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A COMPARATIVE STUDY OF ALTERNATE PLANS FOR PROVIDING

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OF THE PUBLIC SCHOOLS IN LOUISIANA

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DISSERTATION COMMITTEE

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CHAPTER I

INTRODUCTION

Background for the Study

The protection of public school physical property against loss by fire, windstorm, hail, and other hazards is a problem that confronts school boards throughout the state of Louisiana. School districts have an important financial interest in their buildings and contents. The investment in public school buildings and their operation and maintenance comprises in many Louisiana school districts the most important single economic enterprise.

School administrators and boards of education recognize that disastrous financial losses resulting from unforeseen property damage can be avoided by proper insurance coverage. It is essential that this coverage result from a well planned program to avoid unnecessary hardships.

The maintenance of a balanced property insurance program has long been a major administrative problem for many school officials. Evidence availabl. seems to indicate that all too often school insurance plans have evolved over a period of years without regard to the fact that what may have been a very good insurance program several years ago may easily be out of date today. Since expenditures for insurance are recurrent and non-instructional in nature, they should be subjected to close scrutiny. Adequate insurance protection should be secured as economically as possible.

The Association of School Business Officials of the United States and Canada has made or sponsored four nation-wide studies regarding local school board practices in insuring school district property and of the premium-loss ratios on school district property fire insurance. The first survey was completed in 1932 for the period of 1921-30, inclusive;[1] the second survey covered the period of 1931-37, inclusive;[2] the third survey covered the period of 1938-45, inclusive;[3] and the fourth study, in the form of a doctoral dissertation by Salmon at the University of Southern California, covered the period of 1946-1955, inclusive.[4] The four studies were largely in agreement that the

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[1]National Association of Public School Business Officials, Insurance Practices and Experiences of City School Districts of the United States and Canada, Bulletin No. 2 (Trenton, N. J.: Association of Public School Business Officials, 1932).

[2]National Association of Public School Business Officials, An Investigation of Insurance Practices in Various Lines Covering United States City Schools, a report prepared by the Association Research Committee on Insurance, Bulletin No. 9 (Pittsburgh: Association of Public School Business Officials, 1941).

[3]Association of School Business Officials, Insurance Committee Report on School Fire Losses, 1938-45 (Kalamazoo, Mich.: Association of School Business Officials, 1946).

[4]Paul B. Salmon, "Fire Insurance Principles and Practices in School Districts Employing Nationally Affiliated Business Officials" (unpublished Ed.D. dissertation, University of Southern California, 1957).

practices of the local school districts in insuring their property were poor and that the premium-loss ratio indicated that fire insurance rates were too high.

In a number of states, studies have been made of the school district property insurance practices of the local boards of education, including: Brent[1] (Oklahoma), Monger[2] (Oklahoma), Cory[3] (Florida), Creason[4] (Missouri), Cleveland[5] (South Dakota), Underwood[6] (Indiana), Stone[7] (Illinois), and Hadley[8] (West Virginia). These investigators

[1]Paul Leslie Brent, "The Practices of Oklahoma School Boards in the Insuring of School District Physical Property" (unpublished Ed.D. dissertation, University of Oklahoma, 1959).

[2]Doyle Lester Monger, "A Proposed State-Operated Property Insurance Plan for Oklahoma's Public Schools" (unpublished Ed.D. dissertation, Oklahoma State University, 1961).

[3]Paul Cory, "A Study of the Fire Insurance on Public School Buildings in Florida" (unpublished Ed.D. dissertation, Florida State University, 1962).

[4]Fredrick Joseph Creason, "Factors Which Affected the Premium-Loss Ratio of Fire and Extended Coverage Insurance on Missouri Public School Buildings and Contents" (unpublished Ed.D. dissertation, University of Missouri, 1963).

[5]Wayne Lewis Cleveland, "Fire Insurance Practices in South Dakota Independent School Districts: An Analysis and Possible Improvements" (unpublished Ed.D. dissertation, University of South Dakota, 1964).

[6]Wallace Richard Underwood, "The Development of an Insurance Handbook for Indiana Public Schools" (unpublished Ed.D. dissertation, Indiana University, 1966).

[7]Gordon Roy Stone, "An Inquiry into Illinois School District Insurance Coverages, Practices, and Experiences with Recommendations" (unpublished Ed.D. dissertation, University of Illinois, 1967).

[8]Harry Joseph Hadley, "A Study to Develop, Analyze and Evaluate a State Fire Insurance Plan for Public School Systems in West Virginia" (unpublished Ed.D. dissertation, West Virginia University, 1968).

concluded that schools were paying higher rates for fire insurance than were warranted by the losses sustained. They further concluded that state self-insurance plans had proved successful and had furnished adequate fire insurance coverage for school property for less cost than that provided by commercial companies.

Need for the Study

The State of Louisiana has an investment in excess of $797,111,098.93 for buildings and contents.[1] The necessity of protecting these assets against loss is self-evident. However, the problem of how this can best be done at the most economical cost has been an unsolved puzzle for many Louisiana school officials.

In the sense that education is a state function and all schools are the property and ultimately the responsibility of the state regardless of the taxing area used for their support, it would seem to be relevant to investigate ways on the state level by which insurance costs might be reduced. A study of this type would seem to be particularly appropriate for a state like Louisiana since its public school districts receive approximately 63.7 per cent[2] of its operating revenue from state sources and any advantages accruing through the reduction of insurance costs would be felt by all taxpayers of the entire state of Louisiana to a greater degree than in most states.

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[1] One Hundred Nineteenth Annual Report for the Session 1967-68, Bulletin No. 1109 (Baton Rouge, La.: State Department of Education of Louisiana, 1969), p. 10.

[2] National Education Association, Ranking of the States, 1967, Research Report 1967-R1 (Washington, D. C.: Research Division, National Education Association, 1967), p. 47.

In response to a letter written to the Louisiana State Department of Education, Mr. Normand H. Edwards, Director of Administration and Research, stated:

> As far as the writer knows there has been no analysis of the insurance programs of the various school boards and a determination to see if they are getting their money's worth. In fact information in this area is limited.[1]

Therefore, based upon these indications that a need existed, this study of the public school property insurance program in Louisiana was made.

Purposes of the Study

The purposes of this study were to examine the public school physical property insurance program in Louisiana and to investigate possible alternative programs for the improvement of the property insurance in Louisiana public school districts.

The Problem

This study was concerned with a comparative analysis of alternate plans of insurance coverage for the protection of physical property in the public school districts of Louisiana. More specifically, it was intended to (1) examine present cost, (2) identify criteria for satisfactory insurance programs, (3) develop alternate plans for providing insurance coverage based on these criteria, (4) compare the plans on basis of the criteria, and (5) draw conclusions and develop recommendations for improving physical property insurance programs for the public school districts of Louisiana.

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[1]Letter from Normand H. Edwards, dated July 19, 1968.

Delimitation of the Problem

This study was limited to the consideration of (1) the public school systems of Louisiana; (2) fire insurance and extended coverage on the buildings and content therein; and (3) state action which might reduce insurance costs.

Further, this study did not consider the philosophical aspects of the invasion of private enterprise by the establishment of a state-insurance plan.

Definition of Terms

For the purpose of this study terms were defined as follows:

Extended Coverage. An endorsement to the fire insurance policy which extends the coverage of the policy to include losses, with certain exceptions, due to windstorm, hail, explosion (except of steam boilers and pipes), riot and civil commotion, aircraft, vehicles, and smoke.

Hazard. A condition which may create or increase the probability of a loss due to a certain peril.

Insurable Interest. Insurable interest represents the amount that the insured would lose if a loss occurred and there were no insurance coverage. As a matter of principle and law, a school district may not insure for more than this value, since it cannot lose more than its interest.

Insurance. A business or system whereby indemnity is guaranteed by one party to another for certain contingencies and upon specified terms.

Preferred Risks. Those risks which, due to unique circumstances such as special legislation, inspection procedures, and maintenance are considered to be less liable to loss than other comparable insurance situations and are, therefore, ordinarily reflected in reduced rate by commercial underwriters.

Premium-loss Ratio. The amount of losses divided by the amount of the premiums paid by the policy holders. A premium-loss ratio of 55 means that the policy holders were paid on an average 55 cents of each premium dollar for losses suffered.

Public School System of Louisiana. The sixty-four parish wide public school districts and the two public city school districts of Monroe and Bogalusa.

School District Physical Property. The buildings and their contents belonging to or held by the school district.

State-operated Insurance Plan. An insurance program which is administered at the state level. Premiums are paid into a state fund instead of to commercial insurance companies. After the fund reaches what is considered to be a safe level, the premiums are reduced. Interest resulting from the investment of the money in the fund pays the administrative expenses which occur. There are several variations of this program currently in existence at the state level. These will be presented in detail later in this study.

State Self-insurance Reserve Plan. A plan by which a state establishes a special reserve fund, which accumulates through regular deposits or credits, and which may be invested in interest-bearing securities at the discretion of the state so that the income from such a fund may be used to increase the amount of the fund, and from which payments for losses may be made as such losses occur.

Procedure

The type of research used in this study is known as "descriptive-survey." Good[1] stated that the purposes of descriptive-survey investigations may be:

1. To secure evidence concerning an existing situation or current conditions;
2. To identify standards or norms with which to compare present conditions, in order to plan the next step;
3. To determine how to make the next step (having determined where we are and where we wish to go).

The data in this study were obtained from (1) a review of the available literature in the field of insurance as it relates to public schools; (2) reviews of the five state programs currently operating in Alabama, North Carolina, North Dakota, South Carolina, and Wisconsin; (3) information as reported in the Louisiana State Department of Education annual reports; and (4) information available from the Louisiana State Insurance Commissioner's office.

As a first step in the study an investigation of the available and appropriate literature related to general insurance as well as that directly related to public school fire insurance was made. The review of literature included (1) publications by the Association of School Business Officials of the United State and Canada, National Education Association, and the United States Office of Education; (2) articles in professional journals; (3) books, booklets, and pamphlets by authorities in school insurance; and (4) doctoral studies.

For background information concerning governmental property insurance funds, studies were made of the five State Insurance Funds

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[1]Carter V. Good, Essentials of Educational Research (New York: Appleton-Century-Crafts, 1966), p. 192.

which insure school property and of several self-insurance plans of large city school districts in the United States. These studies included the areas of fund organization and administration, coverages, rating and reinsurance practices and experiences.

Data concerning the premiums paid and the loss recoveries from fire and extended coverage insurance on public school buildings of the public school districts of Louisiana were taken from records on file in the State Department of Education. Other data, such as the average daily membership, were extracted from the same source. The data obtained were used in computing the premium-loss ratio for the past twenty-year period.

In order to explore possible ways of improving the program of protection of property for public school districts of Louisiana, a comparative analysis was made between three different methods of securing protection—commercial insurance, a state-operated insurance plan, and a state self-insurance reserve plan. This comparative analysis was made on the basis of identified criteria under the following categories: (1) financial capacity; (2) catastrophe protection; (3) risk spread; (4) reserving; (5) inviolability; (6) service provision; and (7) cost. A projected state-operated insurance plan and state self-insurance reserve plan were constructed for Louisiana—giving careful consideration to the criteria for a successful State Fund as developed by Stone[1]—for the purpose of making this comparison. Stone developed this set of criteria after a detailed study of the five State Insurance Funds and the criteria were validated by submission to the directors of the five

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[1]Stone, op. cit.

State Insurance Funds.

Possible economies on property insurance for the public schools of Louisiana were analyzed and recommendations were made.

Organization of the Study

This study is divided into six chapters. Chapter I includes the background and need for the study, a statement of the problem, definition of terms, and the procedure.

A review of the available literature and related research studies is given in Chapter II.

Chapter III is devoted to the background information concerning governmental insurance funds, especially those serving the public schools. It includes a review of the five State Insurance Funds and several self-insurance plans of large city school districts in the United States with arguments for and against state insurance funds.

Chapter IV presents the data concerning the premium-loss ratios on fire and extended coverage insurance for the public school districts of Louisiana for the twenty-year period, 1949-68, inclusive. The past costs of insurance were compared with established standards to determine if costs might have been excessive.

Chapter V includes (1) the presentation of a set of criteria for the successful operation of a state insurance plan; (2) the development of a projected state-operated insurance plan and a state self-insurance reserve plan; and (3) the comparative analysis between three different methods of securing protection—commercial insurance, state-operated insurance, and state self-insurance reserve fund.

Chapter VI presents the summary, conclusions, and recommendations of the study.

CHAPTER II

REVIEW OF RELATED LETERATURE

A careful examination of the related literature in the field of public school property insurance reveals that several studies have been made. Some of the studies were conducted on a nation-wide basis while others were limited to a specific state or region. The studies covered the economics of public school property insurance, self-insurance programs, fire insurance premium-loss ratios, the legal status of school insurance, and other related areas.

There are three main sources of information in the field of school property insurance—doctoral dissertations, studies by the Association of School Business Officials of the United States and Canada, and articles in periodical literature. Two books entirely devoted to the subject of school insurance are Insurance Practices in School Administration[1] and School Insurance Administration.[2] These books cover the entire field of school insurance.

Seventeen insurance studies have been reviewed and references are made to others as they relate specifically to this study. These

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[1]Henry H. Linn and Schuyler C. Joyner, Insurance Practices in School Administration (New York: The Ronald Press Company, 1952).

[2]Clifford H. Allen, School Insurance Administration (New York: The MacMillan Co., 1965).

are divided into: (1) studies made on the national level and (2) studies made on the state level.

Studies Made on the National Level

Four studies in the area of school property insurance were made by the Committee on Insurance Research of the Association of Public School Business Officials. The first study covered a ten-year period, from 1921-1930; the second, the seven-year period from 1931 to 1937; the third, the years 1938-1945; and the fourth, the years 1946 through 1955.

The first of the studies,[1] covering the period 1921-1930, was concerned with fire insurance costs in the school districts of 380 cities in the United States and Canada. Its purposes were to determine the practices of school authorities in the insuring of school property and to determine if public schools were a preferred risk.

It was determined that the ratio of premiums to losses for the 380 school districts was 28.7 per cent. This left 71.3 cents of every premium dollar for operating costs, payments to reserve funds and for profit to stockholders. The study further revealed that at least forty-nine city school districts and five states were insuring their own school properties, and that these programs appeared to be highly successful from the standpoint of operating efficiency and economical protection. It was concluded that (1) the failure of stock companies to cooperate in lowering public school property insurance rates was creating the necessity, on the part of school officials, to seek more economical

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[1]National Association of Public School Business Officials, Insurance Practices and Experiences in City School Districts.

forms of protection, either through self-insurance or through placing insurance business with mutual companies; (2) reliable appraisals of school property, adequate records of cost-loss insurance experience, and a knowledge of property values are of vital importance in setting up a sound insurance program in public school districts; (3) the removal of existing fire hazards is an effective means by which substantial savings can be made both in insurance costs and in fire prevention; (4) school buildings were highly preferred risk and schools were being unduly penalized by being put into a class with churches, private schools, and all other educational institutions.[1]

The second[2] of the series of four national studies selected for review covered 257 cities for a period of seven years, from 1931 to 1937. Its purpose was to determine whether or not the data collected in the first study was correct.

In this period, only 26.9 cents of the premium dollar paid to insurance companies was returned to the school districts for fire losses—virtually unchanged from the 28.9 cents previously reported in the first study. From the data it was disclosed that public school buildings in city school districts are definitely preferred risks; that stock companies were taking advantage of the fact that schools are political in nature and the local agents were exerting political pressure to force school boards to accept stock insurance with its exorbitant rates, instead of seeking more economical methods of insuring

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[1]<u>Ibid</u>., pp. 219-23.

[2]National Association of Public School Business Officials, <u>An Investigation of Insurance Practices</u>.

district property; that a gross profit of 73.1 per cent is unjustified; and that boards of education should seek to remedy this situation by insuring with mutual companies, or, better still, by establishing state insurance funds for public schools under the direction of the state government, or, as a last resort, by the establishment of self-insurance funds.[1]

The third study[2] covered the period from 1938 to 1945, and was concerned with premium-loss ratios, various forms of insurance coverage, and selected insurance practices. This study revealed that, during the eight year period, 31.9 per cent of each premium dollar was paid back to the districts for fire losses.

Some of the significant findings were: (1) the larger districts used the three-year term policy; (2) the great majority of all sizes of city school districts insure all property under blanket policies; (3) the use of coinsurance was almost universal, the most commonly used coinsurance percentage being 80 and 90 per cent; (4) the most frequent cause of lowered rates was elimination of fire hazards; (5) about sixty per cent of the school districts require insurance companies to qualify for school business on a basis other than a license to write insurance in the particular state; (6) the most common qualification required is a financial or general policyholder's rating of the company; (7) more than 25 per cent of the city school districts have no objective basis for awarding fire insurance to agents; (8) there was no well-defined

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[1] _Ibid._, p. 218.

[2] Association of Public School Business Officials, _Insurance Committee Report on School Fire Insurance, 1939-45_.

pattern as to the frequency with which school buildings valuations were revised.[1]

In order to provide schools with a plan for a complete fire insurance program, a number of recommended practices were given. Among the recommended practices were:

1. Place responsibility for handling the school district's insurance.
2. Secure a realistic appraisal to determine insurable values.
3. Determine the method to be used in insuring the buildings and contents.
4. Develop a school form.
5. Obtain all possible rate reductions.
6. Maintain adequate records.
7. Establish an equitable plan for distributing insurance to companies and agents.
8. Obtain maximum adjustment on fire losses.[2]

The fourth of the studies sponsored by the Association of School Business Officials was undertaken by Salmon.[3] It covered the period from 1946 to 1955, with emphasis on fire insurance principles and practices reported by 378 school districts throughout the United States and Canada. The study concluded that: (1) despite exorbitant rates, stock companies dominated the insurance market; (2) school business officials were not obtaining the best insurance coverage for the least money; (3) most school business officials failed to recognize the appraisal of insurable property values as their responsibility; (4) a large number of school districts have not required competitive bidding on standard specifications; and (5) the low fire ratio of 29.53 per cent has given excessive profits to the insurance companies.

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[1] Ibid., p. pp. 3-7.

[2] Ibid., pp. 8-30.

[3] Salmon, op. cit.

Among Salmon's recommendations were the following: (1) the services of a commercial appraisal firm should be used to develop an itemized appraisal of all district-owned buildings and equipment; (2) these values should be reviewed at intervals not in excess of two years; (3) an acceptable method of establishing values is the use of building type and area, taking present market values into consideration; (4) districts should use exclusively the blanket type policy; (5) districts should use the 90 per cent coinsurance clause; (6) districts should use the extended coverage endorsement as part of the insurance policy; (7) the use of the vandalism and malicious mischief clause should be considered; (8) the five year annual renewal plan should be used; (9) districts should draw up standard specifications for the coverage desired, the management characteristics and financial strength of the company required, and should place insurance on a competitive bidding basis; (10) companies and agencies bidding should be examined as to the degree of service and loss settlement satisfaction given in the past; (11) when district requirements are satisfied in these respects, awards should be made on a price basis; (12) districts using <u>Best's Insurance Guide</u> in specifying desired characteristics should require not less than an "A+AAA" rating; (13) districts should seek the elimination of hazards; (14) checking the concurrency of all policies should be the joint responsibility of school business officials and insurance representatives; and (15) districts should maintain a regular fire prevention inspection program.[1]

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[1] <u>Ibid</u>., pp. 355-89.

In 1965, Viles[1] conducted another study dealing with property insurance experiences on a state-by-state and national basis for the U. S. Office of Education. The investigation covered the five-year period 1948-1952 and the loss ratio was determined for each state from the data obtained from the various State Departments of Education. This was the first five-year period after a change in insurance classification was made which placed public schools in a class containing only educational institutions. It determined that the premium-loss ratio for the nation as a whole and for all types of insurance companies was 35.3 per cent. For the state of Louisiana the premium-loss ratio was 54.7 per cent, the fourth highest premium-loss ratio of all states in the nation for the five-year period.

In his study, Viles reveiwed the five states maintaining state insurance funds for public school property. The presentation was a factual analysis and was not intended to be either critical or complimentary. He made no judgments as to the potential of a state program, but recommended that more studies be conducted in the area of public school insurance.

Studies Made on the State Level

One of the early studies on which a report is available was conducted by Melchior[3] in 1925. He made an intensive investigation

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[1]Nelson E. Viles, _School Property Experiences on the State Level_, U. S. Department of Health, Education and Welfare Bulletin, 1956 No. 7 (Washington, D. C.: U. S. Government Printing Office, 1956).

[2]_Ibid_., p. 21.

[3]William T. Melchior, _Insuring Public School Property_, Contributions to Education No. 168 (New York: Teachers College, Columbia University, 1925).

of insurance practices in school districts in the state of New York, as well as a general investigation dealing with general insurance procedures in the cities of the United States.

Among the findings of this study were: (1) practically all school districts carried fire insurance; (2) use of non-combustible materials for exterior wall does not insure the safety of the building from fire; (3) school authorities made the appraisals of property in 66 per cent of the districts and these were mostly unscientific and inaccurate; (4) 66 per cent of the buildings were insured under a co-insurance plan; (5) the three-year term policy was used by 92.1 per cent of the districts; (6) the ratio of indemnity collected to premium costs was 35.62 per cent, which means that for every dollar paid to insurance companies as premiums on public school property, 64.38 cents were retained by the insurance companies.[1]

Steinhauer[2] conducted a study in 1939 which confined itself to Pennsylvania. School Districts of that state reported spending $9,275,227 for fire protection for the years 1924-35. In return, they received, in payment for fire losses, a total of $3,328,721, or 35.8 cents for every dollar expended. It was Steinhauer's contention that his data presented objective evidence to prove that school districts of the state could and should organize and operate a co-operative insurance association. This association must operate upon sound insurance principles.

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[1] *Ibid.*, pp. 171-80.

[2] Milton H. Steinhauer, "Fire Insurance on Public School Property in Pennsylvania" (unpublished Ph.D. dissertation, University of Pennsylvania, 1939) as reported by Paul Cory, *op. cit.*

The financial ability of such an association (of districts), as measured by the amount of premiums expended for fire protection, is more than sufficient to withstand the average annual loss and the possible deviation from this average, according to Steinhauer. He offered three alternative possibilities directly related to this evidence. They were:

1. Self-insuring by districts.

2. A State Insurance Fund.

3. An association of public school districts in an insurance organization commonly known as a mutual organization.

Due to the fact that in only the very largest districts of the state were the numbers of pieces of property great enough and scattered enough to consider self-insurance and that he had doubts that the state legislature would pass legislation authorizing a state insurance fund, Steinhauer recommended that the schools organize a mutual insurance association to be known as the Public School Mutual Insurance Company of Pennsylvania.[1]

Finchum,[2] in 1953, reported his study of the insurance practices and procedures of the school boards in Tennessee. He made an exhaustive examination of the legal requirements for school protection, the extent to which administrators actually fulfilled their responsibilities in this connection, defined certain practices and indicated factors necessary for an adequate insurance program. The findings of Finchum included: (1) Tennessee neither requires nor forbids local

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[1]*Ibid.*, pp. 103-07.

[2]Ralph N. Finchum, "A Study of the Insurance Practices and Procedures of Tennessee Public School Boards" (unpublished Ed.D. dissertation, University of Tennessee, 1953).

boards to insure school property; (2) legal restriction bars the purchase of insurance from mutual insurance associations whose policies have clauses permitting unlimited assessments; (3) about 2 per cent of the school boards carried no fire insurance, of the reporting districts only 35 to 40 per cent coverage was carried, and approximately 26 per cent did not carry insurance on buildings content; (4) the extended coverage clause was utilized on only 59 per cent of the insured buildings, and wind and hail coverage on only 7 per cent of these structures.[1]

Finchum recommended that the state of Tennessee should consider the use of a state fund for insuring school property and encouraged the state legislature to enact appropriate laws which would provide the structure for setting up such a program. In his exploration and discussion of a state fund for insurance, he pointed out that, regardless of the form of management used in such funds, the important factors involved are maintaining economies in managerial and acquisition costs and providing adequate reserves to meet any loss that might occur.

Hanson[2] presented a study for the National Association of Insurance Agents in 1953 in which he related arguments against state-operated insurance programs. He held that such self-insurance plans were undesirable, unsound, and an invasion of private enterprise.

In 1958 Mills[3] made a study of the school property insurance in

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[1] Ibid., pp. 343-45.

[2] George S. Hanson, State and Municipal Self-Insurance (New York: National Association of Insurance Agents, 1954).

[3] Hugh L. Mills, "A Study of Public School Insurance in Arkansas" (unpublished Ed.D. dissertation, University of Arkansas, 1958).

Arkansas. The purposes of the study were: (1) to provide background information in the area of property insurance; (2) to identify certain administrative practices and procedures which are being used by public school administrators and school boards in the local school districts of Arkansas with respect to the operation of fire insurance programs covering buildings and contents in these districts; (3) to indicate what are believed to be sound insurance practices; and (4) to submit a proposed guide by which Arkansas school districts might improve the effectiveness of their property insurance programs.

Some of the significant findings of the study were: (1) most of the districts had their property insured with stock companies; (2) that 70.5 per cent of the districts reporting had no regular appraisal of values; (3) approximately 60 per cent of the districts did not use the coinsurance clause; (4) the percentage of insured value to true value was reported as being 40 to 80 per cent of the true value; (5) the returns indicated that the practices of the North Central Accredited Schools were better than the practices of the other schools in the state.[1]

Mill's conclusions were: (1) state insurance plans in five states have proven successful; (2) present insurance rates in Arkansas were excessive; (3) administrative practices varied greatly with no attempt at standardization; (4) school district property was underinsured; (5) no adequate legal basis for the insuring of public school property has been established in Arkansas. He recommended that: (1) the Arkansas Department of Education should (a) take the lead in

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[1]<u>Ibid.</u>, pp. 204-05.

up-grading the quality of local insurance programs, (b) require annual insurance reports from school districts, (c) provide consultative services, and (d) require that better insurance records be kept; (2) local school districts should strengthen their insurance programs in accordance with accepted criteria; and (3) a feasibility study should be made of a state insurance plan for Arkansas.[1]

Brent[2] studied the insurance practices of 272 school districts in Oklahoma to determine how these practices might be modified to provide greater protection and economy. Practices were compared with the criteria for an ideal school district insurance program and practices.

His conclusions were: (1) the insurance affairs of school districts were poorly managed due to a lack of sufficient knowledge and adequate time; (2) school district officials were overly concerned with maintaining the good will of local insurance agents to the detriment of the school districts; (3) there was a lack of frequent, properly conducted school district fire prevention inspections; and (4) in general, larger school districts tended to conform to the criteria for an adequate insurance program, than did smaller districts. Brent suggested the following modifications: (1) appraisals of property value should be made at least once every two years; (2) an objective method should be adopted for the selection of insurance agents, companies, and the distribution of business to agents; (3) local districts and the state should provide in-service training to administrators charged with the responsibility of managing district insurance programs; (4) schools should remove as many

[1] *Ibid.*, pp. 206–08.

[2] Brent, *op. cit.*

fire hazards as practical through minor alternations and better housekeeping; (5) school districts using coinsurance must maintain the required amount of insurance; and (6) a state program of school insurance should be inaugurated.[1]

Monger,[2] in 1961, completed a detailed study of the five state self-insurance plans now operating. The purpose of this study was to identify the principles, practices, and policies characteristic of the five state property insurance fund plans in order to formulate a proposed property insurance fund plan for Oklahoma.

He concluded that his proposed property insurance plan for the public schools of Oklahoma should be successful, basing his conclusion on the successful existence of state funds, the opinions of specialists, and the findings and conclusions of a consulting actuary. The program, if adopted and the fund established, would allow the state to provide adequate protection of its public school properties against loss while reducing the insurance premium rates as much as $850,000 annually.

Monger recommended that the proposed property insurance plan should be studied further and adopted as a part of the school code of Oklahoma. After the adoption of this plan and establishment of the state fund, continuous consideration should be given to the extension of the types of coverage available through the fund.[3]

A study of the fire insurance on public school buildings in

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[1] *Ibid.*, pp. 189-97.

[2] Monger, *op. cit.*

[3] *Ibid.*, pp. 159-60.

Florida was made by Cory[1] in 1962 for the purposes of examining the relationships between premiums paid for fire and extended coverage insurance and losses sustained by the public schools of Florida and determining the feasibility of establishing a self-insurance program for the Florida public schools. The data on premiums paid, losses sustained and cost-loss ratios for 1940-1961 were assembled and analyzed. The history of self-insurance on public property was developed.

From the collection and analysis of the data the following findings resulted:

1. Fire insurance on all school buildings over three classrooms is required by statute.

2. No uniformity of method for obtaining insurance exists in the Florida school system. Thirty per cent of the counties use bidding to secure their insurance.

3. Florida's school boards expended $13,345,417 for fire and extended coverage insurance premiums for the 21-year period, 1940-1961, and received benefits totaling $3,254,094, which results in a 24.37 per cent cost-loss ratio.

4. The cost-loss ratio for the 10-year period 1951-1961 was 17.6 per cent for the public schools as compared with the total of all Florida property insured by all insurance companies cost-loss ratio of 35 per cent for the same period.

5. The public schools are paying excessive premium rates for their fire and extended coverage insurance.

6. Public school buildings in Florida are a preferred risk and

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[1]Cory, op. cit.

should be placed in a separate classification.

7. A self-insurance program is feasible with all prerequisites satisfiable.

8. A self-insurance program would provide a more complete continuous insurance coverage and at a lower cost, than the present manner of insurance application.

9. The majority of Florida's county superintendents favor a self-insurance program for the Florida public schools.[1]

Cory recommended that the Florida State Department of Education institute the necessary proceedings for the preparation of recommended legislation which would eventuate in the establishment of self-insurance program, properly organized and protected, for the public schools of Florida.

In 1964, Cleveland[2] completed a study of fire insurance practices in South Dakota independent school districts. The study included (1) a survey and analysis of the present fire insurance practices in South Dakota independent school districts, (2) an analysis of existing state self-insurance programs for public schools, and (3) the formulation of recommendations for possible improvements in school fire insurance programs in South Dakota, with special attention given to the feasibility of a state self-insurance plan. The survey and analysis were based upon a random sample of thirty-five independent school districts.

Among the major findings of the study were the following:

1. The administration of the fire insurance program in South

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[1] Ibid., pp. 94-7.

[2] Cleveland, op. cit.

Dakota is frequently a rather unorganized activity, with no person being given the definite responsibility for planning and executing the program.

2. The cost-loss ratio for the period 1957-62 was 36.97 per cent.

3. Very few school districts use an independent appraisor for insurance purposes.

4. The Public and Insititutional Property Plan (PIPP) for insurance has gained wide acceptance in South Dakota.

5. The majority of school administrators in South Dakota favored a state insurance plan.

6. There is a need in South Dakota for leadership and assistance from the Department of Public Instruction in planning and administering the fire insurance program.

7. On the basis of the cost-loss ratio for the five school fiscal years from 1957 to 1962, the hypothesis that a state insurance plan would be a financial savings to South Dakota school districts appears to be tenable.[1]

Cleveland recommended that the Department of Public Instruction should provide leadership by (1) providing an insurance consultant, (2) publishing a school property insurance handbook, (3) initiating action toward securing a separate classification for school buildings for fire insurance and rate making purposes, and (4) revising the superintendent's and clerk's annual report form to include information for a continuing study of cost-loss ratios on school district property.

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[1] _Ibid._, pp. 241-44.

Underwood[1] made a study in 1966 for the purpose of developing a school insurance handbook for Indiana public schools which was to be used as an aid to school board members and school administrators in understanding basic school insurance concepts. The handbook was also to serve as an aid in developing sound insurance programs in Indiana schools.

Major findings were: (1) there are no statutes in Indiana which specifically authorize school districts to purchase various types of insurance policies and to pay for such policies out of school funds; (2) there is no law in Indiana that prohibits school districts from insuring with mutual insurance companies; (3) school districts have favorable loss ratios and are preferred risks; (4) five states—Alabama, North Dakota, North Carolina, South Carolina, and Wisconsin—have state insurance funds that have provided fire insurance at a financial savings to the school districts of those states; (5) the majority of school districts' fire insurance programs are not efficiently and economically administered to the point that the greatest amount of benefit is derived from each dollar spent.[2]

An inquiry into Illinois school district insurance coverages, practices, and experiences was made by Stone[3] in 1967. A further study was made of the five state insurance funds which insure school property in the states of Alabama, North Carolina, North Dakota, South Carolina, and Wisconsin. This information was synthesized with the Illinois study

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[1]Underwood, op. cit.

[2]Ibid., pp. 237-39.

[3]Stone, op. cit.

and criteria developed in the event an Illinois State Fund was determined to be feasible and economically beneficial to the citizens of the state.

It was found that:[1]

1. Each State Insurance Fund operates differently, yet each has effected savings for the state taxpayer.

2. Motivations and deterrents to Fund establishment and maintenance exist in the areas of losses, expense and governmental regulation. Motivations would outweigh the deterrents to a Fund inception provided the Fund was monopolistic, well-managed, and safeguarded through an adequate initial state appropriation, reserves, and reinsurance.

3. Other state studies have indicated that schools should have been treated as preferred risk but were not being treated as such.

4. Insurance industry innovations have had a marked effect in the reduction of property insurance costs to Illinois schools.

5. Illinois Public School insurance practices are frequently inefficient and coverages are in some cases inadequate for the protection of taxpayers' interests.

6. Public school insurers, in the aggregate, are enjoying a greater than "reasonable" amount of profit.

7. An Illinois State School Insurance Fund would be both feasible and economically desirable.

8. An Illinois State School Insurance Fund could save the public schools from 117 to 150 million dollars during the next fifteen

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[1]*Ibid.*, pp. 174-76.

years.

A study to develop, analyze and evaluate a state fire insurance plan for public school systems in West Virginia was made by Hadley[1] in 1968. Several preliminary conclusions were drawn from the study. Some of the most important of these are: (1) school buildings usually qualify as preferred risks when compared to similarly constructed buildings; (2) school fire insurance as offered by states currently operating a program is less expensive than comparable commercial insurance; and (3) the basic assumptions of fire insurance prerequisites are fulfilled when the state is used as the insurable base because the number of risks are large and at the same time the risk is spread over a large geographical area. The final conclusion drawn was that public school districts in West Virginia could feasibly and profitably initiate and implement a cooperative state fire insurance program.

In summary, the literature suggests that school districts are concerned about high insurance costs and reveals that state insurance programs have some potential for reducing these costs. Even though there has been general agreement among investigators that state self-insurance plans can provide adequate coverage at less cost, it still cannot be concluded that such plans would therefore be successful in all states. The present study develops two alternate plans for state self-insurance for the public schools of Louisiana and compares them with the presently operating commercial coverage. It will hopefully provide additional evidence to support the position that state self-insurance plans should be more widely adopted.

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[1]Hadley, op. cit.

CHAPTER III

GOVERNMENTAL PROPERTY INSURANCE PLANS

The growing concern over the excessive costs of property insurance has led to the adoption of a plan of self-insurance by some governmental units. The concept that insurance coverage should be carried on by professional, privately-owned risk and profit-making institutions has been giving way to the development of government-sponsored insurance programs.[1]

Governmental property insurance plans are of two types: emergency reserve funds and self-insurance plans. Emergency reserve funds involve the advance appropriation by the governing unit of funds which may be used to restore or replace damaged or destroyed property. The appropriation is designed to build up over a period of time a fund of sufficient size to pay for all losses which might occur. A self-insurance plan differs from emergency reserve funds in that established insurance principles underlie their operation. They charge specified premiums, build up reserves and are not dependent on yearly appropriations.[2]

State Programs of Insurance

Since education is a state function, it seems consistent for

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[1]Frank Lang, Government Insurance in the United States (New York: 1950), p. i.

[2]*Ibid.*, p. 72.

state to assume the risk for loss of school property. However, only five states have statewide public school insurance: Alabama, North Carolina, North Dakota, South Carolina, and Wisconsin. All the state insurance plans have good records, and substantial savings have been reported in the cost of insurance to school districts. With expanding state assistance for capital outlay, more interest in state insurance will probably be generated. The main obstacle to such plans is the opposition of insurance companies, for school insurance is a very profitable business. It appears that there is no good argument against state insurance as far as school districts are concerned.[1]

Only one state-operated program, that of North Carolina, is limited to public elementary and secondary schools. The other state-operated programs reported here do include public school properties together with other state owned property.

For background information concerning governmental property insurance funds, an examination of these state insurance funds will be made. The data included in these state-operated programs summaries were developed from state laws, annual and other reports prepared by the state program directors, and by correspondence with the directors of the state programs.

Alabama

The Alabama State Insurance program covering public elementary and secondary schools is a part of an overall State Insurance Fund program covering public-owned properties of all types throughout the state.

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[1]Calvin Grieder, Thruman M. Pierce, and William Everett Rosenstengle, Public School Administration (New York: The Ronald Press Company, 1961), p. 567.

Public school participation is voluntary.

The Fund was established in 1923 and amended in 1949 and 1957. The scope of coverage includes loss for fire, lightning, windstorm, and hail, or fire and all the perils usually included under extended coverage, on buildings and contents.[1]

The program is actually a self-supporting state insurance company program which is defined by law and supervised by the State. The State accepts no financial responsibility except through the availability of a $100,000 state appropriation to serve as an emergency fund—after the earned surplus has been exhausted.

The State Insurance Fund is handled as one division of the Department of Finance and maintains an office staff composed of a manager, field inspectors, and a central office staff. Operating expenses are limited by law to that amount appropriated by the legislature, and all such expenditures shall be limited to 6 per cent of the premiums.[2] The fund director makes an official annual report and in addition makes frequent progress reports to the director of finance.

Appraisals are required for all buildings covered by the State Insurance Fund acting for the Department of Finance. The fund officials utilize the State Department of Education and the State Building Commission data on construction costs as needed in checking building values. Should the directors and owners not agree on the values of the building it is possible to appoint a third person to serve as an

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[1]State Insurance Fund, State Insurance Fund of Alabama, Reprint from Code of Alabama 1940, 1955, and 1957 supplements (Charlottesville, Va.: The Michie Company, 1958), p. 3.

[2]*Ibid.*, p. 6.

arbitrator.

Insured buildings are inspected annually and copies of these reports are filed with the owners and the State Department of Education. These inspections are for the purpose of reduction of the risk. The field staff men are appointed as Deputy State Fire Marshals and are delegated the authority to condemn hazardous schools.

The rates used in the State Fund are promulgated by the Alabama Inspection and Rating Bureau, and these promulgated rates are then discounted 40 per cent to arrive at the rate to be charged the state facility.

Reinsurance practices are used to distribute the risk. This arrangement provides for "quota share" or participating insurance on an item to item basis. The amount of insurance retained by the State Insurance Fund and the amount of reinsurance purchased on each item is determined by the management of the State Insurance Fund. In addition to this participating reinsurance, the exposure of the State Fund with respect to the perils of extended coverage are further protected by catastrophe reinsurance arranged with London based and certain other companies in an amount of approximately $4,000,000 to apply to that portion of any single loss in excess of $500,000.[1]

At the end of its 45th year, the Alabama Insurance Fund had a reserve of $8,832,969.72. Most of this was invested in state and federal bonds. The operating expenses were less than the returns from the investments. Rates were 40 per cent less than commercial rates and fund

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[1]Letter from Thomas B. Weston, Manager, State Insurance Fund, Montgomery, Alabama, dated June 9, 1969.

reserves were growing every year.[1] Steady growth was anticipated as reflected in the annual reports.

North Carolina

The North Carolina State Insurance Program for Public School Buildings was developed as a school insurance program and is not a part of an over-all state government insurance system, as are the other existing state insurance plans that include the public schools. It is administered by a division under the State Board of Education. It was set up in 1949 by authorization of the 1949 General Assembly primarily because fire insurance rates were to be increased by a flat 25 per cent on public schools in North Carolina as of June 1, 1948.[2]

In establishing the program in 1949, the state granted $50,000 to cover administration expenses for the first two years, after which the program was to be entirely self-supporting. The General Assembly authorized a transfer of $2,000,000 from a state literary fund to establish a working reserve for this insurance fund. According to Mr. Winborne the $2,000,000 loan from the state literary fund has been completely repaid and the fund is no longer indebted.[3]

This program is actually a state-wide optional school cooperative insurance endeavor. The State assumes no financial obligations for losses. The officials in charge of the program are expected to

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[1]State Insurance Fund, Forty-fifth Annual Report, Department of Finance, Director of Finance, Montgomery, Ala.: Skinner Printing Company, September 30, 1968), p. 7.

[2]Letter from Thomas B. Winborne, Director, Division of Insurance, North Carolina Board of Education, dated June 4, 1969.

[3]*Ibid.*

keep the program safe and make it self-supporting within the limits set by the State Legislature. Operating expenses are limited to 10 per cent of the premiums collected. Expenses to date have been below this figure.[1]

In 1969 it was estimated that the Fund covered about 65 per cent of the school property of the State. The participating units may insure for either 100 per cent or 75 per cent of the insurable value; however all the units carry 100 per cent coverage. Though not encouraged, the school board may carry other coverage on the same property. Local coverage for each district is written on a specific policy schedule attachment based upon weighted average rates. Since the state fund uses a low rate it does not apply a coinsurance rate reduction, neither does it write long-term policies.[2]

The North Carolina school property insurance plan has a reinsurance contract which insures the excess of its liability above $200,000 for each and every location, and each and every loss, with a $2,000,000 limit. This policy works similarly to a deductible automobile policy; the Fund assumes the first $200,000 liability and the reinsurance takes over from that point on.[3]

Each building is inspected once a year before renewal of the policy. The Board checks building values and with local officials establishes insurable values. Insurable value is replacement cost less depreciation and also less 5 per cent for so-called non-consumables such

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[1] Ibid.

[2] Ibid.

[3] Ibid.

as foundations.

On July 1, 1949, the Division of Insurance began its operation with base rates of 68 per cent of the Bureau rates in effect in May, 1948.[1] When the reserve of the Fund reaches the sum of 5 per cent of the total insurance in force, then annually thereafter the State Board of Education shall proportionately decrease the premiums on insurance to an amount which will be sufficient to maintain the reserve at 5 per cent of the total insurance in force. In the event in the judgment of the State Board of Education the income from the investments of the reserves are sufficient to maintain the same at 5 per cent of the total insurance in force, no premiums shall be charged for the insuing year, provided that no building or property insured shall cease to pay premiums until five annual payments of premiums have been made.

Since participation in the State Fund is optional, Fund officials did not expect an immediate, rapid and extensive growth of the program. However, a very rapid growth has taken place with a total insurance in force as of June 30, 1968 of $521,894,900.[3]

Since the establishment of this state insurance program, the schools have paid into the Fund $8,992,950.68 in premiums and have received in claims a total of $5,491,033.16. The loss-ratio to earned premiums varied from a low of 14.82 per cent in 1952 to a high of 141.81 per cent in 1966. To date the Fund has experienced a loss-ratio of

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[1]North Carolina State Insurance Fund, "Rate History", Bulletin, North Carolina (1956), p. 2.

[2]North Carolina Statues, Articles 16, Section 2.

[3]Public School Insurance Fund Statement of Comparative Data 1950 to 1968, Thomas B. Winborne, Director of the Division of Insurance, Raleigh, North Carolina, 1968.

61.06 per cent and a net accumulated profit of $4,043,267.62.[1]

One of the greatest benefits of the Fund is that of a fire inspection service. The Fund is interested in the districts replacing destroyed structures as rapidly as possible, but the Fund, through a highly effective inspection service, undertakes to prevent fires occurring.[2]

North Dakota

The North Dakota public school building insurance program is part of the total state insurance program covering state, county and municipal buildings, all of which are in the same classification as public schools. All public buildings in incorporated villages or cities must be insured under the Fund and public buildings such as rural schools outside of incorporated areas may be optionally covered. The Fund was established in 1919 with no appropriation for its operation or maintenance, however all proven claims of loss by fire, windstorm, and related damage have been paid liberally and promptly.[3]

The State Fire and Tornado Fund is under the direction of the Commissioner of Insurance who is authorized by law to insure not more than 90 per cent of the approved insurable value, with arbitration provided if there is no agreement upon value. The Commissioner notifies the boards of premiums due by risk classification. A risk considered hazardous may be refused. Assessment is made on a percentage basis in

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[1]*Ibid.*

[2]Winborne, letter.

[3]Frank Albers, Commissioner, *State Fire and Tornado Fund--Law and History*, 1963, Bulletin, North Dakota, pp. 2-4.

relation to the bureau rate and may not exceed the bureau rate. Rates have varied greatly over the lifetime of the Fund. This is due primarily to changes in the requirements for the Fund initiated by the legislature. Rates have varied from 50 per cent of the bureau rate to free insurance.[1]

Reinsurance in the North Dakota system was provided for in the original act of 1919. This act provided that any single risk of over $100,000 should be reinsured with a reliable company. In 1943, legislation was passed to cancel all existing reinsurance, leaving the Fund to carry all risks with reinsurance provisions made for catastrophe. This provided for insuring the Fund against loss in excess of $500,000 arising from a single catastrophe, up to an annual total of $25,000,000.[2]

The custodian of the Fund is the State Treasurer who handles insurance funds with the same operational procedure as are used with other state funds. Investments include certificates of deposit and federal and state bonds. Legal limits are placed upon the amount to be invested in municipal bonds.[3]

All policies insured by the Fund are for two-year terms at 1.75 times the annual rate. The State Insurance Fund pays the Fire Underwriters Inspection Bureau, an independent agency, for risk rating. All policies cover fire, wind and/or extended coverage with the usual coinsurance reductions applying when coinsurance policies are written.

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[1]Ibid.

[2]Letter from H. John Loerch, Manager, State Fire and Tornado Fund, Insurance Department, dated June 11, 1969.

[3]Albers, op. cit., p. 5.

Most of the coinsurance is 80 per cent but up to 90 per cent may be written. Premiums are due every odd year on August 1, with sixty days grace. A penalty of 6 per cent per annum is levied for non-payment within that time.[1]

Though the Fund is self-supporting, operating expenses are appropriated biennially by the legislature and later recharged to the Fund. Operating expenses include employees' salaries, rating costs, risk inspection and other miscellaneous costs. Operating costs have averaged less than 10 per cent of gross income since the inception of the Fund.[2]

The Fund had 911 policies in effect as of June 30, 1968, with a total risk of $305,163,759. The net premium income was $1,100,575.39. Losses were paid totaling $865,046.50. Extended coverage losses equaled $251,538.99. This yielded a percentage of losses to net premiums of 101.4 per cent.[3]

South Carolina

The first state to establish a plan of self-insurance on public property was South Carolina in 1900. This plan ~~included~~ state buildings, institutions, county buildings, and all public buildings including contents.[4]

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[1]Ibid.

[2]Ibid.

[3]Biennial Report of the Fire and Tornado Fund of the State of North Dakota, 1968, Commissioner of Insurance, Bismarch, North Dakota, p. 3.

[4]Lang, op. cit., p. 72.

The program is under the direction of one unit of the Division of Sinking Funds and Property of the State Budget and Control Board. In 1936, revision in the law made Fund coverage mandatory for all public buildings and contents, and the law specifically mentioned all public school buildings. It also authorized the Fund officials to cancel or reduce coverage on buildings that are no longer useful for school purposes or which deteriorate to an uninsurable condition,

Special agents of the Division carry out inspections and appraise the insured buildings annually. Classification of buildings does not follow insurance rating bureau classes. Instead, by a ruling of the Division, all properties are rated as 75 per cent insurable or 80-95 per cent insurable. The insurable value of any building or property is the actual cost of the building and content less depreciation. Any property which is given a Triple "A" rating is insured at 80-95 per cent. Should a disagreement arise, three appraisers are consulted to resolve the conflict.[1]

The rate of premiums is set by the Division of Sinking Funds. In no case is the rate to exceed the commercial rate. When the Fund equals 5 per cent of the insurance in force, no premiums will be charged, provided at least five annual payments have been made. Premiums are paid upon demand to the State Budget Board. Five per cent interest per annum is the penalty for failure to pay premiums on time. Premium charges include engineering and inspection services.

The law in South Carolina provides for reinsurance. In the primary state of development, reinsurance was with a commercial company

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[1]Viles, op. cit., p. 47.

but after two large losses were sustained, the company cancelled the policy. The State then established a Reinsurance Sinking Fund. The procedure was to deposit premiums of $180,000 per year from the insurance fund to the reinsurance fund. This fund was in essence a safety valve for the Reinsurance Sinking Fund. All of the assets of this fund were in cash and bonds. At the present time reinsurance is once again placed with a commercial company.[1]

The insurance in force, over $1,017,000,000, is protected by a reserve exceeding $23,000,000 in the Insurance Sinking Fund. Further protection is afforded through reinsurance of fire and extended coverage losses in excess of $150,000; and boiler coverage is reinsured in its entirety.[2]

The same report lists $495,780,964 of insurance in effect on public school property. This represents over half of the total insurance insured by the Sinking Fund. Fire losses and extended coverages paid to public school systems amounted to $563,728.37 for the year 1967 to 1968.[3]

Wisconsin

The State Insurance Fund was created by the Legislature of 1903 for the purpose of insuring uniformly all state property at 90 per cent of its actual value on a mandatory basis. Generally property is

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[1]Report of the State Budget and Control Board, Division of General Services to the General Assembly of South Carolina, June 30, 1968 (Columbia: State Budget and Control Board, 1968), p. 9.

[2]*Ibid.*, p. 10.

[3]*Ibid.*, p. 14.

insured for perils of fire and lightning, extended coverage, and vandalism and malicious mischief.

State fund coverage was extended by the Legislature in 1911 to include property of counties on an optional basis and in 1933 the coverage was further extended to cover the property of towns, cities, villages, school districts, and library boards, also on an optional basis.[1]

Since 1934 the rates for coverage in the fund have been 50 per cent of the rates published by the Fire Insurance Rating Bureau. The Fund is a subscriber to the services of this organization and quarterly fees are paid for this service.[2]

In 1961 a law was passed which provided that when the surplus of the State Insurance Fund exceeds $5,000,000 at the end of any calendar year, the Commissioner of Insurance was to discontinue the collection of premiums on state property and property for which the state is liable.[3] This amount was reduced to $2,000,000 in 1967.[4] Since July 1, 1961, premiums have not been collected on state property, but losses are paid as usual.

Receipts of the fund are deposited with the State Treasurer and invested according to law by the State of Wisconsin Investment Board. Losses and expenses of the fund are certified to the Bureau of Finance and payment is made in the manner usual to all state business.

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[1]General Information on the State Insurance Fund supplied by the Commissioner of Insurance, State of Wisconsin.

[2]*Ibid.*

[3]State of Wisconsin, Laws of 1961, Chapter 191.

[4]State of Wisconsin, Laws of 1967, Chapter 209.

All expenses of the fund including salaries, office rent, supplies, and postage are paid out of the State Insurance Fund.

Withdrawls of surplus have been made by action of the Legislature. Effective July 1, 1955, \$5,000,000[1] was transferred to the general fund and Chapter 224, Laws of 1963, transferred \$3,500,000 from the State Insurance Fund to the general fund. Chapter 209, Laws of 1967, transferred \$3,000,000 from the State Insurance Fund to the general fund.

Chapter 325 of the Laws of 1959 appropriated \$1,700,000 as a loan from the State Insurance Fund to be used exclusively for land purchases, for plans and specifications, and for equipping of district state office buildings. A repayment feature of the law provides for annual payments to the State Insurance Fund of one-twentieth of the amount transferred. Such payments are now being made. Present balance outstanding is \$978,750. There is a provision in the law that if the available balances in the State Insurance Fund are insufficient to meet claims for losses, the whole amount of the loan, or any part thereof, shall be payable immediately.

The Fund has been writing coverage for non-state risks—counties, cities, school districts—under the Public and Institutional Property Form since the introduction of this program into the state in October of 1960. Package policies which include liability coverage are not available in the Fund.[2]

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[1]State of Wisconsin, Laws of 1955, Chapter 385.

[2]General Information on the State Insurance Fund supplied by the Commissioner of Insurance, State of Wisconsin.

Earned premiums for the year ending December 31, 1968, paid entirely by governmental units other than the state—counties, cities, and school districts—were $533,757.09. Losses on state property amounted to $253,814.12 and on other than state property $249,670.80 was incurred. Expenses incurred were $72,036.35. The loss ratio on all perils was 94.3 per cent and the expense ratio was 13.5 per cent. Insurance in force as of December 31, 1968, on state property was $1,016,652,318, on other than state property $970,583,664.[1]

To protect the remaining surplus of the Fund, after transfer of $3,000,000 by Chapter 209, Laws of 1967, the Commissioner of Insurance was authorized with the consent of the Governor to purchase such reinsurance as was necessary to protect the surplus of the Fund or to properly distribute the risk. There is appropriated from the general fund a sum sufficient for the purchase of such reinsurance as is authorized. The reinsurance agreement was entered into for a term of one year from August, 1968, to August, 1969. The agreement provides for $3,000,000 of coverage with a deductible of $2,000,000 on any one loss or in the aggregate during the term of the agreement with losses of less than $5,000 excluded. Consideration is being given to reinsurance of risks in excess of $5,000,000 on an individual basis.[2]

City School Districts Programs of Self-insurance

Self-insurance is not new to schools for many city school systems have been self-insuring for years. School districts which are

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[1] *Ibid.*

[2] *Ibid.*

large enough and of sufficient size to spread the risk and if they are financially able to bear the burden should seriously consider self-insurance. Self-insurance can save the school districts from 30 to 50 per cent of their insurance premium costs plus earn for them interest on their reserve fund.[1]

Four types of self-insurance plans of city schools have been identified:

1. Self Assumption or bear the burden plan. Under this plan the school district carries no insurance on its property or hazards, and sets up no funded reserves. New York City has operated under this plan for many years and found it very economical.

2. Partial Insurance Plan. Under this plan only the most hazardous risks are insured. Fire resistive and fire proof buildings are not insured.

3. Reserve Fund Plan. Under this plan instead of paying premiums to an insurance company the school district yearly sets aside or appropriates a sum of money to be placed in a cumulative reserve fund out of which losses are paid as they occur. The usual technique to go to a full reserve plan is to work up to it by first a deductible plan, then a partial reserve plan, and finally a full reserve plan.

4. Deductible Plan. Under this plan the school determines how large a loss it can absorb from its current budget funds or by special appropriation. In essence, the school district is buying excess insurance and insuring against catastrophic losses. The small losses are

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[1]Robert W. Schaerer, Self Insurance (Chicago: Association of School Business Officials of the United States and Canada, 1965), p. 384.

absorbed by the school district.[1]

Among the cities that have self-insured their properties are Albany, Baltimore, Boston, Chicago, Cincinnati, Cleveland, Columbus, Gary, Montgomery County-Maryland, Milwaukee, Philadelphia, Providence, San Antonio, Seattle, St. Louis, and Worchester.[2]

Montgomery County-Maryland

The Montgomery County-Board of Education fire insurance plan represents a joint venture between the local government and the school system. The plan is designed to protect the local government and the school board against the hazard of fire and extended coverage; this to be accomplished by purchasing commercial insurance coverage with a $100,000 deductible clause; at the same time establishing a cash reserve fund.

The provision for payment of fire losses is as follows:

1. Less than $500. The responsible governing body shall repair the damage and charge such expense to its maintenance account. No claim shall be made against the insurance fund for losses of $500 or less.

2. More than $500, but not in excess of the amount in the insurance reserve fund. The responsible governing body shall repair the damage and make a claim against the insurance fund for the full cost of such repair less $500.

3. More than the amount in the insurance cash reserve fund but not in excess of $100,000. The responsible governing body shall repair

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[1] _Ibid._, p. 386. [2] _Ibid._, p. 387.

the damage and make a claim for the full cost of such repair against the self-insurance fund. The Committee shall arrange to issue certificates of indebtedness, as provided by an act of the County Council, in such amount to pay the difference between the claims and the amount in the insurance reserve fund.

4. More than $100,000. The responsible governing body shall repair the damage and make a claim for the full cost of such repair against the self-insurance fund. The Committee shall make claim against commercial insurance company for such portion of the loss in excess of $100,000. The remaining $100,000 to be provided from the insurance fund.[1]

In 1953 the County Council passed an act authorizing Montgomery County, Maryland, to issue certificates of indebtedness, in an amount not exceeding $500,000 outstanding at any one time, to cover the cost of reconstructing, replacing or repairing property of the County, and/or the Board of Education, damaged or destroyed by fire and other contingencies. It has not been necessary to use this authority.[2]

Annual appropriations are made sufficient to purchase commercial insurance on a full coverage rate for newly acquired locations. This amount is transferred to the fund. The commercial insurance actually purchased is $100,000 deductible which cost considerably less than the amount appropriated. The difference remained in the fund. For 1963, $113,000 was appropriated and $41,000 paid a commercial carrier.[3]

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[1]Brian M. Benson, Self Insurance (Chicago: Association of School Business Officials of the United States and Canada, 1965), p. 374.

[2]*Ibid.*, p. 375. [3]*Ibid.*, p. 376.

Whenever the total book value of cash and securities held by the Trustees of the Insurance Fund shall equal or exceed \$500,000 on the first day of a fiscal year there shall be paid to the appropriation authority as a dividend a sum equal to 8½ per cent of the Reserve for Fire Losses of the Insurance Fund.

The method of selecting the excess insurance carrier is by public competitive bid with advice from an independent insurance consultant. Competitive bidding eliminates the question of favoritism to any agent, broker, or company.

During the eleven year period of 1953-1964 there was a total of \$186,550.46 losses paid of which the Insurance Fund paid \$136,708.78 and commercial insurance companies \$49,841.68. It was estimated that during this period that the Montgomery County's local government and school system saved approximately \$222,558.14 by using the \$100,000 deductible with reserve fund plan.[1]

Seattle School District No. 1

In 1914 the Seattle School District No. 1 discontinued the practice of purchasing fire insurance and set aside by a bookkeeping procedure \$100,000 in the annual budget for fire losses. This allowed the District to pay losses out of the General Fund in case of loss. This procedure was continued until 1931 when legislation was enacted authorizing a school district to establish a separate Insurance Fund for fire losses. Through a tax levy \$84,000 was collected for the fund and later in 1937 and in 1948 transfers from the General Fund totaling

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[1] <u>Ibid</u>., p. 378.

$350,000 were made. Thus, $434,000 was placed in the fund. The money has been continuously invested in U. S. Securities so that the present fund including accrued interest totals $866,434.[1]

Fire losses for the 50-year period of 1914 to 1964 were only $93,867. By comparison the district would have paid out an estimated $1,480,000 in premiums for $50,000 deductible insurance during the fifty years.[2]

A monthly fire inspection is followed and all items or conditions found which could in any manner be conductive toward a fire or accident are noted for immediate correction. This monthly inspection is augmented by a separate periodic joint inspection with a city fire department official.

The officials of the Seattle School District realize that their insurance experience has been extremely fortunate and they are studying the advisability of purchasing reinsurance for protection against major fire losses. However, their basic insurance plan will continue to be a self-insurance program.

Chicago Public Schools

Chicago has followed the No Insurance Plan for property damage risks for many years. The school system carries no insurance, sets up no reserves, and pays for losses incurred out of current revenues.

A review of the fire loss history for the Chicago Public

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[1]Frank M. Brock, Seattle Looks at Self Insurance (Chicago: Association of School Business Officials of the United States and Canada, 1965), p. 379.

[2]Ibid.

Schools was made in 1962, covering a 21-year period, showed a total of $1,630,542 for fire losses. The average annual loss for the 21-year period was $77,645. The total value of buildings and equipment as of December 31, 1961 was $497,995,888. It was noted that to insure all public schools against loss by fire and extended coverage would have cost approximately $750,000 per annum, whereas the average annual fire loss during the 21-year period was only $77,645.[1]

As a part of a total plan of school building modernization and rehabilitation, Chicago has allocated substantial sums to long-range fire prevention programs. For example, expenditures for replacing wooden stairways, removing of wooden wainscoting, and providing metal sash adjoining fire escapes, over a period of 11 years, totals $1,843,774. In 1958, a city ordinance was enacted which required the installation of automatic sprinkler systems in schools of ordinary construction of two or more stories in height. The system was installed at a total cost of $4,033,577. Compliance with this ordinance resulted in a substantial reduction in the risk of total or major losses due to fire in those buildings where greatest vulnerability to fire loss existed.[2]

Chicago makes periodic tests and surveys of relative costs of insurance for various types of coverages, inasmuch as there are dangerous pitfalls in making assumptions on the basis of past experience only. The school officials of Chicago are aware of the fact that the decision of a school district to be a self-insurer should be predicated

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[1]Edwin A. Lederer, Evaluation of No Insurance Plan (Chicago: Association of School Business Officials of the United States and Canada, 1965), p. 381.

[2]Ibid., p. 382.

on factual knowledge rather than on educated guesses. This knowledge must be secured by careful determination of the comparative costs of the types of protection required.[1]

Arguments For and Against State Insurance Funds

There has been much controversy regarding state governments' programs for self-insuring their buildings and contents against the risk of physical loss. It was found, from the literature which was examined on the subject, that authors were either extremely critical or highly commendatory of the principle of state insurance. Some of the general arguments for and against state insurance programs are presented in the following paragraphs of the study.

Arguments Favoring State Insurance Funds

Holy[2] in giving some advantages of a state self-insurance plan reported that school property is less of a fire risk than most other types of buildings for these reasons: (1) education programs include only a few activities of a fire hazard nature; (2) schools have a lower occupancy ratio than most buildings used for other purposes; and (3) schools represent a separation of risks as they are geographically scattered.

In a study covering the possibility of state property insurance for the schools of Kentucky, Gruelle[3] stated that the establishment of

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[1] *Ibid.*, p. 383.

[2] T. C. Holy, "Is Your Fire Insurance Too Costly?" *Nation's Schools*, XXXII (November, 1943), pp. 43-44.

[3] O. P. Gruelle, *State Insurance of Public School Property in Kentucky*, Bulletin No. 3 (Lexington, Kty.: University of Kentucky, 1939), p. 92.

a state insurance plan for public school property and contents would tend to eliminate the competition of the insurance companies for the public school insurance business and would relieve the school administration of the responsibility and embarrassment of having to decide which of the competing agents or companies should write the school policies. He further stated that the propriety of the establishment of state insurance funds is not a question since education is acknowledged to be a function of the state.

Mills listed the following arguments favoring state insurance funds:

1. The state can effect a substantial saving since commercial companies must bear the expense of agent's commissions, advertising, and other related expenses.
2. Premiums paid into a state insurance fund which are invested will, after a fund has been operating over a period of years, provide a surplus which will be sufficient to greatly reduce premium costs or remove them entirely.
3. By insuring with a state fund, additional savings may be effected on insurance of public buildings since most public buildings, due to fire-resistive construction, are likely to have a lower loss ratio than other types of property.
4. Public property that is required by statutory provision to participate in a state fund usually is thereby required to provide adequate coverage against loss by fire and other hazards, whereas if this insurance coverage were left for negotiation with commercial insurance agents, the property may not be insured in the proper amount.
5. By arranging for an adequate initial appropriation, sound management of the state fund, together with adequate reinsurance, the Fund will be able to withstand fire losses without additional legislative appropriations.
6. There is little cause for concern regarding possible misappropriation or diversion of state insurance funds if legislation creating such funds is properly drafted and the officials administering them are properly bonded.[1]

In a detailed study of the five state self-insurance plans now operating, Monger noted these advantages: (1) the schools in the

[1]Mills, op. cit., pp. 163-64.

self-insurance programs covered in the study pay smaller insurance premiums than those deemed necessary by commercial insurance companies; (2) the cost of insurance in the state programs have varied from free insurance to 60 per cent of the commercial rates with 50 per cent being the typical savings; (3) administrative costs of the state programs appear to average 6 to 8 per cent of the premium income; (4) the existing state plans are protecting the investments of public funds as well as protecting the economic values of the school property from loss.[1]

Arguments Against State Insurance Funds

In trying to determine if state insurance programs were practicable, Beyer[2] cited the following as undersirable factors: (1) with a state fund, a fundamental principle of fire insurance underwriting must be disregarded, the principle of selecting risks, all state buildings must be included; (2) for the state to enter a line of private business that is honestly and fairly conducted is basically wrong for any American governing body; (3) a fund cannot be created to take care of a total loss on the most valuable units since it lacks the proper spread of risks to protect from shock losses; (4) experiences with state insurance funds have been far from satisfactory in many instances; (5) the legislature of a state can direct the reserves of the fund into other channels.

Some of the arguments advanced by opponents of self-insurance plans are listed by Hanson as follows:

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[1]Monger, op. cit., pp. 57-59.

[2]Walter F. Beyer, "The Practicability of State Insurance Funds," American School Board Journal, LXXXIII (September, 1931), pp. 48, 116-19.

1. Self-insurance funds provide no guarantee that insurance costs would be reduced, since their limited operations could not expect to realize the competitive economies of the vast insurance companies.
2. A self-insurance fund which is confined to a state or municipality lacks a proper number and spread of risks in order to protect the fund against large losses.
3. Whether or not, or just when, the time will arrive when a state insurance fund would have been established of sufficient size as not to require further premium payments or reduced premiums is problematical. This would depend upon losses sustained and the over-all administration of the state fund.
4. The presence of large "idle" funds invites diversion to other public purposes, thus reducing the ability of the fund to furnish protection.
5. Even where a sound self-insurance program is set up, there is no guarantee that subsequent administrations will continue periodic increments necessary to maintain the soundness of the program.[1]

Strickler[2] lists the following as major criticism of state self-insurance programs: (1) the economies achievable through avoiding payment of commercial insurance premiums are much less than commonly supposed; (2) the insureds are denied the benefits of certain services that accompany commercial insurance relationships; (3) ultimate collapse of the system looms from the eventuality of the very large loss; (4) self-insurance plans fail to incorporate such basic insurance operational principles as adequate selection and rating and proper number and spread of risks; (5) self-insurance constitutes an invasion of government of a field of private enterprise, and such invasion is contrary to public policy and deterimental to the public welfare.

In summary, the self-insurance programs of the five states which are currently operating state insurance funds and those of several

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[1]Hanson, op. cit., pp. 13-14.

[2]Lester B. Strickler, "In Defense of Self-Insurance for State Property," (Corvallis, Oregon: Oregon State University, 1968, mimeographed).

large city school districts appear to be providing adequate insurance protection for their public school property at a more economical rate than could have been provided through commercial insurance companies. Opinion concerning state insurance funds are divided, with some writers extremely critical and others strongly supportive.

CHAPTER IV

PREMIUM-LOSS RATIO FOR LOUISIANA'S PUBLIC SCHOOLS

The ratio of fire loss claims received to premium payments made is known as the premium-loss ratio. This loss ratio is very important as it affects the rates for school property fire insurance. Insurance authorities have stated that so long as the loss ratio does not exceed 50 per cent the insurance companies can do a profitable business.[1]

Commercial companies include public schools with all educational institutions to arrive at the premium-loss ratio. Therefore, the only way it has been possible to calculate the premium-loss ratio for public schools has been to obtain the data from the public schools themselves.

Studies concerning the premium-loss ratio for public schools have been made by writers of dissertations and by the members of the Association of School Business Officials of the United States and Canada, and others. From these studies there is an overwhelming amount of evidence that the fire insurance premium-loss ratio for public schools is well below the 50 per cent which the insurance industry says it must have in order to make a profit.[2] The early studies of Melchior in New York

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[1]Finchum, op. cit., p. 276.

[2]Stephen J. Knezevich and John Guy Fowlkes, Business Management of Local School Systems (New York: Harper and Brothers, Publishers, 1960).

State[1] and Steinhauer in Pennsylvania,[2] among others, point out how little of the school premium dollar paid to companies was ever returned to schools to cover losses.

A summary of five nation-wide studies of the fire insurance premium-loss ratio for public schools is given in Table 1. The Association of School Business Officials of the United States and Canada[3] made three of these studies and sponsored the fourth by Salmon.[4] The fifth was made by Viles[5] for the United States Office of Education. The Association of School Business Officials investigators obtained the data for their studies directly from school districts. The data included in Viles' study was obtained from the State Departments of Education of the various states.

The fire premium-loss ratio for all schools over the nation in the five studies ranged from only 26.9 to 35.3 per cent of total premiums paid, as shown in Table 1. It might be noted that the premium-loss ratio for Louisiana public schools in these same five studies ranged from 13.54 to 84.65 per cent with its premium-loss ratio being below the national average in only the 1931 to 1937 survey. The fire loss-ratio for Louisiana public schools has been high when compared with the national mean fire loss ratios for public schools according to the studies reported in Table 1.

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[1]Melchior, op. cit. [2]Steinhauer, op. cit.

[3]National Association of Public School Business Officials, Insurance Practices and Experiences in City School Districts; An Investigation of Insurance Practices. Association of School Business Officials of the United States and Canada, Insurance Committee Report on School Fire Insurance, 1938-45.

[4]Salmon, op. cit. [5]Viles, op. cit.

TABLE 1

FIRE INSURANCE AND EXTENDED COVERAGE PREMIUM-LOSS RATIOS
FOR PUBLIC SCHOOLS OF THE UNITED STATES AND CANADA
AS REPORTED IN FIVE STUDIES

State	Three Surveys by the ASBO[a]			Salmon[b]	Viles[c]
	1921-30	1931-37	1938-45	1946-55	1948-53
Alabama	30.45	16.61	5.86	20.50	-
Arizona	34.23	.00	.00	43.07	38.0
Arkansas	25.74	74.40	-	.00	43.0
California	24.81	44.79	19.55	41.27	25.2
Colorado	14.08	1.35	13.78	1.06	45.6
Connecticut	14.60	4.20	-	11.91	31.2
Delaware	-	8.30	38.53	-	-[e]
Florida	-	-	.72	19.47	19.7
Georgia	-	65.76	96.21	3.16	28.0
Idaho	-	.00	2.83	20.35	29.5
Illinois	65.96	45.67	45.77	46.77	32.6
Indiana	7.20	18.34	31.26	25.92	19.3
Iowa	30.59	46.51	.35	8.49	28.9
Kansas	-	.00	8.27	43.38	45.6
Kentucky	.00	11.03	.00	32.88	45.5
Louisiana	78.48	13.54	42.46	84.65	54.7
Maine	90.44	1.57	.53	-	13.5
Maryland	-	184.90	3.77	10.16	34.2
Massachusetts	43.56	10.38	5.44	-	33.4
Michigan	17.76	3.13	5.86	20.01	26.0
Minnesota	5.49	12.49	14.49	29.13	16.5
Mississippi	-	-	-	-	45.0
Missouri	27.78	10.95	7.24	3.88	35.7
Montana	63.59	2.35	.00	.00	-[f]
Nebraska	1.59	8.86	37.82	54.24	30.0
Nevada	-	-	-	-	19.6
New Hampshire	-	.00	-	-	-[e]
New Jersey	4.97	1.95	14.60	25.50	24.8
New Mexico	.00	.00	.00	64.07	32.9
New York	33.92	38.88	10.67	24.01	47.2
North Carolina	15.05	144.39	8.99	.00	33.3[f]
North Dakota	-	31.02	-	-	-[d]
Ohio	28.17	13.05	37.58	52.16	25.8
Oklahoma	2.34	24.73	.00	12.85	59.4
Oregon	170.81	120.08	106.76	24.24	27.0
Pennsylvania	20.68	5.63	76.13	42.47	46.6

TABLE 1—Continued

State	Three Surveys by the ASBO[a]			Salmon[b]	Viles[c]
	1921-30	1931-37	1938-45	1946-55	1948-53
Rhode Island	-	.00	-	-	43.2
South Carolina	-	-	-	-	-[d]
South Dakota	16.99	1.74	-	-	53.1
Tennessee	7.64	2.89	-	-	56.3
Texas	19.21	15.09	13.37	29.30	55.6
Utah	-	5.50	7.85	49.52	11.0
Vermont	-	.00	-	-	12.5
Virginia	-	-	-	8.59	46.4
Washington	61.67	41.74	13.47	51.92	34.4
West Virginia	.34	5.02	5.08	.00	23.2
Wisconsin	-	.46	.89	11.67	26.3[f]
Wyoming	.00	14.11	-	-	7.6
Canada	19.08	-	106.79	21.04	-
All States and Canada Total	28.70	26.90	31.90	29.53	35.3

[a]Association of Public School Business Officials, Insurance Committee Report on School Fire Insurance, 1938-45, pp. 39-49.

[b]Salmon, "Fire Insurance Principles and Practices," p. 261.

[c]Viles, *op. cit.*, p. 21.

[d]State operated program.

[e]Data for these states not available to State Department of Education Officials.

[f]Part of insurance carried in state operated program.

Premium payments by the public schools of Louisiana for fire and extended coverage insurance, payments received by the public schools from commercial companies for insured property losses, and premium-loss ratios experienced by the public schools from the 1948-49 fiscal year to the 1967-68 fiscal year are reported in Table 2. The data concerning

TABLE 2

PREMIUM-LOSS RATIO FOR FIRE INSURANCE AND EXTENDED COVERAGE COMPUTED ON ALL LOUISIANA SCHOOL DISTRICTS AS REPORTED TO THE LOUISIANA STATE DEPARTMENT OF EDUCATION FOR A TWENTY-YEAR PERIOD, 1949-1968, INCLUSIVE

Year	Premiums Paid[a]	Loss Payments Received[a]	Ratio
1948-49	$ 665,781.85	$ 227,293.50	34.14
1949-50	819,841.71	69,626.89	8.49
1950-51	995,140.17	352,888.77	35.46
1951-52	1,085,505.11	465,509.55	42.88
1952-53	1,188,311.22	261,447.64	22.00
1953-54	1,397,734.57	433,717.38	31.03
1954-55	1,476,483.97	377,247.51	25.55
1955-56	1,327,755.63	143,236.57	10.79
1956-57	1,309,927.85	237,069.24	18.10
1957-58	1,370,626.64	1,620,514.00	118.28
1958-59	1,440,746.22	492,733.30	34.20
1959-60	1,638,766.65	593,649.66	36.23
1960-61	1,804,935.60	474,462.51	26.29
1961-62	1,754,434.26	454,965.30	25.93
1962-63	1,748,243.95	545,399.16	31.20
1963-64	1,848,461.44	728,463.52	39.41
1964-65	2,174,049.95	899,222.61	41.36
1965-66	2,027,355.87	828,444.81	40.86
1966-67	2,693,275.34	6,563,857.16	243.71
1967-68	3,086,758.67	675,887.63	22.00
Total	$31,854,136.67	$16,445,636.71	51.65

[a]As reported by the State Department of Education in the Annual Report for each school session.

premiums paid and loss payments received was obtained from the appropriate Annual Report which was prepared by the State Department of Education of Louisiana.

The premium payments over this 20-year period which provided for fire and extended coverage insurance amounted to $31,854,136.67, while loss payments due to fire and extended coverage were $16,445,636.71. The premium-loss ratio for this 20-year period was 51.65 per cent which is comparable with the premium-loss ratio for Louisiana in Viles' study.

The premium-loss ratios ranged from a low of 8.49 per cent for the fiscal year 1948-49 to a high of 243.71 per cent for the fiscal year 1966-67. The unusually high loss ratio for the 1966-67 year was due largely to the wide-spread damage to public school buildings in the southern portion of the state by Hurricane Betsy. Only one other year, 1957-58, was the premium-loss ratio higher than 100 per cent and that was the year that Hurricane Audrey hit the coast of Louisiana.

In Table 3 are tabulated the insurance premiums paid, loss payments received, and the premium-loss ratios, by individual school districts for the 20-year period. The school districts are grouped by the Public Service Commission Districts in which they reside.

The premium-loss ratios of the individual school districts for the 20-year period ranged from a low of 1.00 per cent for the West Feliciana Parish School District to a high of 230.44 per cent for the Plaquemines Parish School District. There were nine school districts whose premium-loss ratios for the 20-year period were greater than 100 per cent. With the exception of the Monroe City School District, all sustained considerable damage to school property from either Hurricane Audrey in 1957 or Hurricane Betsy in 1966.

From further analysis of the fire loss and extended coverage experience of the school districts over the 20-year period, it may be seen from Table 3 that every school district in the state of Louisiana

TABLE 3

PREMIUM-LOSS RATIOS FOR FIRE INSURANCE AND EXTENDED COVERAGE FOR PUBLIC SCHOOL DISTRICTS OF LOUISIANA FOR A TWENTY-YEAR PERIOD, 1949-1968, INCLUSIVE

School District	Premium Paid[a]	Loss Payments Received[a]	Ratio
	First Public Service Commission District		
Jefferson	$1,332,077.24	$1,754,887.97	131.74
Orleans	2,674,497.17	711,761.07	26.61
Plaquemines	477,276.84	1,099,820.56	230.44
St. Bernard	389,683.44	727,353.99	186.65
St. Charles	431,894.22	343,977.22	79.64
St. James	126,579.55	152,693.98	120.63
St. Johns	118,134.02	258,425.71	218.76
Total	$5,550,142.48	$5,048,920.50	90.97
	Second Public Service Commission District		
Acadia	$ 608,700.20	122,800.59	20.17
Allen	343,045.35	64,381.01	18.77
Ascension	289,538.81	125,553.16	43.36
Assumption	268,397.36	149,101.52	55.55
Avoyelles	386,743.16	181,097.16	46.83
Beauregard	433,142.27	268,333.42	61.95
Calcasieu	1,194,809.03	466,318.45	39.03
Cameron	347,195.97	781,255.06	225.02
East Baton Rouge	1,491,948.88	899,690.18	60.30
East Feliciana	257,858.39	116,378.47	45.13
Evangeline	388,326.59	643,795.28	165.79
Iberia	352,614.31	71,058.78	20.15
Iberville	547,405.22	157,210.58	28.72
Jefferson Davis	594,906.20	106,189.27	17.85
Lafayette	642,826.04	275,548.92	42.87
Lafourche	671,908.13	910,317.56	135.48
Livingston	295,713.81	194,175.37	65.66
Pointe Coupee	194,148.40	21,373.09	11.01
St. Helena	161,666.34	115,708.73	71.16
St. Landry	663,364.84	141,176.46	21.28
St. Martin	206,442.98	14,259.06	6.91
St. Mary	496,097.16	29,889.33	6.02
St. Tammony	634,548.16	222,239.90	35.02
Tangipahoa	769,645.62	422,956.30	54.95

TABLE 3—Continued

School District	Premium Paid[a]	Loss Payments Received[a]	Ratio
Terrebonne	$ 671,807.17	$ 247,541.91	36.85
Vermilion	297,201.01	52,429.22	17.64
Washington	385,220.53	170,574.78	44.28
West Baton Rouge	263,502.35	137,143.75	52.05
West Feliciana	121,480.23	1,215.39	1.00
City of Bogalusa	218,138.79	23,648.57	10.84
Total	$14,198,343.30	$7,133,361.27	50.24
Third Public Service Commission District			
Bienville	$ 398,507.44	$ 96,246.61	24.15
Bossier	609,361.51	234,156.28	38.43
Caddo	1,120,309.30	216,783.73	19.35
Caldwell	153,943.99	2,910.63	1.89
Catahoula	183,971.66	7,013.69	3.81
Claiborne	276,089.08	61,828.34	22.39
Concordia	290,530.44	75,223.78	25.89
DeSoto	381,522.11	132,022.28	34.60
East Carroll	215,045.11	134,240.07	62.42
Franklin	344,503.20	42,883.05	12.45
Grant	336,579.68	166,542.68	49.48
Jackson	266,709.16	139,226.09	52.20
LaSalle	226,152.60	39,243.65	17.35
Lincoln	440,539.95	56,780.46	12.89
Madison	243,648.73	20,820.13	8.55
Morehouse	617,901.16	190,380.55	30.81
Natchitoches	516,261.98	177,936.02	34.47
Ouachita	1,069,974.45	544,901.24	50.93
Rapides	1,139,769.16	630,283.96	55.30
Red River	119,829.22	25,193.10	21.02
Richland	367,203.66	208,141.63	56.68
Sabine	329,722.99	140,283.06	42.55
Tensas	172,053.59	39,711.17	23.08
Union	246,815.73	61,823.16	25.05
Vernon	509,323.13	93,864.81	18.43
Webster	644,148.26	76,479.15	11.87
West Carroll	338,179.84	333,928.87	98.74
Winn	245,571.89	12,465.92	5.08

TABLE 3—Continued

School District	Premium Paid[a]	Loss Payments Received[a]	Ratio
City of Monroe	$ 301,481.87	$ 302,040.83	100.19
Total	$12,105,650.89	$ 4,263,354.94	35.22
State Total	$31,854,136.67	$16,445,636.71	51.65

[a]As reported by the State Department of Education in the Annual Report for each fiscal year.

reported having sustained losses. However, six school districts in Louisiana sustained damages of less than one year's annual premium. Also, thirty-five school districts, which is over 50 per cent of the total school districts in Louisiana, had total losses of less than five years' premium for the 20-year period.

The composite premium-loss ratio of the three public service commission districts are shown in Table 3. The premium-loss ratio of the First Public Service Commission District of 90.97 per cent as compared to the premium-loss ratio of 35.54 per cent of the Third Public Service Commission District gives an indication of the extent to which the hurricane damage contributes to the premium-loss ratio of the state as a whole. The First Public Service Commission District is composed of the seven parishes along the coast near the mouth of the Mississippi River. The school districts in this public service district have received more damage to school property from hurricanes than the school districts in either of the other two public service districts. The Third Public Service Commission District is composed of the parishes in

North Louisiana where virtually no damage to school property has ever been sustained from hurricanes. The school districts in the Second Public Service Commission District, which had a composite premium-loss ratio of 50.24 per cent, are about equally divided in number as to those which have received substantial damage to school property from hurricanes and those which have substained little or no damage from hurricanes.

In summary, during the 20-year period of 1948-49 to 1967-68 fiscal year, the sixty-six school districts of Louisiana made premium payments for property insurance in the amount of $31,854,136.67 and were paid $16,445,636.71 in indemnities with a premium-loss ratio of 51.65 per cent. When this premium-loss ratio of 51.65 per cent is compared with the established standard of 50 per cent, as previously given in this chapter, we must conclude that the insurance costs charged by commercial companies have not been excessive for the public school districts of Louisiana as has been reported in earlier studies for other states.

CHAPTER V

PRESENTATION OF CRITERIA, DEVELOPMENT OF STATE PLANS AND COMPARATIVE ANALYSIS

Since this study was concerned with the comparative analysis of alternate plans for securing protection of property of school districts of Louisiana, it was first necessary to develop alternate plans to the present commercial insurance coverage. Two alternate plans were projected: a State-operated Insurance Fund and a State Self-insurance Reserve Fund. It was also necessary to develop or identify criteria for comparing the three plans of insurance coverage.

A review of literature revealed that the criteria for the successful operation of a state insurance fund as developed by Stone[1] were comprehensive and well suited for use in this present study. Stone's criteria were developed after a detailed study of the five State Insurance Funds and were validated by submission to the Directors of the five State Insurance Funds. References from other writers which support or reinforce Stone's criteria are cited where appropriate.

State Fund Criteria

The Criterion of Financial Capacity

The criterion of financial capacity pertains to the willingness

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[1]Stone, op. cit.

and ability of a state to retain losses. This criterion has implications for necessary initial state appropriations and long-range school district or state payment capability and willingness to such a Fund.

Not only must there be initial capacity for Fund establishment, there must also be continuing capacity for Fund maintenance. Both the initial and continuing participation of schools in a Fund should be high to insure continuing capacity of the Fund. Such participation could only be achieved through Fund attractiveness, if participation were optional, or through mandatory participation by law.

The Criterion of Catastrophe Protection

Except in unusual circumstances, a State Fund insurance program must have catastrophe protection. It is probably advisable that a State Fund, at least initially, reinsure some of its risks in order to allow it to maintain lower reserves.

Due to the high potential risk of severe damage from hurricanes along the coastal region of Louisiana, any State Insurance Fund for the protection of school property in Louisiana must pay careful attention to this criterion. The fiscal year of 1966-67 showed loss payments to Louisiana school districts of $6,563,857.16. Without catastrophe protection one severe hurricane could use up a sizable reserve and might put a State Insurance Fund in dire financial straits.

Generally reinsurance can be purchased in three types: pro-rata, excess of loss (deductible), and catastrophe. It must be stated that for a State Fund, the reinsurance must be "tailor-made" or serious trouble could result from over-exposure.[1]

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[1]*Ibid.*, p. 99.

The Criterion of Risk Spread

The criterion of risk spread refers to the adequacy of the Fund's exposure distribution. This criterion gives rise to the requirements of mass, homogeneity, and independence of Fund insured risks. In theory, there must be sufficiently large numbers of exposure units, with each unit possessing the same degree of exposure to loss. If loss occurs to one unit, it should not occur from the same cause to another unit.

According to Linn and Joyner:

> The number of risks to be covered should be sufficiently large to permit the orderly working of the law of averages. An insufficient number of risks means a lack of spread of risk. Risks should be physically independent of one another to avoid a catastrophe or general conflagration.[1]

The law of large numbers is defined by Angell as:

> The greater the number of exposure units, the nearer the actual results will approach the underlying probability.[2]

By independence, we refer to units being so distinct from each other that the occurrence of loss to one unit should not change the probability of loss to another. In practice the principle of independency is never completely attained, but the Fund's concern should be in the elimination of the incalculable catastrophic hazard which may cause loss to several or all the units because of their inter-dependence.

These principles would seem to favor mandatory State Fund coverage for schools and imply the need for reinsurance.

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[1]Linn and Joyner, op. cit., p. 74.

[2]Frank J. Angell, Insurance Principles and Practices (New York: The Ronald Press Company, 1959), p. 63.

The Criterion of Reserving

The criterion of reserving refers to the setting aside of funds in order to have adequate funds available when they are needed. An abrupt change from commercial insurance to a State Fund should only be made if sufficient reserve has been developed for large and unexpected losses.

The State Funds which are presently operating determine the amount of reserve fund which should be set aside by at least three different methods: (1) a certain reserve maximum amount is stipulated by law, (2) a reserve is set aside in relation to the largest individual risk, and (3) a reserve is set aside in relation to the net risk. Whichever method is used, the final test is in the reserve adequacy. The reserve fund should be adequate to absorb a large loss without bankrupting the Fund.

The Criterion of Inviolability

The reserve funds must be restricted and used only for payment of losses. A seemingly idle insurance reserve fund could be a source of temptation to other governmental agencies seeking readily available money for other purposes. Tampering and transfers from the Fund should be prohibited by law.[1]

Legislative mandate protecting the Fund from "raiding" from all quarters, no matter how just the cause, would need be obtained. This statement is made with full realization that one legislature is not bound by acts of a previous legislature.

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[1]Knezevich and Fowlkes, op. cit., p. 277.

The Criterion of Service Provisions

The provision of efficient and specialized services of many types by a Fund to school districts would be essential. Implicit in this criterion are the needs for Fund provision for rapid and efficient claims adjusting services, assistance in the planning of school district insurance programs including insurable value determination, assistance in planning new buildings, and over-all loss prevention services.

The Criterion of Cost

The criterion of cost to the state and its schools is the pre-eminent criterion to which all other State Fund criteria are related.[1] The initial and continuing cost of a State Fund should be within the financial capacity of the state and its schools. The premiums charged schools in the aggregate should be less than that charged for comparable individual insurance.

Any amount of premium reduction would depend on (1) the loss experiences of the schools, (2) favorable physical characteristics of their exposure units, (3) expense savings resulting from grouping, (4) certain tax and acquisition benefits, (5) any added economies of Fund operation, and (6) some combination of these factors.[2]

A State School Insurance Fund must benefit economically the public schools of the state, hence the taxpayers of the state, for its existence to be justifiable. It is assumed that direct cost benefit could produce indirect benefit to the schools' educational programs.

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[1]Stone, *op. cit.*, p. 92.

[2]*Ibid.*

According to Johns and Morphet:

> It is agreed that it is a desirable objective of school business administration to purchase the maximum amount of needed protection at the minimum cost, then the provision for state insurance is sound public policy.[1]

Projected Programs of State Insurance for Louisiana

Guide lines for two programs for state insurance in Louisiana were developed from the criteria and from the study of the state plans now in operation. The guide lines are not to be considered as statutory models, but rather skeletal frameworks around which effective statutes may be written.

A State-operated Insurance Fund

Guide Lines

1. The State of Louisiana shall insure public school district property against loss by fire, and including extended coverage.

2. The Fund shall be administered by a division under the State Department of Education.

3. There shall be an initial reserve fund of three million dollars appropriated by the legislature from the general fund of the state. This appropriation is in the form of a loan to be repaid to the general fund of the state in three installments of one million dollars each when the reserve fund shall have accumulated one million dollars in excess of the original three million dollars appropriated.

4. School districts shall pay annual premiums at the rate determined by the Insurance Division of the State Department of Education,

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[1]Roe L. Johns and Edgar L. Morphet, Financing the Public Schools (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960), p. 522.

which in no case shall exceed 80 per cent of the current rates established by the Louisiana Rating Bureau. These rates shall be adjusted from time to time to provide insurance for the local school districts at the lowest cost possible.

5. A reinsurance contract shall be purchased which insures the excess of its liability above $200,000 for each and every location, and each and every catastrophe in which loss is suffered.

6. The Fund shall be mandatory for every public school district in the state of Louisiana.

7. The Division of Insurance of the State Department of Education shall provide for inspection of buildings at least once every two years. Local authorities shall be required to comply with the recommendations of the State Department of Education.

8. Local school districts shall annually furnish complete inventories of buildings and contents with an estimate of current replacement values.

9. The sum of $75,000 per year shall be appropriated by the Legislature for administrative costs for the first two years of operation. Thereafter the cost of operation shall be borne by the Fund and shall be limited to 10 per cent of the premium written in each year.

10. All premiums and earnings that are not needed for the payment of losses or administrative costs in a particular year shall be invested in accordance with statutory provisions of the state. No part of the insurance fund may be used for any purpose other than the payment of losses and administrative costs.

11. All loss adjustments shall be made by the Director of the

Division of Insurance or his agent. In case of disagreement between the Director of Insurance and the school district, a third person shall determine the loss. Inability to agree upon a third person shall cause the Governor of the state to appoint a third person, whose decision shall be binding.

12. All premiums must be paid within sixty days of effective date. Delinquent premiums shall be deducted from state funds due the school district.

13. Policies shall be written for periods of five years with five equal premium payments to be made annually. All policies shall be written for 100 per cent of the insurable value of the property.

14. In the event that losses exceed the reserve fund during any one year, the plan shall provide for advance of monies from the general fund of the State to bring the reserve fund to $3,000,000. Such advance payments shall be repayable to the general fund of the State in the same manner as the original loan of $3,000,000.

15. The Division of Insurance of the State Department of Education shall employ well-trained, experienced, and competent personnel who shall be responsible for providing rapid and efficient claim adjusting services, assisting in planning new buildings, and providing overall loss prevention services.

16. The Division of Insurance of the State Department of Education shall be empowered to adopt rules and regulations necessary for the efficient operation of the Fund.

A State Self-insurance Reserve Fund

Guide Lines

1. The State of Louisiana shall insure public school district property against loss by fire, and including extended coverage at 100 per cent of insurable value.

2. The Fund shall be administered by a division under the State Department of Education.

3. There shall be an initial reserve fund of three million dollars appropriated by the legislature from the general fund of the State. This appropriation is in the form of a loan to be repaid in three installments of one million dollars each when the reserve fund shall have accumulated one million dollars in excess of the original three million dollars appropriated.

4. The sum of two dollars per average daily membership of the pupils in the public schools of Louisiana shall be appropriated by the State Legislature each year to the State Self-insurance Reserve Fund to cover loss payments and annual administrative costs. When the reserve of the Fund reaches the sum of 5 per cent of the total insurance in force, then annually thereafter the legislature shall proportionately decrease the payment per average daily membership to an amount which will be sufficient to maintain the reserve at 5 per cent of the total insurance in force.

5. Administrative costs shall be limited to 10 per cent of the combined annual appropriation and earnings of the plan.

6. A reinsurance contract shall be purchased which insures the excess of its liability above $200,000 for each and every location,

and each and every catastrophe in which loss is suffered. As the reserve fund increases the need for reinsurance shall be reevaluated.

7. The Fund shall be mandatory for every public school district in the State of Louisiana.

8. The Division of Insurance of the State Department of Louisiana shall provide for inspection of buildings at least once in every two years. Local authorities are required to comply with the recommendations of the State Department of Education.

9. Local school districts shall annually furnish complete inventories of buildings and contents with an estimate of current replacement values.

10. All loss adjustments shall be made by the Director of the Division of Insurance or his agent. In case of disagreement between the Director of Insurance and the school district, a third person shall determine the loss. Inability to agree upon a third person shall cause the Governor to appoint a third person, whose decision shall be binding.

11. All appropriations and earnings that are not needed in a given year for payment of losses or administrative costs shall be invested in accordance with statutory provisions of the State. No part of the insurance fund may be used for any purpose other than the payment of losses and administrative costs.

12. In the event that losses exceed the reserve fund during any one year, the plan shall provide for advance of monies from the general fund of the State to bring the reserve fund to $3,000,000. Such advance payments shall be repayable to the general fund of the State in the same manner as the original loan of $3,000,000.

13. The Division of Insurance of the State Department of Education shall employ well-trained, experienced, and competent personnel who shall be responsible for providing rapid and efficient claim adjusting services, assisting in planning new buildings, and providing overall loss prevention services.

14. The Division of Insurance of the State Department of Education shall be empowered to adopt rules and regulations necessary for efficient operation of the Fund.

A Comparative Analysis of Three Methods of Securing Protection

The comparative analysis of three different methods of securing protection of property for public school districts of Louisiana—commercial insurance, state-operated insurance fund, and state self-insurance reserve fund—was based on the following identified criteria categories: (1) financial capacity, (2) catastrophe protection, (3) risk spread, (4) reserving, (5) inviolability, (6) service provisions, and (7) cost.

Category of Financial Capacity

Financial capacity pertains to the willingness and ability of a state or company to retain or pay for losses sustained. There is no question concerning the ability and willingness of commercial companies to provide insurance protection on the public school property of Louisiana. They have been providing this protection for many years and have never given any indication of not wishing to continue to do so in the future.

The ability and willingness of the State of Louisiana to provide protection for its public school property through a state insurance plan can be best assessed by making comparisons between Louisiana and the five states presently operating state plans successfully, with respect to factors which can be considered indicators of willingness and ability.

Ability to pay for insurance losses may be said to be related to size of population and per capita income. Willingness may be judged on the basis of the degree of effort now being made to support governmental services, as indicated by per capita total general revenue and per pupil expenditures for public education.

As will be seen from an examination of Table 4, Louisiana when compared with the five states which are presently operating state plans ranks third (among the six states, including Louisiana) in population, fourth in per capita income, third in per capita general revenue of state and local governments, and second in estimated public school current expenditure per pupil in average daily ttendance. Only Wisconsin ranks higher than Louisiana in all four categories. North Dakota and North Carolina rank higher than Louisiana in two categories, but each has a lower per pupil expenditure than Louisiana. Louisiana ranks higher in all four categories than two of the states, Alabama and South Carolina, which are now successfully operating state insurance plans.

It can be safely concluded from these comparisons that the State of Louisiana would be able to provide adequate protection through a state insurance fund and that the people of the state could be expected to make the necessary effort to finance the program provided factors not related to fiscal soundness did not intervene. Also, the fact that

TABLE 4

A COMPARISON BETWEEN LOUISIANA AND THE FIVE STATES PRESENTLY OPERATING STATE INSURANCE PLANS SUCCESSFULLY WITH RESPECT TO FOUR FACTORS WHICH CAN BE CONSIDERED INDICATORS OF WILLINGNESS AND ABILITY TO PAY FOR GOVERNMENTAL SERVICES

State	Estimates of Total Resident Population July 1, 1969[a]		Per-Capita Personal Income, 1968[b]		Per-Capita Total General Revenue of All State and Local Governments, 1967-68[c]		Estimate Current Expenditure for Elementary and Secondary Schools per Pupil in ADA, 1968-69 (Revised)[d]	
	Number	Rank	Amount	Rank	Amount	Rank	Amount	Rank
Louisiana	3,745,000	3	$2,634	4	$480.60	3	$619	2
Alabama	3,531,000	4	2,337	6	374.02	4	398	6
North Carolina	5,205,000	1	2,664	3	362.97	5	510	4
North Dakota	615,000	6	2,730	2	601.51	1	585	3
South Carolina	2,692,000	5	2,380	5	326.11	6	498	5
Wisconsin	4,233,000	2	3,363	1	539.03	2	759	1

[a]National Education Association, Rank of the States, 1970, Research Report 1970-R1 (Washington, D. C.: Research Division, National Education Association, 1970), p. 7.

[b]*Ibid.*, p. 31. [c]*Ibid.*, p. 37. [d]*Ibid.*, p. 57.

Louisiana public school districts spent \$3,086,758.67[1] for property and extended coverage insurance out of total expenditures of \$584,462,272.94[2] during the fiscal year of 1967-68, which was only approximately one half of one per cent of their total expenditures, further supports the contention that the State of Louisiana would be able to provide adequate protection through a state insurance fund if the legislature were willing to pass the appropriate legislation.

Category of Catastrophe Protection

The need for a state-operated insurance fund or a state self-insurance reserve fund to provide catastrophe protection has been stressed previously. It was also pointed out that generally reinsurance can be purchased in one of three types: pro-rata, excess of loss (deductible), and catastrophe.

All five of the states which presently provide state wide public property school insurance have been able to purchase reinsurance for catastrophe protection. South Carolina's State Insurance Program has a reinsurance contract providing fire and extended coverage insurance with a deductible of \$150,000 per loss occurrence.[3] The North Carolina Public School Insurance Fund reinsurance contract insures the excess of its liability above \$200,000 for each and every location, each and every

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[1] One Hundred Nineteenth Annual Report for the Session 1967-68, Bulletin No. 1141 (Baton Rouge, La.: State Department of Education of Louisiana, 1969), p. 36.

[2] *Ibid.*, p. 8.

[3] Report of the State Budget and Control Board, Division of General Services to the General Assembly of South Carolina, June 30, 1968, *op. cit.*, p. 9.

occurrence of loss.[1]

Since North Carolina was the only state-operated insurance program which was limited to public elementary and secondary school property, as called for in this study, its plan for catastrophe protection was followed. Also, Mr. Winborne, Director of the Division of Insurance of North Carolina, stated that its plan of reinsurance had worked very satisfactorily for North Carolina.[2]

Commercial insurance companies have long recognized the need for catastrophe protection and all have well established plans of reinsurance for catastrophe protection.

Category of Risk Spread

There is no question of the ability of commercial companies to provide for the spread of their risks because of the large number of companies which insure property in Louisiana and because most companies are not limited in their operations to any one state or region.

Since the proposed state-operated insurance fund and the state self-insurance reserve fund call for mandatory Fund coverage, the risks would be distributed throughout the entire State of Louisiana. Such mandatory state wide coverage has provided adequate homogeneity and independence of risk to assure the success of the five state plans presently in operation, and is deemed to satisfy the category of risk spread in the proposed state plans.

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[1]Winborne, letter.

[2]Winborne, telephone interview on April 24, 1970.

Category of Reserving

It is difficult to ascertain the initial amount of reserving necessary for a State Fund which in effect, is underwritten by the state which has a vast reserve. Once fully operational, some Funds attempt to work toward maintenance of a reserve of approximately 5 per cent of the total Fund-retained risks.[1] At Fund inception however, this practice is not followed. South Carolina maintained a reserve of 2 per cent of the Fund-retained risks for its first twenty years of operation. Alabama and North Dakota, after many years of operation, currently have reserves of approximately 1.5 per cent and 2.0 per cent of retained risks respectively.[2] North Carolina established its reserve at Fund inception in the amount of two million dollars. All state insurance funds must have adequate reserves upon which to draw at inception when the Fund could experience a higher expense and loss ratio than would be anticipated after it was fully operational.

It appears that an initial reserve appropriation of three million dollars would be adequate when taking in consideration that a reinsurance contract shall be purchased which insures the excess of its liability above $200,000 for each and every location, and each and every occurrence of loss.

As for commercial insurance companies, state statutes control the amount of reserve each company must maintain if they do business in Louisiana, and such reserve have proved to be adequate.

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[1] Stone, op. cit., p. 141.

[2] Ibid.

Category of Inviolability

Only to the extent that statutes would mandate inviolability at the time of Fund inception and to the extent that the taxpayers and educators could offer influence to maintain inviolability, would this criterion be met satisfactorily by a State-operated Insurance Fund or a State Self-insurance Reserve Fund.

Category of Service Provision

There would be a possibility for broadened and more specialized services to be offered to the school districts through a specialized insurer such as a State Fund. Only to the extent that service efforts were more specialized and personalized would the State-operated Insurance Fund or the State Self-insurance Reserve Fund operate more effectively in this area than commercial insurers.

Category of Cost

Comparisons were made of the costs of protecting the physical property in the public school districts of Louisiana by alternate methods—commercial insurance, state-operated insurance fund, and state self-insurance reserve fund. Tables were constructed showing the estimated experiences of operating a state-operated insurance fund and a state self-insurance reserve fund if all risks had been assumed during the past twenty-year period of 1949 through 1968. The cost experiences of commercial insurance for this same period were shown in Table 2 in the preceding chapter.

State-operated Insurance Fund

The estimated cost experiences of operating a State-operated

Insurance Fund for Louisiana is shown in Table 5. Column 1 represents 80 per cent of the actual premiums paid by the school districts of Louisiana as reported in the Louisiana Annual Reports for the fiscal years 1949 through 1968.

Column 2 is calculated as 15 per cent of Column 1. Fifteen per cent is the approximate rate of the combined administrative costs of 10 per cent and reinsurance cost of 5 per cent experienced by the North Carolina Fund.[1] Mr. Winborne, Director of the Division of Insurance of North Carolina, stated that it was his opinion that a State-operated Insurance Fund in Louisiana would be able to purchase a reinsurance contract which insures the excess of its liability above $200,000 for each and every location, each and every occurrence of loss, such as North Carolina uses, at approximately the same percentage of the premium charged the school districts as has been their experience in North Carolina even though there might exist a greater threat of damage from hurricanes in Louisiana. The basis of his opinion was that the added risk would be reflected in the premium charged the individual school districts in Louisiana.[2]

Column 3 is the actual amount paid by commercial insurance companies to the public schools of Louisiana for insured porperty losses.

Column 4 is the annual increment from operation which is derived by subtracting the sum of Column 2 and Column 3 from Column 1.

Column 5 is derived by multiplying Column 6 by 5 per cent.

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[1]Public School Insurance Fund Statement of Comparative Data 1950 to 1968, op. cit.

[2]Winborne, telephone interview on April 24, 1970.

TABLE 5

THE ESTIMATED EXPERIENCES OF THE PROJECTED STATE-OPERATED INSURANCE FUND FOR THE PUBLIC SCHOOLS IN LOUISIANA, HAD SUCH A FUND BEEN IN OPERATION FROM 1949 to 1968

Fiscal Year	80% of Premium Payments (1)	Adminis- trative Cost (2)	Actual Losses Paid Out (3)	Annual Increment from Operations (4)	Interest Earned on Investments (5)	Accumula- tive Reserve (6)
1948-49	$ 607,625[a]	$ 101,631[b]	$ 227,293	$ 278,701	$ 150,000	$ 3,428,701
1949-50	730,873[a]	107,793[b]	69,627	553,453	171,385	4,153,539[c]
1950-51	796,112	119,417	352,889	323,806	157,677[d]	3,635,022
1951-52	868,404	130,261	465,509	272,634	181,751	4,089,407[c]
1952-53	950,649	142,597	261,448	546,604	154,470[d]	3,790,481
1953-54	1,118,188	167,728	433,717	516,743	189,524	4,496,748[c]
1954-55	1,181,187	177,178	377,247	626,762	174,837[d]	4,298,347
1955-56	1,062,205	159,331	143,236	759,638	214,917	5,272,902
1956-57	1,047,942	157,191	237,069	653,682	263,645	6,190,229
1957-58	1,096,501	164,475	1,620,514	-688,488	309,511	5,811,252
1958-59	1,152,597	172,890	492,733	486,974	290,563	6,588,789
1959-60	1,311,013	196,652	593,650	520,711	329,439	7,438,939
1960-61	1,443,948	216,592	474,462	752,894	371,947	8,563,780
1961-62	1,403,547	210,532	454,965	738,050	428,189	9,730,019
1962-63	1,398,595	209,789	545,399	643,407	486,501	10,859,927
1963-64	1,478,769	221,815	728,464	528,409	542,996	11,931,332
1964-65	1,739,240	260,886	899,223	579,131	596,567	13,107,030
1965-66	1,621,885	243,283	828,445	550,157	655,352	14,312,539
1966-67	2,154,620	323,193	6,563,857	-4,732,430	715,627	10,295,736
1967-68	2,469,407	370,411	675,888	1,423,108	514,787	12,233,631
Total	$25,633,307	$3,853,645	$16,445,637	$5,333,946	$6,899,685	$12,233,631

[a]Includes $75,000 for administrative expense.

[b]Includes reinsurance cost estimated at 5% of premium payments.

[c]Reduced by $1,000,000 for repayment of loan.

[d]Calculated after the reserve fund had been reduced by $1,000,000.

Column 6 is the accumulative reserve and was derived by adding Column 4 and Column 5.

An examination of Table 5 reveals that in all years except 1957-58 and 1966-67, the increase in the accumulative reserve of the Fund was substantial. The estimated accumulative reserve at the end of the fiscal year of 1967-68 was $12,233,631. It should be noted that the accumulated reserve was approximately one half of the total estimated premium which would have been paid by the school district if the Fund had been in operation during this twenty-year period. To allow an added measure of conservatism in the calculation, no credit was given for reinsurers claim payments which probably would have been a substantial amount, particularly in the fiscal years of 1957-58 and 1966-67.

It should be noted that the estimated reserve for the State-operated Insurance Fund was accumulated using a premium rate of only 80 per cent of the actual premiums paid by the school districts to insurance companies during this twenty-year period. Had a premium rate of 100 per cent been used, the reserve would have been increased by an additional $6,220,830. It is estimated that the annual interest earned on investments would exceed the annual administrative expense by the first year if the Fund was started with an initial reserve of $3,000,000.

Based on the assumption that the Projected State-operated Insurance Fund had been established in fiscal year 1948-49 and that the percentage of premiums charged for administrative cost and the rate of interest on investments are realistic, the public school districts of Louisiana could have saved approximately $18,454,461 by using the Projected State-operated Insurance Fund for the protection of its public school property during the twenty-year period.

State Self-insurance Reserve Fund

The estimated cost experiences of operating a State Self-insurance Reserve Fund for Louisiana is shown in Table 6. The average daily membership for the public schools of Louisiana was taken from the appropriate Louisiana Annual Report and is shown in Column 1.

Column 2 is derived by multiplying Column 1 by two dollars.

Column 3 is 15 per cent of Column 2. Fifteen per cent is the approximate rate of the combined administrative costs of 10 per cent and reinsurance cost of 5 per cent experienced by the North Carolina Fund.

Column 4 is the actual amount paid by commercial insurance companies to the public schools of Louisiana for insured porperty losses.

Column 5 is the annual increment from operation which is derived by subtracting the sum of Column 3 and Column 4 from Column 2.

Column 6 is derived by multiplying Column 7 by 5 per cent. Five per cent is the approximate rate of interest earned on investments by the North Carolina Fund.

Column 7 is the accumulative reserve and is derived by adding Column 5 and Column 6.

An examination of Table 6 reveals that in all years except 1957-58 and 1966-67, the increase in the accumulative reserve of the Fund was substantial. The estimated accumulative reserve at the end of the fiscal year of 1967-68 was $12,862,621. It should be noted that the accumulated reserve was approximately one half of the total estimated premiums which would have been paid by the school districts if the Fund

TABLE 6

THE ESTIMATED EXPERIENCES OF THE PROJECTED STATE SELF-INSURANCE RESERVE FUND FOR THE PUBLIC SCHOOLS IN LOUISIANA, HAD SUCH A FUND BEEN IN OPERATION FROM 1949 TO 1968

Fiscal Year	Average Daily Membership (1)	Premium Payments (2)	Administrative Cost (3)	Actual Losses Paid Out (4)	Annual Increment from Operation (5)	Interest Earned on Investment (6)	Accumulative Reserve (7)
1948-49	434,922	$ 869,844	$ 130,477	$ 227,293	$ 512,074	$ 150,000	$ 3,662,074
1949-50	463,992	927,984	139,198	69,627	719,159	183,104	4,564,437[a]
1950-51	475,808	951,616	142,742	352,889	455,985	178,222[b]	4,198,644[a]
1951-52	491,574	983,148	147,472	465,509	370,167	159,932[b]	3,728,743
1952-53	508,478	1,016,956	152,543	261,448	602,965	186,437	4,518,145[a]
1953-54	528,845	1,057,690	158,654	433,717	465,319	175,907[b]	4,159,371
1954-55	551,799	1,103,598	165,540	377,247	560,811	207,969	4,928,151
1955-56	574,430	1,148,860	172,329	143,236	833,295	246,408	6,007,854
1956-57	598,386	1,196,772	179,516	237,069	780,187	300,393	7,088,434
1957-58	622,716	1,245,432	186,815	1,620,514	-561,897	354,422	6,880,959
1958-59	648,319	1,296,638	194,496	492,733	609,409	344,048	7,834,416
1959-60	667,962	1,335,924	200,389	593,650	541,885	391,721	8,768,022
1960-61	683,699	1,367,398	205,110	474,462	687,826	438,401	9,894,249
1961-62	706,435	1,412,870	211,931	454,965	745,974	494,712	11,134,935
1962-63	735,539	1,471,078	220,662	545,399	705,017	556,747	12,396,698
1963-64	758,878	1,517,756	227,663	728,464	561,629	619,835	13,578,162
1964-65	778,290	1,556,580	233,487	899,223	423,870	678,908	14,680,940
1965-66	793,504	1,587,008	238,051	828,445	520,512	734,047	15,935,499
1966-67	811,033	1,622,066	243,310	6,563,857	-5,185,101	796,775	11,547,173
1967-68	831,751	1,663,502	249,525	675,888	738,089	577,359	12,862,621
Total	12,666,360	$25,332,720	$3,799,870	$16,445,637	$5,087,175	$7,775,347	$12,862,621

[a]Reduced by $1,000,000 for repayment of loan.

[b]Calculated after the reserve fund had been reduced by $1,000,000.

had been in operation during this twenty-year period. To allow an added measure of conservatism to the calculation, no credit was given for reinsurers claim payments which probably would have been a substantial amount, particularly in the fiscal years of 1957-58 and 1966-67.

The estimated total premium payments of $25,332,720 (Table 6, Column 2) used for the Projected State Self-insurance Reserve Fund is $6,521,416.67 less than the total actual premiums paid by school districts during this twenty-year period of $31,854,136.67 as reported in Table 2. It was estimated that the annual interest earned on investments would exceed the annual administrative expense by the first year if the Fund was started with an initial reserve of $3,000,000.

Based on the assumption that the Projected State Self-insurance Reserve Fund had been established in the fiscal year 1948-49 and that the percentage of premiums charged for administrative cost and the rate of interest on investments are realistic, the public school districts of Louisiana could have saved approximately $19,384,038 by using the Projected State Self-insurance Reserve Fund for the protection of its public school property during the twenty-year period.

Basically, the only differences between the two proposed programs of state insurance were in the mode and the amount of premium payments. The amount of premium payments in each case were set at a rate which would provide sufficient funds for the successful operation of the fund. A small savings in the administrative costs to the State Self-insurance Reserve Fund might be realized, providing the legislature appropriated money directly to the insurance fund rather than sending it to the school districts which in turn would pay their part to the State-operated Insurance Fund. However, direct appropriations from the legislature to the insurance fund might cause the individual school districts to be less concerned with preventing and reducing losses.

Summary

In summary, in terms of the criteria of financial capacity, catastrophe protection, risk spread, reserving, inviolability, and service provisions, it has been shown that either of the proposed programs of state insurance would provide insurance protection for the public schools of Louisiana as adequately as commercial companies. Further, it has been shown that the public school districts of Louisiana could realize a significant savings by the establishment of either of the projected state insurance plans. No significant advantage was established between the proposed State-operated Insurance Fund and the State Self-insurance Reserve Fund.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was concerned with a comparative analysis of alternate plans of insurance coverage for the protection of physical property in the public school districts of Louisiana. More specifically, it (1) examined present cost, (2) identified criteria for satisfactory state insurance programs, (3) developed alternate plans for providing insurance coverage based on these criteria, (4) compared the plans on basis of the criteria, and (5) drew conclusions and developed recommendations for improving physical property insurance programs for the public school districts of Louisiana.

The data for this research were obtained from: (1) a review of the available literature in the field of insurance as it relates to public schools; (2) reviews of the five state programs currently operating in Alabama, North Carolina, North Dakota, South Carolina, and Wisconsin; (3) information as reported in the Louisiana State Department of Education annual reports; and (4) information available from the Louisiana State Insurance Commissioner's office.

A review of literature revealed that the criteria for the successful operation of a state insurance fund as developed by Stone were comprehensive and well suited for use in this present study. Guide lines for two programs for state insurance in Louisiana—a State-operated Insurance Fund and a State Self-insurance Reserve Fund—were developed from the criteria and from the study of the state plans now in operation. A comparative analysis was made between the two projected plans for state insurance and commercial insurance on the bases of identified criteria under the following categories: (1) financial capacity; (2) catastrophe protection; (3) risk spread; (4) reserving; (5) inviolability; (6) service provision; and (7) cost.

The criterion of cost was subjected to further analysis. Tables were constructed showing (1) the cost experiences of commercial insurance coverage, (2) the estimated cost experiences of operating a state-operated insurance fund, and (3) the estimated cost experiences of operating a state self-insurance reserve fund; for the public school districts of Louisiana during the past twenty-year period of 1949 through 1968. Conclusions pertaining to the criterion of cost were drawn from a comparative analysis of the information presented in the tables.

Conclusions

1. The study of the history of governmental insurance programs revealed that Alabama, North Carolina, North Dakota, South Carolina, Wisconsin, and several large city school districts are now operating self-insurance programs. It was shown that these programs have provided adequate insurance protection for their public school property more economically than it could have been provided through commercial insurance companies.

2. The costs of property insurance to the public schools in

the five states operating state insurance plans have varied from "free" insurance to 60 per cent of commercial rates. A 50 per cent savings has been the typical experience. The administrative costs of the state programs were approximately 6 to 8 per cent of the premium income. Money to establish a reserve has been appropriated by the state legislature in most cases.

3. Opinions concerning state insurance funds were divided, with some writers extremely critical and other strongly supportive.

4. An analysis of the premium-loss ratio experience of the Louisiana public schools from 1949 through 1968 indicated that the rates charged the public school districts by commercial insurance companies have been equitable when compared to established standards.

5. The high premium-loss ratios of school districts located in the coastal region of Louisiana reflected the wide-spread damage to public school buildings by hurricanes in the years of 1957 and 1966 and gave an indication of the extent to which hurrican damage contributed to the premium-loss ratio of the state as a whole.

6. It was shown that either of the projected programs of state insurance would provide insurance protection for the public schools of Louisiana as adequately as commercial insurance companies. Further, it was shown that the public school districts of Louisiana could realize a significant savings by the establishment of either of the projected state insurance plans.

7. The prerequisites for the operation of a successful state program of insurance were shown to be present in the State of Louisiana. The findings of this study warranted the recommendation that one of the two projected plans for state insurance be established for the protection

of the physical property of the public schools of Louisiana.

Recommendations

1. Steps should be taken by appropriate governmental agencies to prepare legislation based on the findings of this study to implement one of the two projected state insurance plans, and to work for its adoption.

2. After the adoption of a plan for state insurance on public school property, consideration should be given to the extension of the types of coverage available through the Fund to such areas as liability insurance, workmen's compensation insurance, vehicle insurance, crime coverage, flood insurance, and hospital-medical insurance.

3. Since the Louisiana State Department of Education does not have anyone on its staff to provide consultative service on insurance problems to local school districts, it should employ an insurance specialist to advise local school boards and to conduct research.

4. Finally, it is recommended that further studies be conducted to:

   a. Determine the feasibility of incorporating other areas of public school insurance such as liability insurance, workmen's compensation insurance, vehicle insurance, crime coverage, flood insurance, and hospital-medical insurance into the state insurance program of Louisiana.

   b. Determine the feasibility and desirability of establishing state insurance plans in other states, particular in those not exposed to major catastrophic risks such as hurricanes.

c. Develop and test plans for protecting public school property other than those which have been treated in this or other studies, or which are now in operation.

d. Investigate the role of the Office of the State Insurance Commissioner in the respective states in assuring that public property is adequately and economically protected from loss from fire and other major risks.

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