seemed necessary.

⁵⁸Ibid., January 2, 1966. p. 10B.

⁵⁹Powell, Theodore, ed. Laws Relating to Education, 1966. Supplement, (Hartford, Connecticut: Connecticut State Department of Education), 1966.

⁶⁰Elementary and Secondary Education Act of 1965.

Tables 2, 3, 4, 5, and 6 appearing in the following pages contain information of the community factors being tested in this study. Figure 2, page 49, is a map of Connecticut showing the turnover communities of the state.

The ten factors being tested represent a number of community concerns, including economic, political, and sociological considerations. The particular factors employed in this study were selected because quantitative measurement of them is possible by employing data available from public sources.

The experimental hypotheses are restated, data presented, and results described in the following paragraphs.

Hypothesis I: The turnover of public school superintendents is independent of the size of the community. This hypothesis was subjected to the chi square test. Data on population of communities were classified into four categories: under 5,000; 5,000-10,000; 10,000-29,999 and over 30,000. Because of the small number of towns with a population under 5,000 among the communities included in this study, this category was combined with the 5,000 to 10,000 category.

The formula for chi square is $\chi^2 = (o - e)^2 / e$, where χ^2 = chi square, o = observed turnover, and e = expected turnover as computed. The computation of expected frequencies is explained by Garrett.⁶¹ Observed and expected frequencies are set in contingency Table 7 on page 50.

⁶¹Henry E. Garrett. Elementary Statistics, (New York: David McKay Company, Inc., 1962). p. 149.

TABLE 2

No Turnover Cities and Towns

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPOSITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Cromwell	Under 10M	1.11	564	T. Meet.	91	Dem.	21.4		1.26	19,000
E. Lyme	10-30M	1.53	291	T. Meet.	91	Ind.	17.0		1.88	20,805
Ellington	Under 10M	1.40	213	T. Meet.	97	Ind.	15.7		2.02	18,500
Griswold	Under 10M	1.13	198	T. Meet.	34	Dem.	10.9		1.76	
Guilford	10-30M	1.47	252	T. Meet.	64	Rep.	25.2		1.72	22,500
Meriden	30M+	1.10	2,430	Mayor	62	Ind.	20.2	3.3	1.82	24,000
Montville	10-30M	1.78	307	T. Meet.	86	Dem.	12.5		1.86	22,320
New Britain	30M+	1.04	6,200	Mayor	64	Dem.	18.3	3.4	1.73	
Newington	10-30M	1.29	1,663	Manager	94	Dem.	24.8		1.65	20,000
N. Branford	10-30M	1.55	373	T. Meet.	93	Rep.	12.0		1.62	19,800
Norwalk	30M+	1.09	2,500	Mayor	93	Ind.	24.7	4.3	1.97	33,500
Plymouth	Under 10M	1.14	465	T. Meet.	83	Ind.	12.0		1.95	18,200
Portland	Under 10M	1.16	350	T. Meet.	97	Dem.	18.0		1.68	21,000
Shelton	10-30M	1.33	800	Mayor	92	Ind.	31.0		1.98	18,997

TABLE 2 (Continued)

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPOSITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Somers	Under 10M	1.46	183	T. Meet.	81	Ind.	12.4		2.03	19,000
Stonington	10-30M	1.16	395	T. Meet.	91	Ind.	23.3		2.01	19,200
Stratford	30M+	1.02	2,380	Manager	92	Ind.	32.6	3.8	2.14	25,000
Torrington	30M+	1.06	833	Mayor	82	Dem.	25.5	3.2	2.02	22,500
Vernon	10-30M	1.37	794	Mayor	89	Ind.	13.8	3.1	1.72	
Wallingford	30M+	1.17	820	Mayor	75	Ind.	16.3	3.1	1.75	23,860
MEAN		1.27	1,100		81.55		19.4	3.5	1.83	21,658

TABLE 3

One Turnover Cities and Towns

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPETITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Bloomfield	10-30M	1.38	700	Manager	89	Dem.	24.3		2.05	25,000
Bristol	30M+	1.20	2,100	Mayor	68	Ind.	19.1	3.4	1.72	27,000
Cheshire	10-30M	1.30	553	T. Meet.	67	Rep.	22.1		2.17	22,500
Danbury	30M+	1.24	1,140	Mayor	84	Ind.	25.6	3.4	2.05	30,000
Derby	10-30M	1.03	2,270	Mayor	55	Dem.	21.2	2.9	1.71	17,000
Fairfield	30M+	1.22	1,750	T. Meet.	94	Ind.	35.0	4.5	1.97	30,500
Hamden	30M+	1.17	1,450	Mayor	91	Ind.	29.5	4.0	2.16	25,000
Killingly	10-30M	1.24	293	Manager	72	Ind.	17.2		1.96	20,000
Ledyard	10-30M	1.96	260	T. Meet.	85	Rep.	13.7		1.93	19,900
Litchfield	Under 10M	1.29	143	T. Meet.	68	Rep.	17.0		1.84	20,000
Madison	Under 10M	2.39	291	T. Meet.	49	Rep.	17.0		1.57	20,000
Naugatuck	10-30M	1.16	1,350	Mayor	57	Ind.	35.9		1.41	21,000
New Canaan	10-30M	1.66	1,001	T. Meet.	50	Rep.	36.6	7.0	1.84	33,000
Plainfield	10-30M	1.19	248	T. Meet.	55	Dem.	16.2		1.46	18,500

TABLE 3 (Continued)

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPOSITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Plainville	10-30M	1.25	1,710	Manager	77	Dem.	19.6		1.87	20,000
Putnam	Under 10M	1.02	308	T. Meet.	58	Dem.	29.3		1.42	18,000
Rocky Hill	Under 10M	1.15	620	Manager	85	Dem.	22.5		1.78	22,500
Seymour	10-30M	1.17	810	T. Meet.	89	Ind.	15.7		1.78	18,000
Simsbury	10-30M	1.71	505	T. Meet.	61	Rep.	17.1		1.72	24,000
S. Windsor	10-30M	1.70	550	Manager	91	Dem.	19.6		2.06	22,000
Southington	10-30M	1.25	785	Manager	89	Ind.	16.2	3.2	2.17	25,000
Stafford	Under 10M	1.10	138	T. Meet.	62	Ind.	14.6		2.02	
Thomaston	Under 10M	1.23	590	T. Meet.	97	Rep.	15.4		1.78	21,130
Thompson	Under 10M	1.19	159	T. Meet.	69	Dem.	12.7		1.73	19,500
Trumbull	30M+	1.63	1,420	Manager	88	Ind.	23.8		2.06	26,200
Waterbury	30M+	1.02	3,880	Mayor	62	Dem.	24.7	3.2	2.36	24,000
W. Hartford	30M+	1.23	3,540	Manager	89	Rep.	33.6	5.7	2.02	34,500
W. Haven	30M+	1.23	4,750	Mayor	79	Ind.	20.3	3.1	1.82	25,000

TABLE 3 (Continued)

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPETITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Weston	Under 10M	1.96	380	T. Meet.	57	Rep.	33.0		1.79	30,500
Winchester	10-30M	1.07	310	T. Meet.	90	Ind.	19.2		1.58	18,500
Windsor Locks	10-30M	1.25	1,490	T. Meet.	60	Dem.	21.4		1.98	
Wolcott	10-30M	1.41	605	Manager	88	Dem.	11.0		1.62	19,400
MEAN		1.34	1,158		74.2		21.9	4.0	1.86	23,254

TABLE 4

TWO TURNOVER CITIES AND TOWNS

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPETITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Ansonia	10-30M	1.01	3,230	Mayor	67	Dem.	21.2	2.9	1.85	22,000
Avon	Under 10M	1.69	393	T. Meet.	71	Rep.	27.2		1.53	23,086
Berlin	10-30M	1.35	566	T. Meet.	97	Rep.	28.1		1.99	21,500
Bethel	10-30M	1.30	626	T. Meet.	86	Rep.	26.5		2.16	20,850
Bridgeport	30M+	.98	8,590	Mayor	69	Ind.	23.7	3.6	2.10	27,000
Brookfield	Under 10M	2.53	425	T. Meet.	62	Rep.	16.9		1.92	
Brooklyn	Under 10M	1.57	180	T. Meet.	84	Dem.	12.7		1.80	
Coventry	Under 10M	1.29	212	T. Meet.	97	Rep.	13.0		1.85	17,000
Darien	10-30M	1.22	1,500	T. Meet.	35	Rep.	41.1	7.1	2.34	32,500
E. Hampton	Under 10M	1.39	209	T. Meet.	95	Rep.	14.1		1.70	17,500
E. Hartford	30M+	1.21	2,930	Mayor	64	Dem.	32.6	3.3	2.40	
Enfield	30M+	1.35	1,245	Manager	59	Dem.	11.5	2.9	1.95	25,000
Farmington	10-30M	1.28	480	Manager	85	Rep.	25.8		1.93	23,500

TABLE 4 (Continued)

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPOSITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Glastonbury	10-30M	1.35	366	Manager	86	Rep.	21.5		1.76	23,000
Granby	Under 10M	1.17	142	T. Meet.	75	Rep.	14.7		1.35	20,000
Greenwich	30M+	1.21	1,279	T. Meet.	50	Rep.	65.1	6.3	2.00	31,000
Groton	30M+	1.33	1,100	Manager	92	Ind.	15.6	3.2	1.78	
Manchester	30M+	1.13	1,725	Manager	96	Rep.	23.6	3.7	2.19	23,650
Mansfield	10-30M	1.43	479	T. Meet.	96	Dem.	14.2		1.66	21,000
Middletown	30M+	.97	715	Mayor	73	Dem.	30.7	3.2	1.87	
Milford	30M+	1.19	2,099	Mayor	94	Ind.	23.7	3.2	1.93	
Monroe	10-30M	1.62	393	Manager	81	Ind.	25.5		1.56	20,000
New London	30M+	.93	5,100	Manager	72	Ind.	27.9	3.2	2.56	
North Haven	10-30M	1.47	1,240	T. Meet.	80	Rep.	25.3		2.49	23,000
Norwich	30M+	1.09	1,430	Manager	69	Ind.	15.5	3.1	2.13	20,000
Old Lyme	Under 10M	1.21	145	T. Meet.	63	Rep.	21.3		1.82	
Old Saybrook	Under 10M	1.78	528	T. Meet.	67	Rep.	29.3		1.67	22,000

TABLE 4 (Continued)

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPETITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Stamford	30M+	1.20	2,850	Mayor	89	Dem.	34.8	4.6	1.87	34,000
Westport	30M+	1.51	1,570	T. Meet.	69	Rep.	27.0	6.3	2.01	32,500
Wethersfield	10-30M	1.33	2,020	Manager	95	Rep.	27.3	4.4	2.06	27,000
Windsor	10-30M	1.21	797	Manager	83	Dem.	21.8		1.92	22,500
MEAN		1.33	1,438		77.4		24.4	4.1	1.94	23,895

TABLE 5
THREE TURNOVER CITIES AND TOWNS

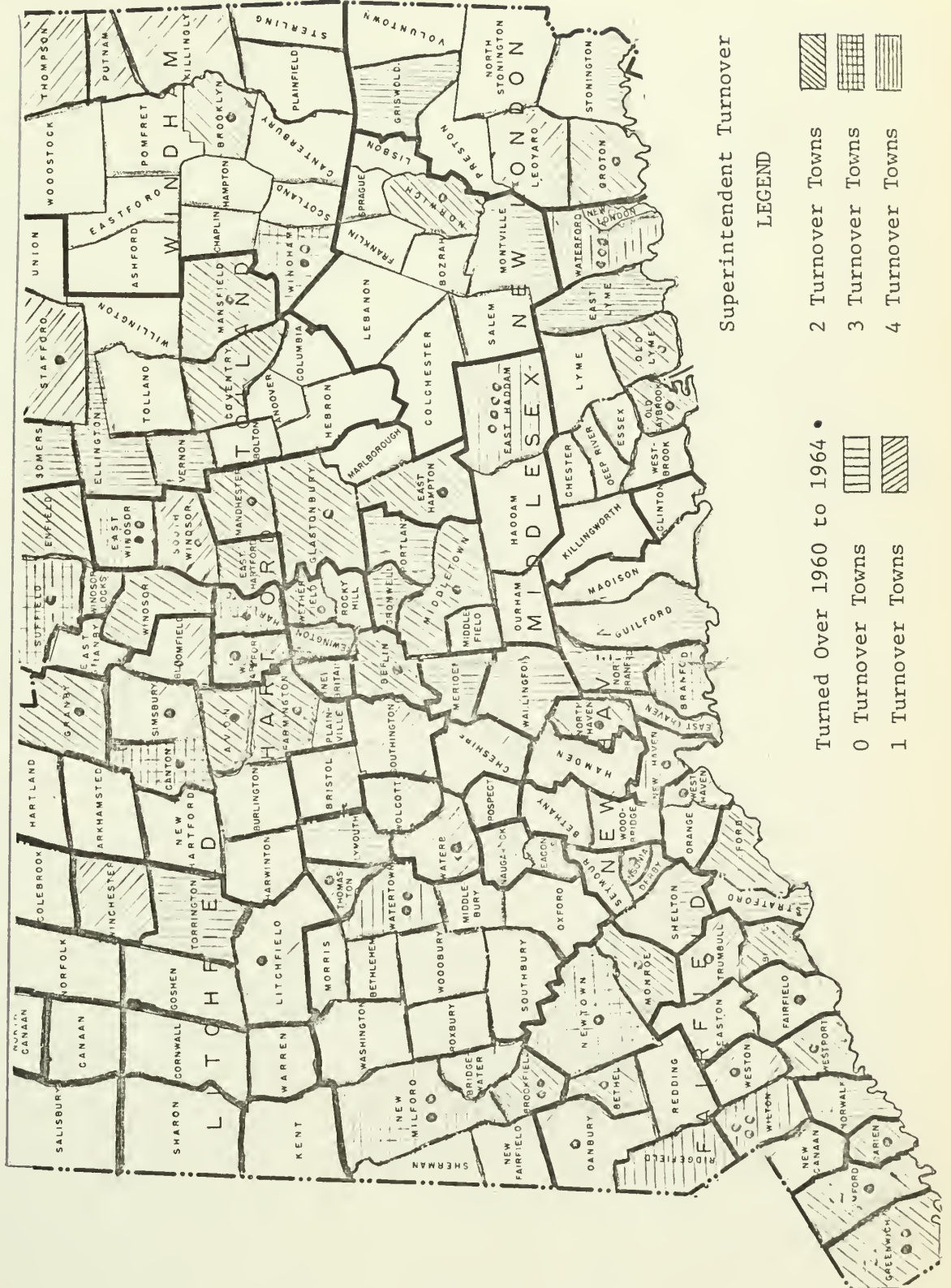
TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPOSITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
Branford	10-30M	1.23	875	T. Meet.	96	Ind.	20.1		1.85	23,500
Canton	Under 10M	1.30	236	T. Meet.	65	Rep.	18.1		1.70	20,000
E. Haven	10-30M	1.19	2,050	T. Meet.	89	Ind.	13.2		2.18	
E. Windsor	Under 10M	1.23	345	T. Meet.	91	Dem.	14.3		1.82	19,200
Hartford	30M+	1.01	8,800	Manager	52	Dem.	30.0	3.5	1.98	34,000
New Milford	10-30M	1.57	202	T. Meet.	85	Ind.	26.4		1.90	21,000
Newtown	10-30M	1.27	240	T. Meet.	71	Rep.	35.8		1.74	21,800
Suffield	Under 10M	1.24	195	T. Meet.	79	Rep.	17.7		2.11	22,000
Windham	10-30M	1.08	660	T. Meet.	76	Ind.	19.2	3.1	1.80	24,045
MEAN		1.23	1,511		78		22.8	3.3	1.70	23,193

TABLE 6

FOUR TURNOVER CITIES AND TOWNS

TOWN	POPULATION	POPULATION GROWTH	POPULATION DENSITY	TYPE GOVERNMENT	PARTY COMPETITION	MAJORITY PARTY OR NON-PARTY	PER PUPIL VALUATION	PER CAPITA INCOME	INCREASED COST/PUPIL	SUPERINTENDENT SALARY LEVEL
E. Haddam	Under 10M	1.24	79	T. Meet.	89	Rep.	19.3		1.73	17,200
New Haven	30M+	.92	6,200	Mayor	54	Ind.	27.6	3.1	2.52	
Ridgefield	10-30M	2.04	480	T. Meet.	60	Rep.	18.1		1.45	
Waterford	10-30M	1.17	475	T. Meet.	96	Rep.	19.6		1.86	20,082
Watertown	10-30M	1.21	600	Manager	94	Ind.	16.6		1.76	21,000
Wilton	10-30M	1.95	500	T. Meet.	48	Rep.	25.2		1.81	32,500
MEAN		1.42	1,456		74		21.0	3.1	1.86	22,708

FIGURE 2



Turned Over 1960 to 1964 •

Superintendent Turnover

LEGEND



2 Turnover Towns

3 Turnover Towns

4 Turnover Towns

0 Turnover Towns

1 Turnover Towns

TABLE 7
Size of Community vs. Turnover

Period		Under 10M	10-30M	Over 30M
1960-1964	o	19	28	18
	e	17	31	17
1965-1969	o	18	42	20
	e	20	39	21

$$\chi^2 = (19-17)^2 / 17 + (28-31)^2 / 31 + (18-17)^2 / 17 + (18-20)^2 / 20 \\ + (42-39)^2 / 39 + (20-21)^2 / 21$$

$$\chi^2 = 1.06$$

This value of 1.06 for chi square is not significant at the .01 level, where a value of 9.21 or greater is required with two degrees of freedom. Neither is it significant at the .05 level or even at the .10 level.⁶² It is significant at the .25 level. Because of the small value of chi square, the experimental hypothesis does not hold as tested by these data. The conclusion made is that there is very little relationship between the size of the community and turnover of public school superintendents.

Hypothesis II: The turnover of public school superintendents in Connecticut is independent of growth of communities of the state during the sixties. This hypothesis was subjected to the chi square

⁶²Murray R. Spiegel. Theory and Problems of Statistics. (New York: McGraw-Hill Book Company, 1961). p. 345.

test. Data associated with population growth were classified according to the plan indicated in the description of data presentation of the previous chapter. The mean and standard deviation of population growth data was computed. The mean of the data was 1.34 and the standard deviation .26. On the basis of this standard deviation, three categories were established: .9-1.08, 1.09-1.60, and 1.61 plus. Data employed in the chi square computation appear in contingency Table 8 as follows:

TABLE 8

Population Growth vs. Turnover

Period		.9-1.08	1.09-1.60	1.61+
1960-1964	o	8	45	12
	e	8	48	9
1965-1969	o	10	62	8
	e	10	58	12

$$\chi^2 = (8-8)^2 / 8 + (45-48)^2 / 48 + (12-9)^2 / 9 + (10-10)^2 / 10 + (62-58)^2 / 58 + (8-12)^2 / 12$$

$$\chi^2 = 2.85$$

The value 2.85 for chi square with two degrees of freedom is not significant at the .01 level, where a value of 9.21 is necessary or at the .05 level where a value of 5.99 is needed to establish significance. It is significant at the .10 level.⁶³ Thus, the experimental

⁶³Ibid.

hypothesis relative to population growth must be rejected at the .05 and accepted at the .10 level. There does appear to be a trend in relationship which would become more significant if larger growth variances or more levels of turnover change were available.

Hypothesis III: The turnover of public school superintendents in Connecticut is independent of the density of population. This hypothesis was subjected to the chi square test. Two categories of data were established per the description of data plan. According to median of density data, the two categories were set as follows: 0-709 and 710 plus. Data on population density and turnover appear in contingency Table 9 and computations are as follows:

TABLE 9

Population Density vs. Turnover

Period		0-709	710+
1960-1964	o	42	23
	e	37	28
1965-1969	o	41	39
	e	45	35

$$\chi^2 = (42-37)^2 / 37 + (23-28)^2 / 28 + (41-45)^2 / 45 + (39-35)^2 / 35$$

$$\chi^2 = .68 + .89 + .36 + .46$$

$$\chi^2 = 2.39$$

The value of 2.39 for chi square is not significant at the .01 or .05 levels. It is significant at the .10 level.⁶⁴ The experimental

⁶⁴Ibid.

hypothesis cannot be accepted at this relatively uncritical level. Under other conditions a relationship might be established. The level of significance suggests a trend that might be confirmed with wider density variances or more levels of turnover change.

Hypothesis IV: The turnover of public school superintendents in Connecticut is independent of the type of government of the community. Subjected to the chi square test the validity of this hypothesis was determined. Data related to type of local government were classified according to the three major types found in cities and towns in Connecticut: council-manager, mayor-council, and town meeting. The data associated with type of government appear in contingency Table 10 as follows:

TABLE 10

Type of Government vs. Turnover

Period		Manager	Town Meeting	Mayor
1960-1964	o	14	44	7
	e	16	39	10
1965-1969	o	21	44	15
	e	19	49	12

$$\chi^2 = (14-16)^2 / 16 + (44-39)^2 / 39 + (7-10)^2 / 10 + (21-19)^2 / 19 + (44-49)^2 / 49 + (15-12)^2 / 12$$

$$\chi^2 = 3.26$$

The value of chi square of 3.26 with two degrees of freedom is not significant at the .01, .05, or .10 level. It is significant at the

.25 level.⁶⁵ Thus, the experimental hypothesis is held to be untrue and we conclude that the relationship that the type of government and the turnover of superintendents is negligible.

Hypothesis V: The turnover of public school superintendents in Connecticut is independent of competition between major political parties. This hypothesis was subjective to chi square test. According to the plan of the data description set forth in the previous chapter, levels of competition were categorized as follows: 0-65, 66-87, 88+. Party competition and turnover data appear in contingency Table 11. This table and computation of chi square follow.

TABLE 11
Party Competition vs. Turnover

Period		0-65	66-87	88+
1960-1964	o	19	22	24
	e	18	24	23
1965-1969	o	22	32	26
	e	23	30	27

$$\chi^2 = (19-18)^2 / 18 + (22-24)^2 / 24 + (24-23)^2 / 23 + (22-23)^2 / 23 \\ + (32-30)^2 / 30 + (26-27)^2 / 27$$

$$\chi^2 = .50$$

The values, .50 with two degrees of freedom is not significant at the .01, .05, .10, or .25 levels.⁶⁶ The experimental hypothesis,

⁶⁵Ibid.

⁶⁶Ibid.

thus, is disproven. Apparently party competition is not a factor related to the turnover of public school superintendents.

Hypothesis VI: The turnover of public school superintendents in Connecticut is independent of political party affiliation or non-affiliation with a political party. The chi square test was applied to this hypothesis. The three categories established were: Democrat, Republican, and independent. Data on party affiliation and non-party affiliation appear in contingency Table 12. This table and the chi square computations follow.

TABLE 12

Party Affiliation or Non-Affiliation vs. Turnover

Period		Democrats	Republicans	Independents
1960-1964	o	11	37	17
	e	15	30	20
	o	22	31	27
	e	18	38	24

$$\chi^2 = (11-15)^2 / 15 + (37-30)^2 / 30 + (17-20)^2 / 20 + (22-18)^2 / 18 \\ + (31-38)^2 / 38 + (27-24)^2 / 24$$

$$\chi^2 = 5.70$$

This value of chi square of 5.70 with two degrees of freedom is not significant at the .01 level nor the .05 level. It is significant at the .10 level.⁶⁷ The experimental hypothesis does not hold at the higher levels of significance. Thus, it is concluded that party affiliation or non-party affiliation has little relationship to the

⁶⁷Ibid.

turnover of public school superintendents in Connecticut. There is an indicated statistical relationship that might become significant were wider party affiliation variances or more levels of turnover change available.

Hypothesis VII: The turnover of public school superintendents in Connecticut is independent of the wealth of the community based on value of taxable property per pupil enrolled in the public schools. The chi square test was applied to this hypothesis. In comparing the data on turnover, the data of the two periods representing the early and late years of the sixties were categorized according to the plan described in the description of data in the previous chapter. The mean per pupil valuation was twenty-two thousand dollars and the standard deviation 8.4 thousand. Categories thus were established at 1-13.5M, 13.6-30.4M, and 30.5M+. Because of the small number of turnovers in the lowest classification group, 1.0-13.5, it was combined with the 13.6-30.4M category. The data set in contingency Table 13 and chi square computations as follows:

TABLE 13

Per Pupil Valuation vs. Turnover

Period		1.0-13.5M	13.6-30.4M	30.5M+
1960-1964	o	2	54	9
	e	3	54	8
1965-1969	o	9	62	9
	e	10	60	10

$$\chi^2 = (56-57)^2 / 57 + (9-8)^2 / 8 + (71-70)^2 / 70 + (9-10)^2 / 10$$

$$\chi^2 = .26$$

The value .26 for chi square with one degree of freedom is not significant at any critical level.⁶⁸ The experimental hypothesis thus is disproven. It is concluded that per pupil valuation is not a factor related to the turnover problem.

Hypothesis VIII: The turnover of public school superintendents in Connecticut is independent of per capita income of people making up the community of the school district. Data on thirty-five of the larger towns in Connecticut were available. These data were not sufficient to test hypothesis VIII and it is omitted from further consideration in this study.

Hypothesis IX: The turnover of public school superintendents in Connecticut is independent of increases in per pupil expenditures for education during the sixties. This hypothesis was subjected to the chi square test. The cost per pupil in towns comprising this study in 1959 were compared with those of 1969. An increase-cost ratio was computed by dividing the 1969 costs per pupil by 1959 costs. According to the description of data plan of the previous chapter, the mean and standard deviation of these cost ratios was computed. The mean per pupil cost increase ratio was 1.90 and the standard deviation .23. Three categories based on the standard deviation were thus established as follows: 1-1.66, 1.67-2.12, and 2.13+. Data on turnover and per pupil costs are set in contingency Table 14. This table and computations follow.

⁶⁸Ibid.

TABLE 14

Per Pupil Costs vs. Turnover

Period		1.0-1.66	1.67-2.12	2.13+
1960-1964	o	6	50	9
	e	8	47	10
1965-1969	o	12	52	16
	e	10	57	13

$$\chi^2 = (6-8)^2 / 8 + (50-47)^2 / 47 + (9-10)^2 / 10 + (12-10)^2 / 10 + (52-57)^2 / 57 + (16-13)^2 / 13$$

$$\chi^2 = 2.32$$

The value of 2.32 for chi square is not significant at any critical level.⁶⁹ Thus the experimental hypothesis is disproven and the null hypothesis holds. It is concluded that per pupil cost increase is not a factor in the turnover of public school superintendents in Connecticut.

Hypothesis X: The turnover of public school superintendents in Connecticut is independent of salaries paid superintendents in the various cities and towns. This hypothesis was subjected to the chi square test. Data were classified according to the plan set forth in the description of data in the previous chapter. The computed mean and standard deviation of the salaries of superintendents in the state in 1969-1970 was 22.8 and 4.7 thousand dollars respectively.⁷⁰ Based on the mean and standard deviation three categories of salary were established:

⁶⁹Ibid.

⁷⁰Connecticut Education Association, Administrative Salaries, 1969-1970. p. 1.

15-18.1M, 18.2-27.5M, and 27.6M+. Data on turnover and superintendents salaries is set in contingency Table 15. Categories two and three were combined in computing chi square due to the small number of turnovers recorded in the cells under category three. It was necessary to apply Yate's correction as the numbers in some of the cells were small.⁷¹

Table 15 and the computations of chi square follow.

TABLE 15
Superintendents Salaries vs. Turnover

Period		15.0-18.1M	18.2-27.5M	27.6M+
1960-1964	o	11	33	8
	e	8	38	6
1965-1969	o	7	52	4
	e	10	47	6

$$\chi^2 = [(11-8) - .5]^2 / 8 + [(41-44) - .5]^2 / 44 + [(7-10) - .5]^2 / 10 + [(56-53) - .5]^2 / 53$$

$$\chi^2 = 1.65$$

The value for chi square with one degree of freedom is not significant at the .01 level, .05 level, or .10 level. It is significant at the .25 level.⁷² On the basis of the small value of chi square, the experimental hypothesis is disproven. It is concluded that superintendents' salaries are a negligible factor in the turnover problem.

Interpretation

Twenty cities and towns included in this study did not experience

⁷¹Henry E. Garrett. Statistics. p. 145.

⁷²Murray R. Spiegel. Statistics. p. 345.

changes in the superintendency in the ten years comprising this study. Examination of the data in Table 2 related to these towns reveals that the population growth rates were low compared to all other groupings of communities except those that experienced four turnovers of superintendents. The more stable communities are widely dispersed around the state. Several of these stable towns and cities are clustered in the New Haven area east and north of the city.

A look at the very unstable towns and cities, those that experienced four turnovers, shows that they were widely dispersed across the state. These were no high turnover towns and cities in the northern part of the state.

Further examination of the data related to the classification of towns in respect to turnover shows a high concentration of two and three turnover towns around the city of Hartford. Otherwise the two and three turnover towns are widely dispersed about the state.

No significance can be attached to the size of community per the results indicated earlier. However, it was noted in this study that the small towns not included in this study had high turnover rates in the superintendency. Some significance might be established to the turnover in the large cities in Connecticut. According to the statistics included in Tables 2, 3, 4, 5, and 6 of this paper, these cities experienced a total of twelve turnovers in the ten year period comprising this study.

The distribution of turnover towns can be seen from the map on page 49 of this paper. A concentration of the towns included in this study is noted around the population centers: Bridgeport, New Haven, Hartford, and Stamford. The highest concentration of turnover was around Hartford.

Population growth was not shown to be a factor in the turnover problem. However, it was noted earlier that the growth ratio of the no-turnover towns was lower than for any other group except that of the large cities. The large cities had a high turnover rate and a very low growth rate as shown in the tables on turnover of towns.

No significance can be attached to type of government as proven by applying the chi square test. It is perhaps worthy of noting, however, that in the very large cities where turnover was observed to be high, the mayor type government predominates. The large number of towns in which the town meeting predominates gives a distortion to the data that makes it difficult to make a statistical assessment of the part played by type of government in the turnover problem.

Party competition was shown not to be related to turnover of superintendents. An interesting observation related to party competition in respect to the no-turnover towns was noted. Party competition for this group of towns was higher than for all other groupings with a mean of 81.55 per the ratio based on voting behavior and party affiliation.

Party affiliation or non-affiliation with a major political party is not a factor in the turnover problem. The value of chi square secured in testing the data on party affiliation approached the .05 level of significance. Whatever relationship that might exist is inconclusive. Party affiliation itself apparently is not a discrete factor but is dependent upon underlying socio-economic factors. Since political parties have an importance in the make-up of boards of education in Connecticut different from some other states, this finding is surprising.

The per pupil valuation of towns was proven to be a negligible factor in the turnover problem. Interestingly, there is a wide variation

in per pupil valuation in the state from a low of 11.0 thousand dollars in Wolcott to a high of 65.1 thousand dollars in Greenwich. The mean per pupil valuation for the no-turnover towns was the lowest for any grouping of turnover towns.

The per capita income factor could not be tested because of the unavailability of data. Available data concerned only thirty-five of the larger communities of the state. Analysis of data available shows that the high turnover towns and low per capita income might be inversely related. The highest per capita income of any town in the two and three turnover categories was 3.5 thousand dollars. The range of incomes for the thirty-five towns was from 2.9 to 7.1 thousand dollars.

No relationship was established between superintendents' salaries and turnover per this section of the paper. Data from all towns were not available. The range of salaries was from 17,000 dollars in Coventry and Derby to 34,000 dollars in Hartford and Stamford. High salaries could relate to the complexity of operation of the large city schools. These cities experienced the highest turnover of any grouping of towns noted in this study.

C H A P T E R V

SUMMARY AND CONCLUSIONS

Recapitulation

In the first chapter of this paper the basis for the study was established. The problem of turnover in the superintendency in Connecticut has been a matter of conjecture for a number of years. Thus, it was stated that this study is important to the clarification of the turnover problem. Also, it was pointed out that if the rate of turnover is an indication of the rejection of the viable role of the public school superintendent, it is important that this indication be understood by members of the profession.

In establishing the basis of this study, it was noted that the superintendency is becoming an increasingly difficult job, not only in Connecticut, but in other parts of the country as well. The concern of the Commissioner of Education of Connecticut, Dr. William J. Sanders, was noted and parts of his letter to the author of this paper expressing his views on the turnover problems quoted.⁷³

The second chapter reviewed the literature related to this study. Background material on studies of the superintendency was presented and studies relating to the various factors being tested in this study reviewed.

⁷³Letter to Wayne S. Porter from William J. Sanders.

The method of study and description of data were set forth in Chapter III. The method of study is the analytical research type employing archival data. The terms used in this study were described and methods of classification of data explained.

The findings of this study are reported in Chapter IV. Data is presented in table, graphic, and illustrative form. Statistical computations and interpretations make up the major content of Chapter IV.

This final chapter will present an overview of the study including recommendations, conclusions, and needs for further study.

Conclusions

There are no standards of comparing turnover in the public school superintendency or for that matter in any other profession. A significant increase in the rate of turnover in the last five years of the sixties as compared to the first five years of the decade was revealed by this study. In 1969 the turnover rate established for ninety-eight cities and towns comprising this study was 22.4 percent. This is an increase of 8.1 percent over the rate of turnover of 1960. In the last three years of the sixties, there was a turnover of 59.2 percent in the ninety-eight school districts comprising this study. This represents an annual rate of almost twenty percent and, if this rate continues over a period of years, an average tenure length of five years for superintendents in Connecticut is indicated. As indicated previously in this paper, when superintendencies turn over, school systems change

one way or another. Whether turnover affects change toward desirable ends is a matter for investigation by other researchers.

The telephone survey conducted in respect to retirement revealed a very low retirement rate. Only one of three superintendents who leave their positions in Connecticut retires. An annual retirement rate of less than five percent is indicated. Retirement does not account for the upward trend of turnover in the late years of the sixties.

Party affiliation is not a significant factor in the turnover of public school superintendents in Connecticut. Earlier testing of this hypothesis using only the two major political parties did give positive results. Because of the importance of independent voters in determining election results this variable was broadened to include non-affiliated voters.

The other factors tested were found unrelated to the turnover problem. The increases in population do not seem to have influenced turnover, nor can the concentration of population be associated with the mobility of superintendents. Although population density is not related to turnover, the short tenure of superintendents in New Haven and Hartford may indicate special problems in these cities which limit the length of time superintendents remain on the job.

Surprisingly, no relationship was found between the increased costs of education and turnover despite the fact that educational costs per pupil have doubled in many communities of the state of Connecticut

since 1959.⁷⁶ A wide difference in the amount paid superintendents was noted in this study.⁷⁷ In spite of considerable movement of superintendents in the state from one community to another this relationship could not be related to salary levels.

Need for Further Study

Further studies are needed to determine the influence of socioeconomic factors on turnover. Such studies might concentrate on the high turnover communities. It appears that special studies of individual communities are needed to determine other factors related to the fluidity in the superintendency in Connecticut.

This study has established the fact that the length of service of superintendents in the state in recent years is shorter than that in the nation as a whole, five years compared to 7.5 as established by Hickcox and Snow.⁷⁸ Studies of mobility and length of service of executives in business and industry would be helpful as a means of comparison. There are also many other leadership positions in education. It would be interesting to find if there have been changes in mobility patterns in these related occupations.

While studying the ninety-eight towns comprising this study,

⁷⁶Comparison of costs per Connecticut Public Expenditure Council data for 1959 and 1969.

⁷⁷Connecticut Education Association, Administrative Salaries, 1969-1970.

⁷⁸E. S. Hickcox and R. J. Snow. Profile of the Superintendent, p. 5.

high rates of turnover were noted in the school districts composed of multiple towns and unified districts. If the turnover in these districts were considered, a much higher rate of turnover for the state of Connecticut as a whole in the superintendency is indicated. Such a study of these other districts should be made.

The fact that the year 1965 was the low turnover year of superintendents in the state of Connecticut during the sixties establishes a uniqueness worthy of further investigation in other studies in education.

APPENDIX A

Computation of Trend Lines

The turnover of superintendents was determined by comparing the listings of names of superintendents in the annual Connecticut Educational Directory. The turnover was as follows:

<u>Year</u>	<u>Number</u>
1960	14
1961	13
1962	12
1963	9
1964	17
1965	8
1966	14
1967	18
1968	17
1969	22

Turnover trend lines for this data were computed by substituting consecutive values from one to five in the formula $y = ax + b$ and $xy = ax^2 + bx$ for x , and the number of turnovers each year for y . Summation of the resulting pairs of equations, five representing the first five years of the decade and five the second results in sets of simultaneous equations which can be solved for a and b . Values substituted into the general equation $y = ax + b$ give the trend line equations. Computations appear as follows:

Computation of trend line 1960-1964:

When $x = 1$ and $y = 14$,	$14 = a + b$	$14 = a + b$
When $x = 2$ and $y = 13$,	$13 = 2a + b$	$26 = 4a + 2b$
When $x = 3$ and $y = 12$,	$12 = 3a + b$	$36 = 9a + 3b$
When $x = 4$ and $y = 9$,	$9 = 4a + b$	$36 = 16a + 4b$

$$\text{When } x = 5 \text{ and } y = 17, \quad 17 = 5a + b \quad 85 = 25a + 5b$$

Combining by addition:

$$64 = 15a + 5b, \quad 197 = 55a + 15b$$

$$\text{By subtraction: } 45a + 15b = 192$$

$$55a + 15b = 197$$

$$\begin{array}{r} - 10a \quad \quad = - 5 \\ \hline \end{array}$$

$$a \quad \quad = .5$$

Substituting $a = .5$ in equation $64 = 15a + 5b$

$$b = 11.3$$

Substituting these values in equation, $y = ax + b$

The equation of 1960-1964 trend line: $y = .5x + 11.3$

Computation of trend line 1965-1969:

$$\text{When } x = 1 \text{ and } y = 8, \quad 8 = a + b \quad 8 = a + b$$

$$\text{When } x = 2 \text{ and } y = 14, \quad 14 = 2a + b \quad 28 = 4a + 2b$$

$$\text{When } x = 3 \text{ and } y = 18, \quad 18 = 3a + b \quad 54 = 9a + 3b$$

$$\text{When } x = 4 \text{ and } y = 17, \quad 17 = 4a + b \quad 68 = 16a + 4b$$

$$\text{When } x = 5 \text{ and } y = 22, \quad 22 = 5a + b \quad 110 = 55a + 15b$$

Combining by addition:

$$79 = 15a + 5b, \quad 268 = 55a + 15b$$

By subtraction:

$$55a + 15b = 268$$

$$45a + 15b = 237$$

$$\begin{array}{r} 10a \quad \quad = 31 \\ \hline \end{array}$$

$$a \quad \quad = 3.1$$

Substituting $a = 3.1$ in equation $79 = 15a + 5b$

$$b = 6.5$$

Substituting values for a and b in $y = ax + b$

The equation of 1965-1969 trend line: $y = 3.1x + 6.5$

LITERATURE CITED

- Adrian, Charles and Press, Charles. Governing Urban America. New York: McGraw-Hill Book Company, 1968.
- Allen, James E., Jr. Educational Priorities and the Handicap of Local Financing. Address to special training institute of Problems of School Segregation at Teachers College, Columbia, University, 1968.
- American Association of School Administrators, Profile of the Superintendent. Washington, D.C., 1960.
- American Association of School Administrators and Research Division of the National Education Association. Profile of the Superintendent. Washington, D.C., 1968.
- Bailey, S. K., et al. Schoolmen and Politics. Syracuse: Syracuse University Press, 1962.
- Bair, F. H. The Social Understandings of the Superintendent of Schools. Teachers College Contributions to Education, No. 625. New York: Bureau of Publications, Teachers, College, Columbia University, 1934.
- Barstow, R. "Two Decades of Achievement." Connecticut Teacher. XXIV, Number 4. January, 1967. p. 22.
- Bork, Daniel. "The Marvelous Potential of Professional Negotiations." NEA Journal, Volume 56, Number 8, (November, 1967). pp. 28-29.
- Boyden, Sidney. "The Reason Top Executives Change Jobs." Nations Business. February, 1968. pp. 84-88.
- Burkhead, Jessie. Public School Finance, Economics and Politics. Syracuse: Syracuse University Press, 1964.
- Burbank, Natt B. The Superintendent of Schools. Danville, Illinois: Interstate Printers, 1968.
- Campbell, A. K. "Inequalities in School Financing." Educational Digest, Volume 34, (April, 1969), pp. 10-13.
- Campbell, Ronald F.; Corbally, John E., Jr.; and Ramseyer, John A. Introduction to Educational Administration. Boston: Allyn and Bacon, Inc., 1958.

- Carlisle, William T. Turnover and Demand by Public School Administration. CPA Digest Series. New York: Teachers College, Columbia University, 1953.
- Carlson, R. O. "The Public School and Its Clients." Environmental Constraints and Organizational Consequences. The Sixty-Third Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1964.
- Carver, Humphrey. Cities in the Suburbs. Toronto: University of Toronto Press, 1965.
- Coleman, J. S. "The Setting for Controversy." Politics in the Metropolis. Edited by T. R. Dye and B. W. Hawkins. Columbus, Ohio: Charles E. Merrill Books, Inc., 1967.
- Connecticut Education Association. Educational Administrative Salaries 1969-1970. Hartford, Connecticut: 1970.
- Connecticut Public Expenditure Council. Local Public School Expenses and State Aid in Connecticut, 1963-1964. Hartford, Connecticut: 1964.
- Connecticut Public Expenditure Council. Local Public School Expenses and State Aid in Connecticut, 1968-1969. Hartford, Connecticut: 1970.
- Cronin, J. H. "School Board and Principals Before and After Negotiations." Phi Delta Kappan, Volume 49, (November, 1969). pp. 123-127.
- Cronin, J. H. "School Finance in the Seventies: The Prospect for Reform." Phi Delta Kappan, Volume 51, (November, 1969). pp. 117-122.
- Crotty, W. J.; Freeman, D. M. and Gatlin, D. S., eds. Political Parties and Political Behavior. "The Concept of Party: An Analytical Model." by W. N. Chambers. Boston: Allyn and Bacon, Inc., 1968.
- Dahl, Robert A. Who Governs? New Haven: Yale University Press, 1961.
- Dunbar, Ernest. "The Plot to Take Over the PTA." Look Magazine. September 7, 1965. p. 27.
- Dye, Thomas R. Politics, Economics, and Educational Outcomes in the States. Final Report. Athens, Georgia: University of Georgia Press, 1967.
- East, John P. Council-Manager Government: The Political Thought of Its Founder, Richard S. Childs. Chapel Hill, North Carolina: University of North Carolina Press, 1965.

- Epstein, Benjamin. Professional Negotiations Phamphlet Number One. Publication of the National Association of Secondary School Principals. Washington, D.C.: 1969.
- Evans, Seymour. "The Superintendent's Dilemma." American School Board Journal, Volume 155, (October, 1967). pp. 10-12.
- Fenton, John H. People and Parties in Politics. Glenview, Illinois: Scott Foresman and Company, 1966.
- Garrett, Henry E. Elementary Statistics. New York: David McKay Company, Inc., 1962.
- Goldhammer, Keith, et al. Issues and Problems in Contemporary Educational Administration. Eugene, Oregon: The Center for the Advanced Study of Educational Administration, University of Oregon, 1967.
- Gottman, Jean. Megalopolis: The Urbanized Northeastern Seaboard of the United States. New York: The Twentieth Century Fund, 1961.
- Gross, Neal. Who Runs Our Schools? New York: John Wiley Company, 1958.
- Hair, Donald. Tenure and Turnover of Wyoming Public School Superintendents. Laramie: Curriculum and Research Center, College of Education, University of Wyoming, 1965.
- Herink, Reinhard. Statistics. Monarch Notes and Study Guides. New York: Monarch Press, Inc., 1965.
- Hickcox, E. S. and Snow, R. J. Profile of the Superintendent of Schools. Unpublished manuscript, Ontario Institute for Studies in Education, 1970.
- Horton, Paul B. and Leslie, Gerald R. The Sociology of Social Problems. New York: Appleton-Century-Crofts, 1965.
- Hunter, Floyd. Community Power Structure: A Study of Decision-makers. Chapel Hill, North Carolina: University of North Carolina Press, 1953.
- Hurd, Ellery H., ed. Connecticut Educational Directory, 1969. Hartford, Connecticut: State Department of Education, 1969.
- Hurd, Ellery H., ed. Connecticut Educational Directory, 1970. Hartford, Connecticut: State Department of Education, 1970.
- Iannaccone, Laurence and Lutz, Frank W. Politics, Power and Policy: The Governing of Local School Districts. Columbus, Ohio: Charles E. Merrill Publishing Company, 1970.

- James, H. Thomas. "Our Itinerant School Masters." Administrators Notebook, Volume 3, Number 3, February, 1955. pp. 1-4.
- Kammerer, Gladys, et al. City Managers in Politics. Gainesville, Florida: University of Florida Press, 1962.
- Katz, Robert L. "Skills of Effective Administrators." Harvard Business Review, Volume 33, January-February, 1955. pp. 33-42.
- Kessler, John H. "Government Structures and Political Environment." Politics in the Metropolis. Edited by T. R. Dye and B. W. Hawkins. Columbus, Ohio: Charles E. Merrill Books, Inc., 1967.
- Kimbrough, Ralph B. Political Power and Educational Decision-making. Chicago: Rand McNally and Company, 1964.
- Lieberman, Myron. The Future of Public Education. Chicago: University of Chicago Press, 1965.
- Lipset, Seymour. Political Man, The Social Bases of Politics. Garden City, New York: Doubleday & Company, Inc., 1960.
- McCarty, Donald J. "How Community Power Structures Influence Administrative Tenure." American School Board Journal, Volume 148, May, 1964. pp. 11-13.
- McCarty, D. J. and Ramsey, C. E. A Study of Community Factors Relating to the Turnover of Superintendents - Community Power, School Board Structure, and the Role of the Chief School Administrator. Unpublished doctorate dissertation, Cornell University, 1967.
- McCarty, D. J. and Ramsey, C. E. "Community Power, School Board Structure, and the Role of the Chief School Administrator." Educational Administration Quarterly, Volume IV, Number 2, 1968, pp. 19-33.
- McLure, William. "Major Issues in School Finance." Educational Administration Quarterly, Volume 5, Autumn, 1969. pp. 2-14.
- Mayer, Kurt. Class and Society. New York: Random House, 1967.
- Marburger, Carl L. School and Community, The Need for a New Relationship. Speech to American Educational Research Association Symposium, 1969.
- Martin, Roscoe C. Government and the Suburban School. Syracuse: Syracuse University Press, 1962.
- Masotti, Louis H. Education and Politics in Suburbia. Cleveland, Ohio: Press of Western Reserve University, 1967.

- Minat, David W. Educational Decision Making in Suburban Communities, Cooperative Research Project No. 2440, United States Office of Education, 1966.
- Mosier, Earl E. and Baker, John E. "Midwest Superintendents on the Move Typify the Hazards of School Administration, Medium Sized Districts Offer Greatest Security." The Nations Schools, January, 1951.
- Moynihan, Daniel P. "The Roots of the Negro Problem." Politics in the Metropolis. Edited by T. R. Dye and B. W. Hawkins. Columbus, Ohio: Charles E. Merrill Books, Inc., 1967.
- "National Education Association Research Bulletin," Volume 45, Number 3. Research Division NEA, 1967.
- "National Education Association Research Bulletin," Volume 48, Number 3. Research Division NEA, 1970. pp. 71-72.
- Powell, Theodore, ed. Laws Related to Education, 1964. Connecticut State Department of Education. Hartford: 1964.
- Powell, Theodore, ed. Laws Related to Education, 1966. Supplement. Connecticut State Department of Education. Hartford: 1966.
- Pullen, Thomas J. "Superintendents Authority Undermined." American School Board Journal, Volume 153. November, 1966. p. 60.
- Ramseyer, John A. et al. The School Community Development Monograph Series Number Two. Columbus, Ohio: Ohio State University, 1955.
- Sanders, William J. (letter to Wayne S. Porter dated March 19, 1970.)
- Schnore, Leo F. "The Socio-economic Status of Cities and Suburbs." American Sociological Review, Volume 28. February, 1963. pp. 76-85.
- Secretary of State. State of Connecticut Register and Manual. Hartford, Connecticut: 1967.
- Secretary of State. State of Connecticut Register and Manual. Hartford, Connecticut: 1970.
- "Six to Ten Years is Long Enough in One Place, Schoolmen Say." Nations Schools, Volume 76. November, 1965. p. 57.
- Snow, R. J. Community Resistance and Conflict Propensity as Sources for Constraints on the Local School Administrator. Eugene: Center for the Advanced Study of Educational Administration, University of Oregon, 1967.

- Spiegel, Murray R. Theory and Problems of Statistics. Schaum's Outline Series. New York: McGraw-Hill Book Company, 1961.
- State of Connecticut, Public Document No. 48, Taxation Document No. 335. Information Relative to the Assessment and Collection of Taxes, 1968. Hartford, Connecticut: 1969.
- Stinnett, T. M. Turmoil in Teaching. New York: The McMillan Company, 1968.
- Strauss, Anslem. Images of American City. Glencoe, New York: The Free Press of Glencoe, New York, 1961.
- "Surprises in the '70 Census." U.S. News and World Report, Volume 69, Number 9. August 31, 1970. p. 17.
- "The Expanding Metropolis." Fortune Editors. New York: Doubleday and Company, 1958.
- United States Department of Commerce. Statistical Abstract of the United States, National Data Book and Guide to Sources, 89th Edition. Washington, D.C.: U.S. Government Printing Office, 1968.
- United State Department of Health, Education and Welfare. Digest of Educational Statistics. Washington, D.C.: U.S. Government Printing Office, 1967.
- Walden, John C. "School Board Changes and Superintendent Turnover." Administrators Notebook, Volume XV, Number 5. January, 1967.
- Watson, Bernard C. "The Role of the Principal in Collective Bargaining." North Central Association Quarterly, Volume 42. Winter, 1968. pp. 233-243.
- Webb, Harold V. "The Public is Restless." American School Board Journal, Volume 155. May, 1968. p. 32.
- West, Allen M. "Professional Negotiations or Collective Bargaining." National Elementary Principal, Volume 42. February, 1962. pp. 20-25.
- Wildavsky, Aaron. Leadership in A Small Town. Englewood Cliffs, New Jersey: Bedminister Press, 1964.
- Wildman, Wesley A. "Implication of Teacher Bargaining for School Administrators." Phi Delta Kappan, Volume 46. December, 1964. pp. 152-158.
- Willbern, York. The Withering Away of the City. Tuscaloosa, Alabama: University of Alabama Press, 1964.

Wilson, James Q. "Manager Under Fire." Cases in State and Local Government. Edited by Richard T. Frost. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1961.

Woodhall, Maureen. "The Economics of Education." Review of Educational Research, Volume 37. October, 1967. pp. 387-388.

Woodring, Paul. "On Causes of Teacher Discontent." Connecticut Teacher, Volume 35, Number 3. December, 1967. pp. 5-11.

