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NEW JERSEY PUBLIC SCHOOL FACILITIES SURVEY

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PUBLIC SCHOOL FACILITIES SURVEY

PHASE I

An Inventory of Existing Public School Facilities, Needs, and Resources

April 1954

State Department of Education

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Survey conducted by
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This report contains the most complete inventory of school building facilities ever to be made in New Jersey. It represents completion of the first phase of an exhaustive survey in which New Jersey and 44 other states are co-operating with the United States Office of Education to learn the present status of school housing and to determine the needs to be met in the next few years. This joint sponsorship was made possible under Title I of Public Law 815 enacted by the 81st Congress to provide accurate, up-to-date information about the problem of housing public school pupils.

Many persons have co-operated to make this report possible. Secretaries and members of boards of education, local school superintendents, and other school officials have been generous of time in supplying the basic information. The help of the county superintendents has been invaluable in organizing and supervising the survey in each county. The Advisory Committee, composed of members of several interested organizations, and many members of the State Department have contributed helpful counsel and guidance. To all of these persons, grateful acknowledgment is made.

A word should also be said in appreciation of the aid given by survey staff members of the U. S. Office of Education. Their assistance, coupled with the freedom of action permitted within the framework of the national survey requirements, has allowed us to prepare and conduct a survey of public school facilities adjusted to the particular needs of New Jersey.

To the state survey staff, area field workers and office staff, fell the task of organizing and carrying out the project, handling a large volume of data with efficiency, and managing the many details that are involved in such a study. This report is evidence of their sustained and careful work.

The second phase of the survey dealing with estimated needs for the next few years and available resources, is now in progress. When completed it should prove a valuable resource for future school planning.

FREDERICK M. RAUBINGER
Commissioner of Education

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I. HISTORY

Across the nation there has developed a growing awareness of many difficult problems that face our public schools. The lack of adequate school facilities has been generally recognized by the public and by the educational profession as a serious handicap to an effectual educational program.

NEED FOR THE SURVEY

Many factors have contributed to the existing shortage of school buildings and related facilities. Among them are: (1) the drastic curtailment of school construction during the depression years of the '30s, due to insufficient funds and a declining birth-rate; (2) the deferment of school construction during World War II, because of war-time demands, shortages of materials, and high prices; (3) the spectacular increase in the birth-rate which began in 1942-43 and has continued through 1952; and (4) the steadily increasing costs of construction and equipment due to an inflationary economy and the demands of the Korean War.

General recognition of serious school plant inadequacies has pointed up the value of a comprehensive survey of existing school facilities. Such a study could be used as a basis for estimating existing and future needs and could also provide the essential data for planning a long-range program of construction and financing to meet those needs.

A number of appraisals have been made of school plant needs. *A Report on School Building Needs in New Jersey* was made in 1949. In the same year the Council of State Governments estimated new classroom and related facility needs on the basis of reports received from 42 of the 48 states. Many school districts in the State and in the nation have sponsored studies to assess their particular needs. Most of these state-wide studies have been limited in scope.

These reports have revealed critical shortages which, although differing in degree or severity, were not confined to any one section of the nation or of the various states. These reports indicated the desirability of having the states complete a survey of uniform content, using similar evaluative methods and reported in comparable terms.

AUTHORIZATION FOR THE SURVEY

To facilitate a study of the school-housing problem, on both a national and a state basis, the 81st Congress enacted Title I, Public Law 815, with the stated purpose:

"to assist the several States to inventory existing school facilities in relation to the distribution of school population, to develop State plans for school construction programs, and to study the adequacy of State and local resources available to meet school facilities requirements"

Stipulations for participation in the survey required that: (1) the State education department should be designated as the sole agency for carrying out the purposes of the survey; (2) the survey should be conducted in accordance with federal regulations so as to provide information requested by the United States Commissioner of Education and from which a State program could be developed; and (3) reports should be made to the United States Commissioner of Education who, upon request, should be given access to the records.

SCOPE AND LIMITATIONS OF THE SURVEY

The School Facilities Survey was divided into two parts. Phase I, the status phase, was designed to cover: (1) an inventory of school facilities in every school plant in the state; (2) an estimate of current school needs; and (3) an estimate of costs for meeting those needs

and a report on the resources available for capital outlay funds in each school district.

Phase II, the long-range phase, was planned to utilize the findings in Phase I, to project future enrollment increases, and to assess other factors affecting the school plant problem in order to determine the school facility needs as of the school year 1959-60. This information would provide the basis for a program of proposed school plant con-

struction and improvement.

To finance the School Facilities Survey, funds are provided jointly on a matching basis by the Federal Government and the respective states. The Federal Government allocated \$77,560 to New Jersey for the survey, and the sum expended is being matched by the State in cash or by the services of state employees.

ORGANIZATION AND PROCEDURES USED IN MAKING THE SURVEY—

BASIC ORGANIZATION

Under the direction of the State Department of Education and under the supervision of the Business Division of this Department, the School Facilities Survey Office was set up at 162 West State Street, Trenton, N. J. Joseph E. Clayton, then County Superintendent of Monmouth County, was appointed Director of the Survey. Mr. Clayton resigned in December 1953 to become Assistant Commissioner of Education in charge of Controversies and Disputes, and was replaced by Eric Groezinger, then County Superintendent of Hunterdon County.

Interested citizen groups and professional organizations were invited to name representatives to an Advisory Committee. This Committee has acted in an advisory and consultative capacity. The members of this committee and the groups represented are: Advisory Committee on Guide for Schoolhouse Planning and Construction—Robert Micklewright; American Association of University Women—Mrs. J. Albert Prochazka; American Legion, Dept. of New Jersey—Edmund G. Lyons; Department of Superintendents—Arthur M. Judd; League of Women Voters of New Jersey—Mrs. A. S. Jensen; N. J. Association of School Business Officials—George Hankinson; N. J. Congress of Parents and Teachers—Mrs. Eric Mackey (resigned September 1953) and Mrs. Hale Kingsbury (since September 1953); N. J. Education Association—William R. Stover; N. J. Farm Bureau—Herbert W.

Voorhees; N. J. State Chamber of Commerce—Jay C. Van Nuys; N. J. State CIO Council—Anthony Zuccarello; N. J. State Federation of Labor—Abraham Silverstein; N. J. State Grange—Franklin C. Nixon; N. J. State League of Municipalities—James Smith; N. J. Taxpayers Association—Charles T. Sherwood; and State Federation of District School Boards of Education—William Mitchell (resigned June 1953) and William Egeln (since June 1953).

A staff of area field workers was organized to assist the Director in securing data for the survey. This staff included Earl J. Brown, Robert J. Barrall, Marshall W. Errickson, Charles D. Foye, and William W. Ramsey. A study of secondary school enrollment trends was assigned to Howard S. Apgar (resigned September 1953) and Charles J. Tabler (since September 1953). Miss Lucille Russo served as secretary of the survey office until she resigned, September 1953, and was replaced by Mrs. Elizabeth Deardorff. Mrs. Ann Z. Smith was appointed to prepare and edit the printed report.

REPORT FORMS AND BASIS OF DATA

A series of tables, Form RSA-6, for reporting data needed in Phase I of the survey were prepared by the United States Office of Education. In New Jersey the questions from Form RSA-6 were incorporated into simplified forms. Additional items deemed valuable for the develop-

ment of a permanent file of school facilities information for the State Department of Education were also included. These forms were submitted to County Superintendents, members of the State Department of Education, and the Advisory Committee of the survey for suggestions. The forms were revised on the basis of these suggestions.

The following basis for data was used in the survey:

1. Attendance data is as of February 1, 1953.
2. Financial information agrees with the 1951-52 Annual Financial Reports.
3. Estimates of need are based on anticipated conditions as of September 1953.

DEFINITION OF TERMS

In order to achieve uniformity among the various states the following term definitions were set up by the Federal Security Agency.

1. *Local School Administrative Unit*: The city, town, county, or other type of school district, under the jurisdiction of a local school board.

2. *School*: A school center serving an attendance area, usually under the supervision of a principal. Some schools occupy more than one building on the same or separate sites.

3. *Elementary School*: Any span of grades below the secondary school, as determined by State or local practice, e.g., K-6 or 1-8.

4. *Secondary School*: Junior high schools, and senior high schools. Two or more secondary schools housed in the same plant count as one school.

5. *Combined Elementary and Secondary School*: Any combination of elementary and secondary grades occupying the same building.

6. *School Plant*: Includes site, the buildings, and the equipment and furniture which constitute the physical facilities available for a school.

7. *School Building*: One continuous structure which may or may not be connected with other structures by passageways. Includes service systems and built-in accommodations. The cost of a building includes fees for architectural, engineering, supervisory and other professional services, and all overhead costs in connection with planning, designing, financing, and constructing the building.

8. *Classroom*: Any room, originally designed, or later suitably adapted, to accommodate some form of group instruction on a day-to-day basis, excluding such areas as auditoriums, gymnasiums, lunch-rooms, libraries, and study halls. Unless otherwise specifically noted, the term "classroom" includes special instruction rooms.

9. *Special Instruction Room*: A laboratory, shop or other room designed and equipped for instruction in a special subject.

10. *Site*: Land and all improvements other than structure.

11. *Rehabilitating and Remodeling*: Change in structure or a major structural improvement to the building and general overhauling of a building or a major section thereof in order to adapt the plant to continued and effective use for the school program. Does not include normal maintenance program or periodic renovation.

12. *Fire-resistive Building*: A building constructed entirely of fire-resistive materials; or a building with fire-resistive bearing and partition walls, floors, stairways, and ceilings. A building of this type may have wood finish, wood or composition floor surface, and wood roof construction over a fire-resistive ceiling.

13. *Semi-fire-resistive Building*: A building of fire-resistive bearing walls, corridors, and stairways; but with ordinary construction otherwise (i.e., combustible floors, partitions, roofs and finish).

14. *Combustible Building*: All frame; fire-resistive veneer on wood frame; or fire-resistive bearing walls, but otherwise of combustible construction.

15. *Classification of School Plants*:

S—SATISFACTORY: A plant may be adjudged "satisfactory" pro-

vided it is of sufficiently sound construction and provided its educational adequacy is sufficient to warrant its continuance in use for a period of 20 or more years. If over one story in height, the structure shall be fire-resistive. Its classrooms and related spaces shall be of sizes large enough to allow the functioning of a modern educational program comprising multicurricular activities, and to encourage the incorporation of desirable new curriculum developments as they occur. The building shall be well located and on a site sufficiently large, developed, and free from traffic hazards to permit reasonable outdoor activity. The building, including fenestration, artificial lighting, heating, toilet and water services, and flexibility of design, shall be sufficiently adequate to meet reasonable standards for the duration of its anticipated use. Plants of this class are adequately provided with equipment and furniture suitable for the school program.

F—FAIR: This category includes school buildings which by rehabilitating and remodeling can be continued in effective service for 10 to 15 years. Plants to be classed as "*fair*" are structurally safe and reasonably well located. A structure in this classification will lend itself to remodeling in order to meet State and local building codes and regulations as to safety and to meet reasonable standards of educational adequacy for an expenditure commensurate with the facilities resulting from such remodeling. Examples: (1) a school plant otherwise satisfactory but with an inadequate site may be classified as "*fair*" provided the site can be supplemented by the acquisition of additional land; (2) if a plant is satisfactory except that classrooms are too small for modern educational programs, it may be rated as "*fair*" provided it is feasible to move partitions and otherwise to arrange for adequate teaching areas; and (3) a plant with obsolete furniture and lacking in adequate built-in accommodations, but otherwise satisfactory, may be rated as "*fair*" because these deficiencies can be corrected. A plant which is structurally sound and reasonably well located may be classed as "*fair*" even if it has several such deficiencies, provided they can be corrected at a reasonable cost.

U—UNSATISFACTORY: An "unsatisfactory" school plant is one which should be abandoned and replaced as soon as possible. Such plants cannot be made satisfactory with any reasonable expenditure because of one or more of the following deficiencies: (1) structurally unsafe, (2) non-correctible fire hazard, (3) very poorly located with respect to school population and school organization, (4) completely inadequate site which cannot be enlarged, (5) unsatisfactory and hazardous environment, and (6) completely obsolete as to educational adequacy.

16. *Area of Building*: The sum of the areas in square feet of all floors within the building perimeter at the respective floor levels. Include in total building area one-half of area of covered passageways with one or both sides open.

METHOD OF OBTAINING DATA

After the report forms were revised a pilot study was conducted in Monmouth County in February 1953. The study provided an opportunity to check the forms and to establish proper and uniform procedures.

The staff of area field workers was thoroughly briefed as to the purposes and methods of the survey, and each worker was assigned an area of the state in which he would work. Meetings were then held in each of the counties of the State (excluding Monmouth where the pilot study had been conducted) to explain the purposes and scope of the survey and to give instructions for the completion of the reports. At these meetings state representatives met with county superintendents, school administrators, secretaries of Boards of Education, and members of Boards of Education.

The County Superintendents of Schools who directed the survey within their respective counties were: Mason A. Stratton, Atlantic; Roy R. Zimmerman, Bergen; John E. Mongon, Burlington; A. M. Bean, Camden; Willard B. Matthews, Cape May; Lawrence R. Winchell, Cumberland; Frank B. Stover, Essex; J. Harvey Rodgers, Glou-

cester; Urban W. Chase, Hudson; Eric Groezinger, Hunterdon; Jack B. Twichell, Mercer; Robert R. Blunt, Middlesex; Earl B. Garrison, Monmouth; William H. Mason, Jr., Morris; Carl M. Bair, Ocean; J. Harold Straub, Passaic; Albert Shuck (deceased) and Howard Morris, Jr., Salem; Sampson G. Smith, Somerset; Clifford E. Dennis, Sussex; A. L. Johnson, Union; and Will G. Atwood, Warren.

Report forms were distributed and appointments were made for meetings of local school officials with area field workers. The reports were filled out by local school administrators or by secretaries of Boards of Education. The completed reports were checked by the field workers who visited every school in the state. Constant stress was laid on the necessity for accuracy and for recording data based on similar evaluative measures and quoted in comparable terms.

The survey included 547 local school districts. Data on county vocational schools, the New Jersey School for the Deaf, and junior colleges were not incorporated in the report.

The completed reports were returned to the central survey office. Copies of the reports were retained by local school districts and by county superintendents.

INTERNAL CONSISTENCY OF DATA

The data in the present report is based on a 100% sampling of 1745 school plants in the state with a total pupil enrollment of 730,030. Tables in this report based on school plants conform to those figures. Where school buildings are used as a basis of reporting the number in the State is 1855. In these tables the number of pupils exceeds the total pupil enrollment in the state because some pupils are accommodated in more than one building for different portions of the school day.

Where corresponding items have been reported in more than one table, some differences between figures have occurred in the tabulating processes. The 1950 United States Census of Population observes in its Special Report on Education: "Experience has shown that in mass

operations two tabulations of a set of punch cards are not likely to yield precisely identical results." In this report any insignificant variations which developed through the tabulating processes have been adjusted to bring the figures into agreement.

Despite the stress on accuracy and uniformity of reporting, a margin of error exists in any report of this scope. For this reason, as well as for varying standards of reporting and rating, the findings of this report may differ in minor details from other studies of state-wide or county scope. One of the best ways to understand this report is to be conversant with the Definition of Terms and the Method of Obtaining and Compiling Data as explained in the Introduction.

METHOD OF COMPILING DATA

In preparing the state-wide summaries of the tables of this report from data submitted on 1745 schools, the material was first summarized by county units. Some county tables are included in this report. The county summaries were then compiled into the state summary.

The facilities of the International Business Machines Corporation at Trenton were used as an efficient method of obtaining tabulations.

To facilitate use of the report and permit easy access to specific material, the report was divided into five sections:

Section I —Introduction. Presentation of background material; description of survey; conduct of survey.

Section II —Inventory of Existing School Facilities (Tables I through XIII). Report on buildings, class and special rooms, sites, and buses.

Section III —Needs for Public School Facilities, Resources, and Deficits (Tables XIV through XIX). Estimates of needs for new or improved school plants as of September 1953.

Section IV —Implications of the School Facilities Survey.

SOME BASIC INFORMATION ABOUT NEW JERSEY

It has been noted previously that there has been a drastic curtailment of school construction, both in New Jersey and in the nation, since 1935. By that time the extensive school building program of the 1920s had been completed and the full impact of the depression was reflected in lower school budgets for all school services and facilities. The demands and high prices of the wartime economy, from 1941 on, served as an additional deterrent to any adequate program of school construction.

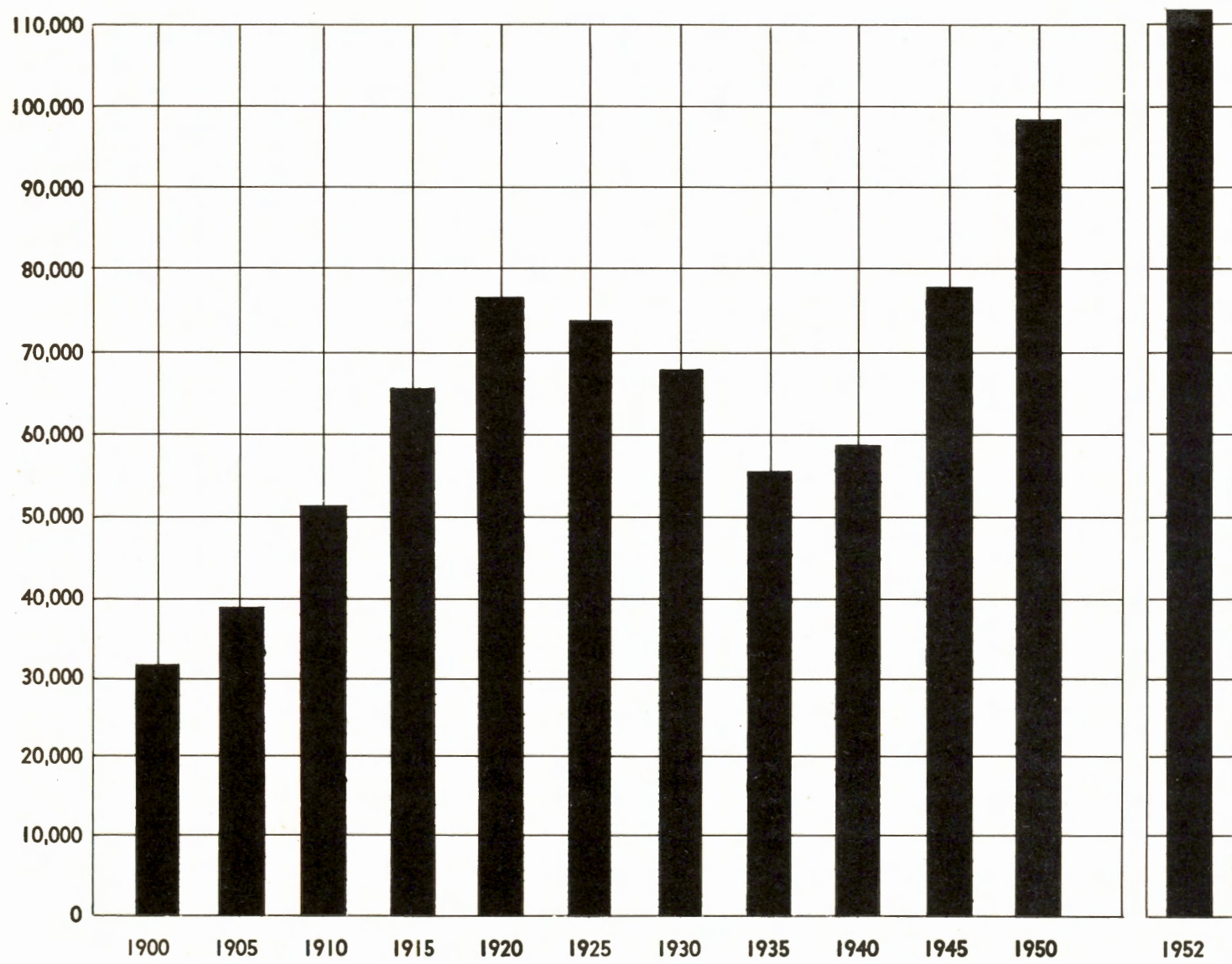
Meanwhile changes have taken place within our state which greatly influence school needs. The following chart and tables are presented to indicate some of these changes. The chart and the first table portray live births in New Jersey at five-year intervals from 1900 to 1950, in addition to which the chart gives the live births for 1952 and the table gives the number of live births yearly from 1945 through 1952. The second table presents the New Jersey population with percent increases over the preceding decade from 1910 to 1950. The third table is a summary, by counties with state totals, giving the number of schools and number of pupils in each type of educational organization for the year 1953.

LIVE BIRTHS

Since live births are directly reflected in school populations five years after the birth year they are particularly significant for educational planning. Some of the factors disclosed by the table on live births in New Jersey which should be considered in relation to school facility needs are:

- In 1935 there were 55,059 live births in New Jersey. In 1952 there were 110,215 live births in New Jersey, a 100% increase over the 1935 figure.
- The children born in 1935 comprised the greatest percentage of the high school graduating class of 1953. That same year (1953) the children born in 1948 entered kindergarten. The effect of school population may be estimated by observing that the live births in 1948 were 73% higher than those in 1935.
- After a drop in 1948, the number of live births in New Jersey has increased each year to reach a new high in 1952. This high number of live births, at one time believed to be a short-term phenomenon whose demands could be met through emergency provisions, has been maintained so that for seven consecutive years (1946-52) it has exceeded 95,000 live births per year.

LIVE BIRTHS IN NEW JERSEY, 1900-1950—by five-year intervals and for 1952¹



LIVE BIRTHS IN NEW JERSEY, 1900-1950 - by 5 year intervals¹

Year	No. of Births
1900	32,270
1905	39,689
1910	53,942
1915	66,476
1920	76,431
1925	74,193
1930	68,282
1935	55,059
1940	59,328
1945	76,995
1950	97,734

LIVE BIRTHS IN NEW JERSEY, 1945-52¹

Year	No. of Births
1945	76,995
1946	95,044
1947	106,086
1948	97,278
1949	97,414
1950	97,734
1951	105,218
1952	110,215

¹ From the Bureau of Vital Statistics, New Jersey State Department of Health.

**1. POPULATION AND PERCENT INCREASE OVER PRECEDING DECADE, 1910-1950,¹ and
2. ESTIMATE OF POPULATION FOR 1952²**

(By Counties with State Totals)

1.

2.

	1910		1920		1930		1940		1950		1952
	Popula- tion	% inc.	Popula- tion	% inc.	Popula- tion	% inc.	Popula- tion	% inc.	Popula- tion	% inc.	
Atlantic	71,894	54.9	83,914	16.7	124,823	48.8	124,066	-0.6	132,399	6.7	134,000
Bergen	138,002	75.9	210,703	52.7	364,977	73.2	409,646	12.2	539,139	31.6	555,000
Burlington	66,565	14.3	81,770	22.8	93,541	14.4	97,013	3.7	135,910	40.1	140,000
Camden	142,029	31.9	190,508	34.1	252,312	32.4	255,727	1.4	300,743	17.6	307,000
Cape May	19,754	49.6	19,460	-1.4	29,486	51.5	28,919	-1.9	37,131	28.4	37,000
Cumberland	55,153	7.7	61,348	11.2	69,895	13.9	73,184	4.7	88,597	21.1	91,000
Essex	512,886	42.8	652,089	27.1	833,513	27.8	837,340	0.5	905,949	8.2	924,000
Gloucester	37,368	17.1	48,224	29.1	70,802	46.8	72,219	2.0	91,727	27.0	94,000
Hudson	537,231	39.2	629,154	17.1	690,730	9.8	652,040	-5.6	647,437	-0.7	661,000
Hunterdon	33,569	-2.7	32,885	-2.0	34,728	5.6	36,766	5.9	42,736	16.2	43,000
Mercer	125,657	31.8	159,881	27.2	187,143	17.1	197,318	5.4	229,781	16.5	235,000
Middlesex	114,426	43.5	162,334	41.9	212,208	30.7	217,077	2.3	264,872	22.0	273,000
Monmouth	94,734	15.4	104,925	10.8	147,209	40.3	161,238	9.5	225,327	39.7	231,000
Morris	74,704	14.7	82,694	10.7	110,445	33.6	125,732	13.8	164,371	30.7	169,000
Ocean	21,318	8.0	22,155	3.9	33,069	49.3	37,706	14.0	56,622	50.2	58,000
Passaic	215,902	39.1	259,174	20.0	302,129	16.6	309,353	2.4	337,093	9.0	344,000
Salem	26,999	5.8	36,572	35.5	36,834	0.7	42,274	14.8	49,508	17.1	51,000
Somerset	38,820	17.8	47,991	23.6	65,132	35.7	74,390	14.2	99,052	33.2	103,000
Sussex	26,781	11.0	24,905	-7.0	27,830	11.7	29,632	6.5	34,423	16.2	35,000
Union	140,197	41.1	200,157	42.8	305,209	52.5	328,344	7.6	398,138	21.3	409,000
Warren	43,187	14.3	45,057	4.3	49,319	9.5	50,181	1.7	54,374	8.4	55,000
STATE TOTAL	2,537,167	34.7	3,155,900	24.4	4,041,334	28.1	4,160,165	2.9	4,835,329	16.2	4,949,000

¹ From the United States Census, 1920, 1930, 1940, 1950.

² From the Bureau of Vital Statistics, New Jersey State Department of Health.

NUMBER OF SCHOOL PLANTS AND PUPIL ENROLLMENTS BY TYPE OF EDUCATIONAL ORGANIZATION¹
(By Counties with State Totals)

	Elementary		Secondary		Combined Elem. & Sec.		Total	
	No. of Plants	No. of Pupils	No. of Plants	No. of Pupils	No. of Plants	No. of Pupils	No. of Plants	No. of Pupils
Atlantic	60	13,954	8	6,814	1	193	69	20,961
Bergen	160	59,351	21	17,605	22	16,578	203	93,534
Burlington	60	14,638	7	4,440	2	1,725	69	20,803
Camden	110	28,668	14	10,886	10	6,389	134	45,943
Cape May	26	3,321	2	779	4	1,800	32	5,900
Cumberland	56	12,708	3	3,929	—	—	59	16,637
Essex	157	83,185	33	30,676	8	6,911	198	120,772
Gloucester	67	15,558	4	2,291	2	2,249	73	20,098
Hudson	74	47,403	13	15,505	6	3,703	93	66,611
Hunterdon	38	5,798	3	1,249	2	948	43	7,995
Mercer	57	19,160	9	7,766	4	3,630	70	30,556
Middlesex	99	31,601	9	7,413	5	3,565	113	42,579
Monmouth	86	27,423	10	7,037	4	2,455	100	36,915
Morris	76	22,375	6	4,470	8	5,152	90	31,997
Ocean	30	7,986	4	2,161	2	386	36	10,533
Passaic	72	35,814	13	10,524	3	3,343	88	49,681
Salem	27	7,654	1	748	2	2,437	30	10,839
Somerset	50	12,879	4	3,853	1	105	55	16,837
Sussex	27	5,605	2	884	2	1,275	31	7,764
Union	97	40,058	19	18,035	6	5,252	122	63,345
Warren	32	6,419	1	919	4	2,392	37	9,730
STATE TOTALS	1,461	501, 558	186	157,984	98	70,488	1,745	730,030

¹ As of February 1, 1953.

II. INVENTORY OF PUBLIC SCHOOL FACILITIES

This inventory (Tables I through XIII) presents existing school facilities at attendance centers and by local school administrative units including: (1) data on rooms, areas, capacity, and date and type of construction; (2) evaluation as to educational adequacy, safety, and permanency of facilities; and (3) data relative to pupil transportation.

PART I—GENERAL CHARACTERISTICS OF SCHOOL BUILDINGS

The following chart and two tables reveal the general characteristics of school buildings in New Jersey as related to (1) combustibility or fire-resistiveness of construction and (2) number of stories. These two factors are presented in one table because they are related to each other in any appraisal of fire safety.

Among the facts disclosed by Table I are:

- 840 or 45.2% of the 1855 school buildings in New Jersey are fire resistive.
400 or 21.6% of the 1855 school buildings in New Jersey are semi-fire-resistive.
400 or 21.6% of the 1855 school buildings in New Jersey are combustible.
215 or 11.6% of the 1855 school buildings in New Jersey are of mixed construction.
- Since Table I represents number of students accommodated under different types of construction during different portions of the school day it is necessary to use the total pupil enrollment of the state as a basis for estimating the percent of students housed under different types of construction, or numbers of stories. The total pupil enrollment in New Jersey is 730,030. The total percentages indicated exceed 100.
412,929 or 56.6% of the total pupil enrollment are housed during at least part of the day in school buildings that are fire-resistive.
139,083 or 19% of the total pupil enrollment are housed during at least part of the day in school buildings that are semi-fire-resistive.
75,533 or 10.3% of the total pupil enrollment are housed during at least part of the day in school buildings that are combustible.
115,273 or 15.8% of the total pupil enrollment are housed during at least part of the day in school buildings that are of mixed construction.
- 331,400 or 45.3% of the total pupil enrollment are housed during at least part of the day in buildings that have three or more stories. 318,721 or 43.6% of the total pupil enrollment are housed during at least part of the day in buildings that have two stories. 92,697 or 12.7% of the total pupil enrollment are housed during at least part of the day in buildings that have only one story. The total percentages indicated exceed 100.

**(1) TYPE OF CONSTRUCTION AND (2) NUMBER OF STORIES BY NUMBER OF BUILDINGS AND NUMBER OF PUPILS
UNDER TYPE OF EDUCATIONAL ORGANIZATION**

2. NUMBER OF STORIES

I. TYPE OF CONSTRUCTION	One		Two		Three or More		Totals	
	No. of Bldgs.	No. of Pupils ¹	No. of Bldgs.	No. of Pupils ¹	No. of Bldgs.	No. of Pupils ¹	No. of Bldgs.	No. of Pupils ¹
Fire-Resistive								
Elementary	187	39,894	285	111,889	148	86,825	620	238,608
Secondary	9	1,447	58	39,565	87	89,500	154	130,512
Combination	3	954	37	22,907	26	19,948	66	43,809
Semi-Fire-Resistive								
Elementary	127	23,019	163	55,903	68	35,900	358	114,822
Secondary	6	1,143	13	7,436	10	7,991	29	16,570
Combination	2	330	5	3,241	6	4,120	13	7,691
Combustible								
Elementary	176	15,035	148	34,091	42	18,675	366	67,801
Secondary	11	1,568	7	1,077	3	1,286	21	3,931
Combination	4	970	5	988	4	1,843	13	3,801
Mixed								
Elementary	34	8,267	88	34,531	55	38,565	177	81,363
Secondary	2	70	3	1,979	13	13,732	18	15,781
Combination	—	—	7	5,114	13	13,015	20	18,129
Totals								
Elementary	524	86,215	684	236,414	313	179,965	1,521	
Secondary	28	4,228	81	50,057	113	112,509	222	
Combination	9	2,254	54	32,250	49	38,926	112	
Grand Totals	561	92,697	819	318,721	475	331,400	1,855	

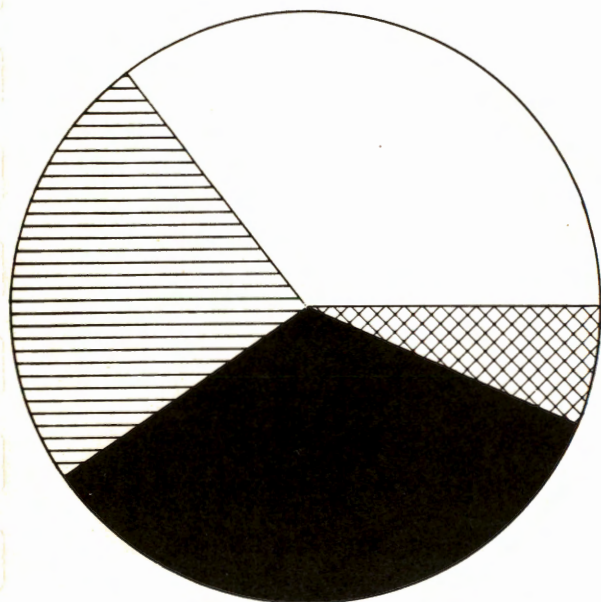
¹Number of pupils accommodated in these buildings for any portion of the school day as of the reporting day February 1, 1953. In cases where the same pupil is accommodated at different periods of the day in facilities falling under different categories, he is counted under each of the categories. Thus the totals of the separate categories are not the same as the total school enrollment. For example, a given secondary school pupil might be accommodated for a portion of the day in a fire-resistive two-story building, for a portion of the day in a semi-fire-resistive one-story gymnasium, and for a portion of the day in a combustible one-story shop building.

TABLE 1-A
SCHOOL BUILDINGS BY 1. TYPE OF CONSTRUCTION and 2. NUMBER OF STORIES

	1. Type of Construction				2. Number of Stories		
	Fire-Resistive	Semi-Fire Resistive	Combustible	Mixed	One Story	Two Stories	3 or More Stories
Atlantic	38	10	15	8	31	20	20
Bergen	100	55	30	27	41	124	47
Burlington	18	27	26	12	42	35	6
Camden	51	41	34	12	39	73	26
Cape May	17	2	16	—	15	12	8
Cumberland	20	15	33	4	33	36	3
Essex	87	50	26	41	11	76	117
Gloucester	24	19	30	5	49	25	4
Hudson	70	13	—	10	—	12	81
Hunterdon	14	8	20	1	29	13	1
Mercer	33	27	7	7	15	47	12
Middlesex	61	14	26	19	41	55	24
Monmouth	39	31	15	25	47	47	16
Morris	48	15	22	11	29	55	12
Ocean	24	8	13	—	31	13	1
Passaic	50	19	16	8	11	42	40
Salem	16	4	12	1	18	12	3
Somerset	24	10	18	6	24	31	3
Sussex	10	2	19	2	19	10	4
Union	84	20	8	14	16	66	44
Warren	12	10	14	2	20	15	3
STATE TOTALS	840	400	400	215	561	819	475

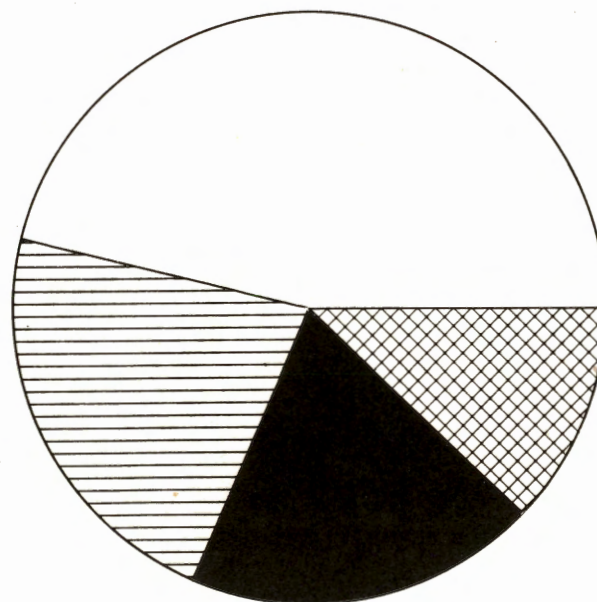
PERCENT OF FIRE-RESISTIVE, SEMI-FIRE-RESISTIVE, MIXED, AND COMBUSTIBLE BUILDINGS
BY NUMBER OF STORIES

30.2%
of buildings
are one-story



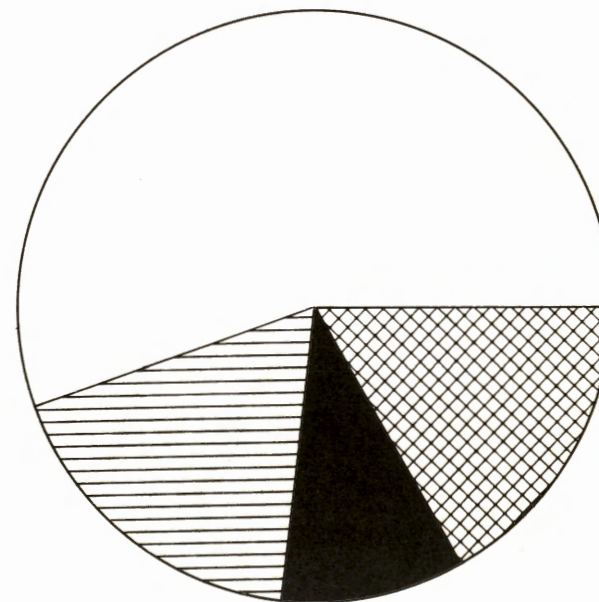
ONE STORY

44.2%
of buildings
are two-story

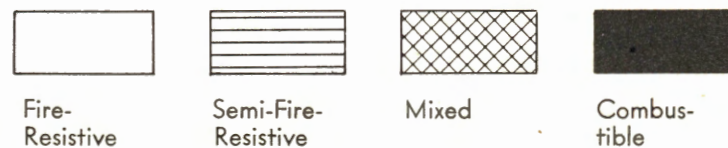


TWO STORY

25.6%
of buildings
are three or more stories



THREE OR MORE STORIES



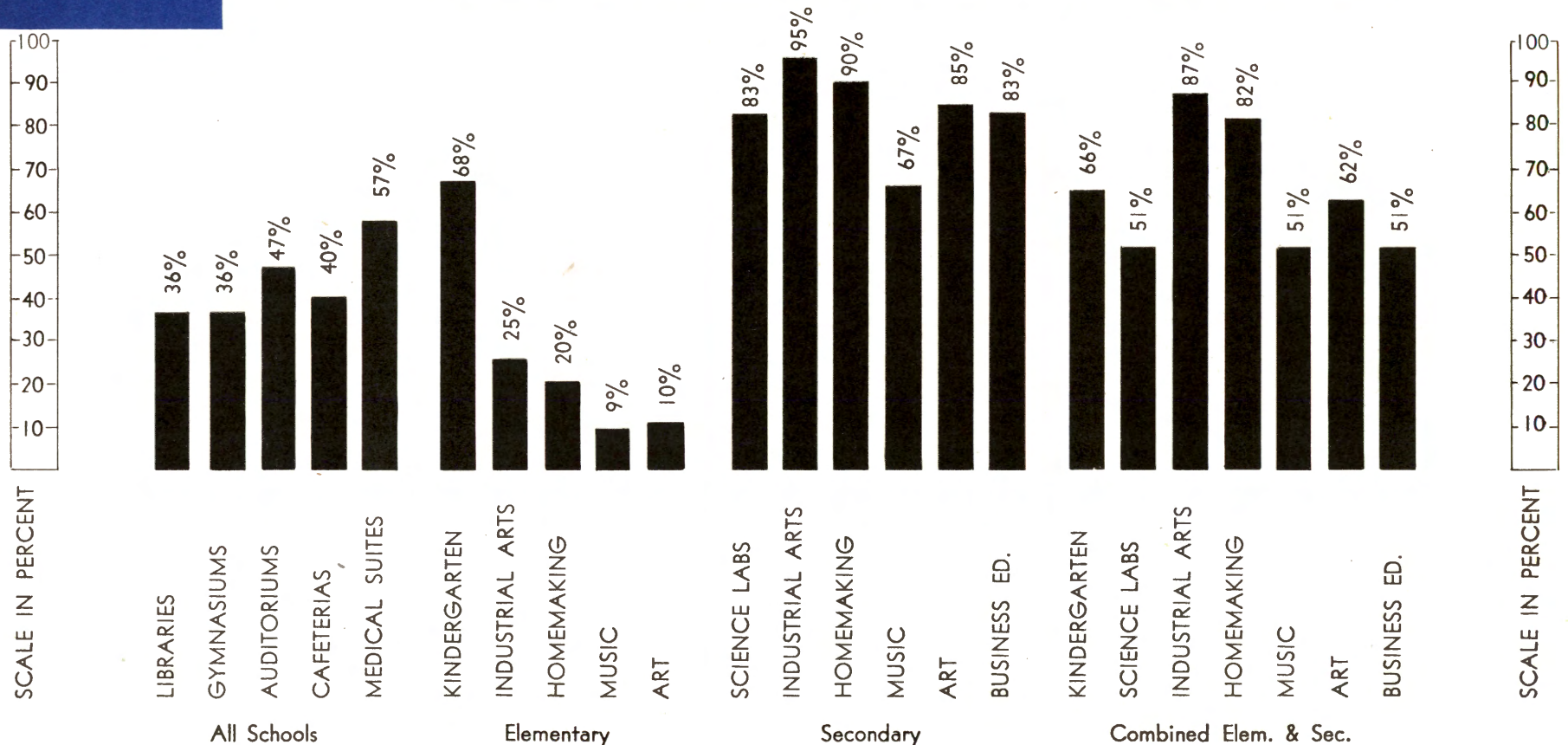
PART II. SPECIAL INSTRUCTION ROOMS AND GENERAL-USE ROOMS

Section I of Table II indicates the extent to which the schools of New Jersey have provided special instruction rooms for those teaching areas which need facilities other than those provided in regular classrooms. Section 2 of Table II indicates the extent to which the schools of New Jersey are equipped with General Use Rooms. The findings of the Table should be related to the varying needs of the elementary and secondary school curriculums.

Over 50% of the secondary and the combined elementary schools have the special instruction rooms and general-use rooms that fall within their usual curriculum needs. The percentages for elementary schools, with the exception of kindergartens, fall well under the 50% mark. Chart B indicates some of those percentages. For the purposes of this Chart gymnasiums include gymnasiums and auditoriums-gymnasiums; auditoriums include auditoriums, auditoriums-gymnasiums, and cafeteriums; and cafeterias include cafeterias and cafeteriums. Multi-purpose rooms have not been included in any of these categories because the activities for which they are used differ considerably from school to school. Nevertheless they should be considered as a factor which would raise the percentages in some of the various categories.

CHART B

PERCENT OF SOME GENERAL-USE ROOMS IN ALL SCHOOLS, AND PERCENT OF SOME SPECIAL INSTRUCTION ROOMS UNDER TYPE OF EDUCATIONAL ORGANIZATION



SPECIAL ROOMS AND GENERAL-USE ROOMS BY NUMBER OF SCHOOLS HAVING, NUMBER OF SUCH ROOMS, AND PUPIL CAPACITY UNDER TYPE OF EDUCATIONAL ORGANIZATION

	Elementary			Secondary			Comb. Elem. & Sec.			Total		
	No. of Schools Having	No. of Such Rooms	Pupil Capacity	No. of Schools Having	No. of Such Rooms	Pupil Capacity	No. of Schools Having	No. of Such Rooms	Pupil Capacity	No. of Schools Having	No. of Such Rooms	Pupil Capacity
1. Types of Special Instruction Rooms¹												
Kindergarten	1,000	1,388	47,416	—	—	—	65	97	3,590	1,065	1,485	51,006
Science labs.	14	14	349	155	366	10,145	50	81	2,224	219	461	12,718
Industrial Arts	358	400	8,704	177	430	11,942	85	135	3,072	620	965	23,718
Homemaking	287	378	10,510	168	380	10,631	80	131	3,954	535	889	25,095
Music	125	134	3,967	124	170	6,312	50	58	1,841	299	362	12,120
Art	150	156	4,266	159	247	6,522	61	69	1,832	370	472	12,620
Business Education	3	3	87	155	539	13,964	50	90	2,457	208	632	16,508
Other	89	138	3,891	86	191	7,624	34	75	2,146	209	404	13,661
2. Types of General-Use Rooms¹												
Libraries	369	370	7,998	174	176	8,044	86	90	3,020	629	636	19,062
Gymnasiums	203	228	11,543	150	206	11,839	66	77	3,934	419	511	27,316
Auditoriums	326	328	140,163	145	146	120,879	65	65	40,180	536	539	301,222
Aud.-Gyms.	186	186	9,546	15	15	781	16	16	935	217	217	11,262
Cafeterias	423	456	53,463	141	167	50,674	61	68	12,272	625	691	116,409
Cafeteriums	65	65	12,628	3	3	706	3	3	392	71	71	13,726
Multi-purpose Rooms ²	206	286	17,928	8	20	771	13	13	1,291	227	319	19,990
Medical Suites	748	782	10,095	155	182	3,580	88	94	1,425	991	1,058	15,100
Other	175	313	11,941	29	48	1,635	10	19	715	214	380	14,291

¹ The column headed "Pupil Capacity" states the number of pupils who can be accommodated during one scheduled period. Any special room for any use other than its primary purpose is not included.

² The pupil capacity of a multi-purpose room is the greatest number of pupils who may be satisfactorily accommodated in any one activity for which the room is used.

PART III. SCHOOL SITES

Table III gives information on existing school sites. Among the facts disclosed by this table are:

- 704 or 40.3% of the schools of the state are situated on sites of between 1 and 2.9 acres.
421 or 24.1% of the schools are situated on sites of less than 1 acre.
1,125 or 64.4% of New Jersey schools are located on sites of less than 3 acres.
- 296,681 or 40.7% of the pupils are enrolled in schools with sites of between 1 and 2.9 acres.
130,753 or 17.9% of the pupils are enrolled in schools with sites of less than 1 acre.
427,434 or 58.6% of New Jersey school children are enrolled in schools with sites of less than 3 acres.
- 522 or 29.9% of the schools have a concentration of over 250 pupils per acre of site.
1,076 or 61.6% of the schools have a concentration of over 100 pupils per acre of site.
- 327,865 or 44.9% of the pupils attend schools with a concentration of over 250 pupils per acre of site.
560,333 or 76.8% of the pupils attend schools with a concentration of 100 or more pupils per acre of site.
- 91 was the average school enrollment where the school site had a concentration of less than 10 pupils per acre of site.
628 was the average school enrollment where the school site had a concentration of over 250 pupils per acre of site.
520 was the average school enrollment where the school site had a concentration of 100 or more pupils per acre of site.

The New Jersey Guide For Schoolhouse Planning and Construction recommends that the minimum size of sites for elementary schools be five acres, plus an additional acre for every 100 pupils enrolled. The recommended minimum size of sites for junior and senior high schools is 10 acres, plus an additional acre for every 100 pupils enrolled.

The facts disclosed by Table III indicate that, in general, and under all types of educational organization, New Jersey schools are situated on sites that are considerably smaller than the recommendations of the New Jersey Guide For Schoolhouse Planning and Construction. Many factors have operated to bring about this condition. Among these are rapid enrollment increases, lack of adequate planning, and the particular problems of congested areas where land is difficult to obtain and frequently very expensive. In some cases inadequate sites have been compensated for, at least in part, by additional indoor facilities. Table XVI, SITE ACQUISITIONS AND IMPROVEMENT (needed as of September 1953), indicates that the reported need for enlargement of existing sites does not include sufficient acreage to improve the present situation as to size of site or concentration of pupils per acre of site.

1. TOTAL AREA OF SITE¹ and 2. NUMBER OF PUPILS PER ACRE BY NUMBER OF SCHOOLS AND NUMBER OF PUPILS UNDER TYPE OF EDUCATIONAL ORGANIZATION, and 3. NUMBER OF SCHOOLS BY SIZE AND AREA

	Elementary		Secondary		Comb. Elem. & Sec.		Total	
	No. of Schools	Total No. of Pupils ²	No. of Schools	Total No. of Pupils ²	No. of Schools	Total No. of Pupils ²	No. of Schools	Total No. of Pupils ²
1. Total Area of Sites								
Less than 1 acre	393	115,785	18	9,333	10	5,635	421	130,753
1 - 2.9 acres	608	221,750	56	45,179	40	29,752	704	296,681
3 - 4.9 acres	225	82,946	29	30,367	16	9,747	270	123,060
5 - 9.9 acres	157	51,305	41	36,056	19	13,960	217	101,321
10 - 14.9 acres	54	19,799	18	14,914	8	6,778	80	41,491
15 - 24.9 acres	19	8,533	17	13,966	5	4,616	41	27,115
25 - 50 acres	4	1,010	7	8,169	—	—	11	9,179
Over 50 acres	1	430	—	—	—	—	1	430
2. Number of Pupils Per Acre								
Less than 10 pupils per acre	35	1,642	4	1,342	1	670	40	3,654
10 - 24.9 pupils per acre	88	12,982	7	3,609	1	493	96	17,084
25 - 49.9 pupils per acre	202	38,530	12	7,070	4	1,723	218	47,323
50 - 74.9 pupils per acre	151	34,116	21	18,220	7	6,106	179	58,442
75 - 99.9 pupils per acre	119	31,372	11	9,493	4	2,329	134	43,194
100 - 149.9 pupils per acre	208	67,808	21	13,832	19	11,456	248	93,096
150 - 199.9 pupils per acre	128	45,845	25	18,143	9	7,248	162	71,236
200 - 250 pupils per acre	119	47,449	16	14,608	11	6,079	146	68,136
Over 250 pupils per acre	411	221,814	69	71,667	42	34,384	522	327,865
	Number of Schools (All Types)							
	Less than 50 pupils Per Acre		50 - 99.9 Pupils Per Acre		100 - 250 Pupils Per Acre		Over 250 Pupils Per Acre	
3. Area of Site								
Less than 1 acre		37		45		94		245
1 - 2.9 acres		91		87		276		250
3 - 4.9 acres		47		86		113		24
5 - 9.9 acres		94		57		63		3
10 - 14.9 acres		48		25		7		—
15 - 24.9 acres		30		10		1		—
25 - 50 acres		9		2		—		—
Over 50 acres		1		—		—		—

¹ In calculating area of site, gross area of all land used primarily for the respective schools is included.

² Number of pupils as of the reporting date of February 1, 1953.

PART IV. SERVICE SYSTEMS

Table IV indicates the type of service systems in school buildings of the State. It is important to note that this table gives no evaluation of the service systems, but only records the type in use. This table is based on school buildings and therefore exceeds the number of school plants. In some cases services not available in auxiliary buildings are available at adjacent main buildings. The total number of pupils exceeds the total pupil enrollment in the state because some pupils are accommodated in more than one building during part of the school day.

In general New Jersey has accomplished much toward providing basic facilities in its school which promote safe and sanitary conditions for its school children. Table IV discloses the following facts:

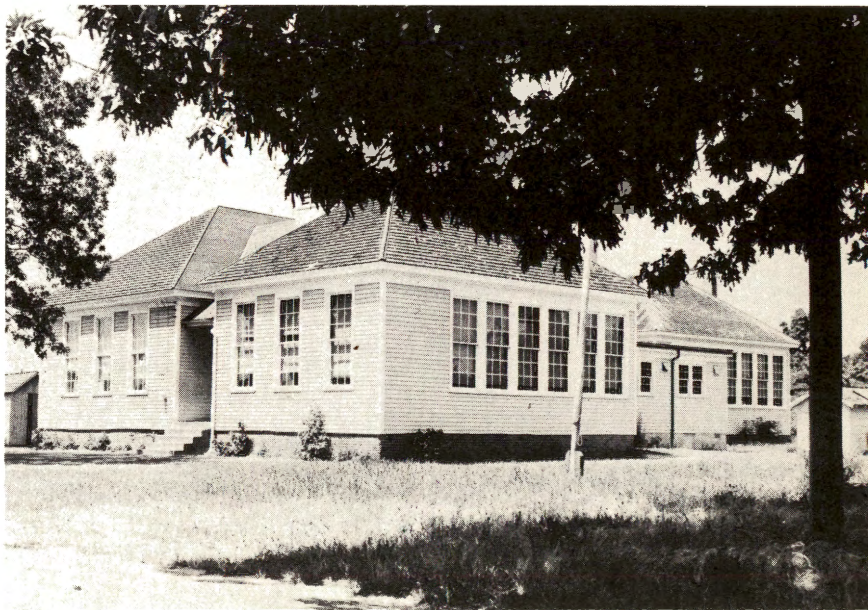
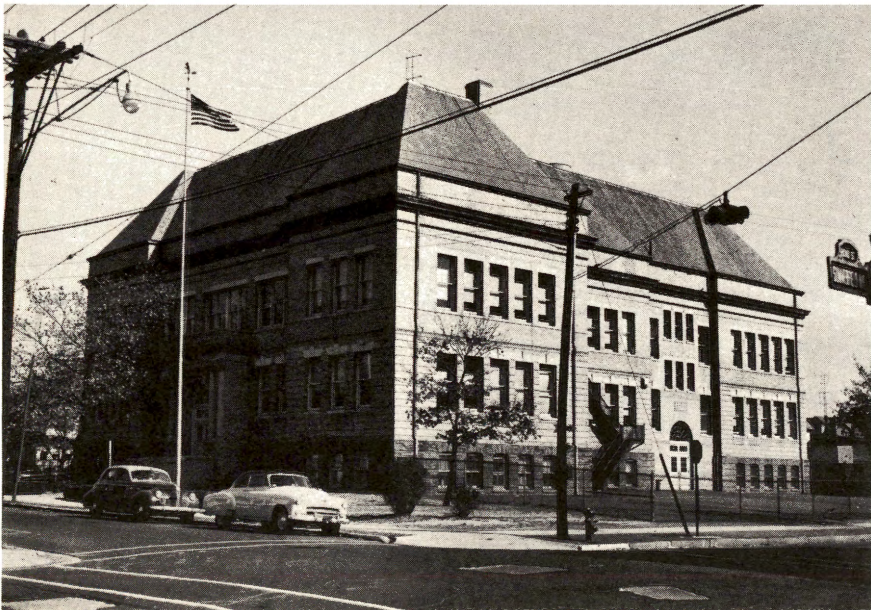
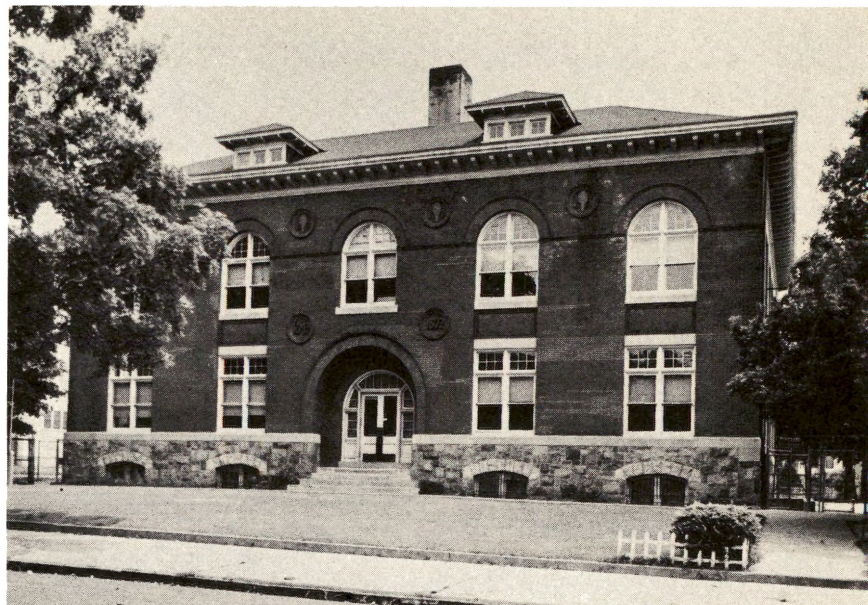
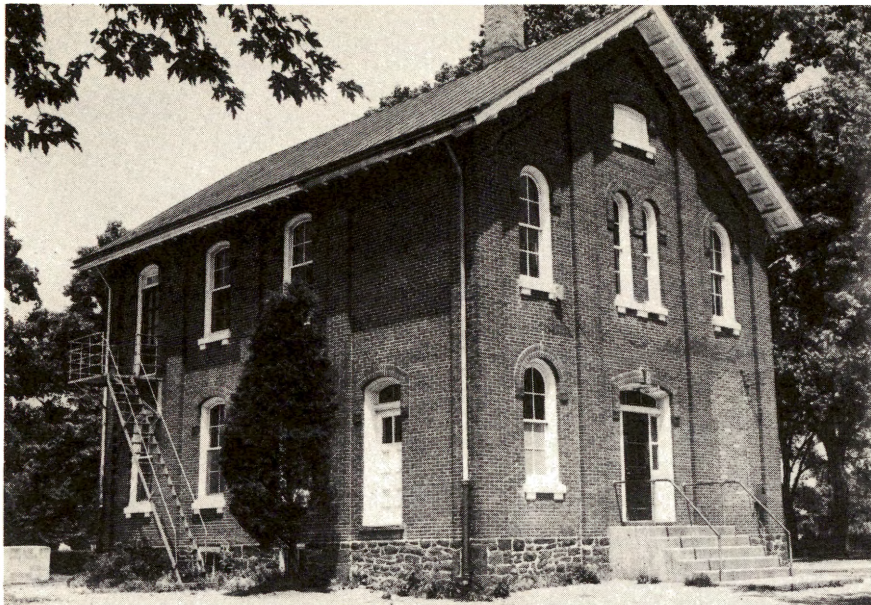
- *Heating.* 96.1% of the school buildings in which 99.3% of the school children are housed are equipped with central heat. 55 of the buildings without central heat are main elementary buildings; the other 17 without central heat are auxiliary buildings.
- *Ventilation.* 56.9% of the school buildings in which 59.7% of the school children are housed have mechanical ventilation.
- *Artificial Lighting.* 100% of New Jersey school buildings are provided with electric lighting.
- *Water Service.* 98.2% of the school buildings in which 99.7% of the school children are housed have pressure water service. 16 of the 18 elementary buildings which have water service hand operated on school grounds are main buildings. Of the 16 recording no water available on school grounds, 4 are main elementary buildings and the other 12 are auxiliary buildings with water service available at adjacent school plants.
- *Toilets.* 94.9% of the school buildings which house 98.9% of the school children are provided with indoor water flush toilets. 69 of the 73 elementary buildings which have outdoor privies are main buildings. Of the 19 buildings without provisions only one elementary building is a main building and that building is not now in use. The other 18 are auxiliary buildings with toilet facilities in adjacent school plants.
- *Sewage Disposal.* 64.2% of the school buildings which house 80.2% of the school children have municipal sewage connections. Of the 78 elementary buildings without disposal systems, 68 are main buildings.
- *Washing Facilities.* 48.8% of the school buildings which house 61.1% of the school children provide hot and cold water for general pupil use. 49.2% of the school buildings which house 38.5% of the school children provide only cold water. 22 elementary buildings which provide no washing facilities are main buildings. The other 16 are auxiliary buildings with washing facilities in adjacent school plants.

TYPE OF SERVICE SYSTEMS DISTRIBUTED BY NUMBER OF BUILDINGS¹ AND NUMBER OF PUPILS UNDER TYPE OF EDUCATIONAL ORGANIZATION

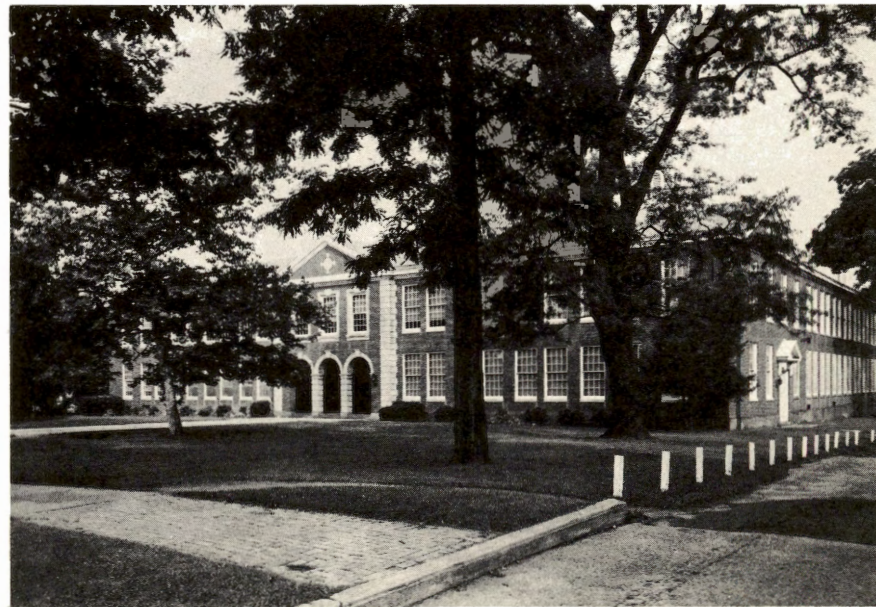
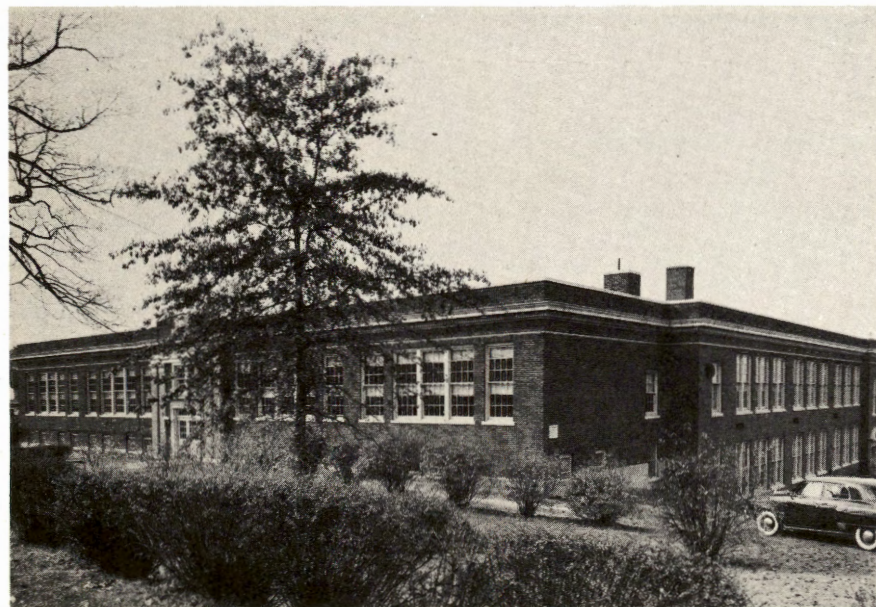
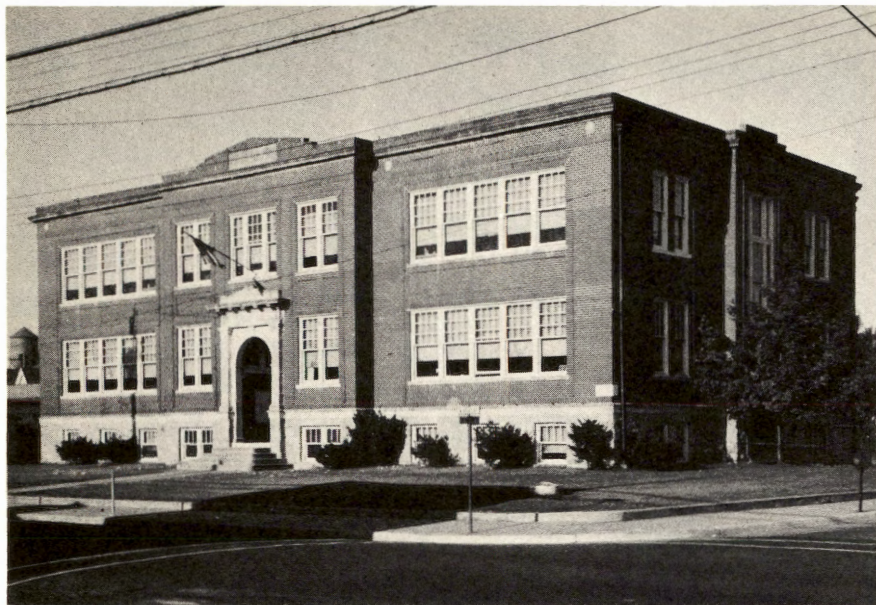
	Elementary		Secondary		Comb. Elem. & Sec.		Total	
	No. of Bldgs.	No. of Pupils	No. of Bldgs.	No. of Pupils	No. of Bldgs.	No. of Pupils	No. of Bldgs.	No. of Pupils
1. Heating								
Central Heat	1,458	498,801	214	165,383	111	73,290	1,783	737,474
Room heater	59	2,795	6	1,121	1	140	66	4,056
Mixed	4	998	2	290	—	—	6	1,288
2. Ventilation								
Mechanical ventilation	850	292,199	141	108,644	64	43,254	1,055	444,097
Gravity ducts	76	17,669	3	2,224	6	3,105	85	22,998
Window ventilation only	379	99,191	36	19,188	17	8,957	432	127,336
Mixed	218	93,535	42	36,738	25	18,114	283	148,387
3. Artificial Lighting								
Electric lighting	1,521	502,594	222	166,794	112	73,430	1,855	742,818
Gas lighting	—	—	—	—	—	—	—	—
No artificial lighting	—	—	—	—	—	—	—	—
4. Water Service								
Pressure water service	1,493	501,556	217	165,512	111	73,290	1,821	740,358
Hand operated on grounds	18	629	—	—	—	—	18	629
No water on grounds	10	409	5	1,282	1	140	16	1,831
5. Toilets								
Indoor water flush	1,437	496,350	212	165,129	111	73,290	1,760	734,769
Indoor, other	3	726	—	—	—	—	3	726
Outdoor privies	73	5,161	—	—	—	—	73	5,161
No provisions	8	357	10	1,665	1	140	19	2,162
6. Sewage Disposal								
Municipal connections	909	376,635	189	154,825	93	64,447	1,191	595,907
School owned disposal	534	120,723	25	10,420	18	8,843	577	139,986
No disposal system	78	5,236	8	1,549	1	140	87	6,925
7. Washing facilities								
Hot & cold water in wash basins for pupil use	646	257,581	178	140,452	81	55,621	905	453,654
Cold water only	844	243,278	38	25,095	30	17,669	912	286,042
Showers for pupil use	167	90,904	156	136,693	74	52,585	397	280,182
No fixed washing facilities	31	1,735	6	1,247	1	140	38	3,122

¹ Includes auxiliary buildings, annexes.

SCHOOL BUILDINGS NOW IN USE IN NEW JERSEY SHOW WIDE VARIATIONS IN AGE AND ARCHITECTURE



SCHOOL BUILDINGS NOW IN USE IN NEW JERSEY SHOW WIDE VARIATIONS IN AGE AND ARCHITECTURE

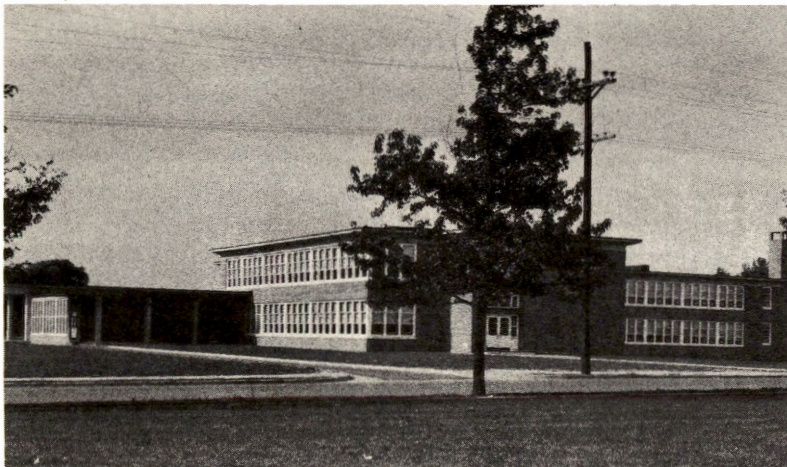


PART V. TRANSPORTATION OF PUPILS

Table V presents the facts regarding pupil transportation in New Jersey. School districts must provide transportation at public expense for pupils living remote from their schools. This has been interpreted as 2 or more miles for elementary school pupils and $2\frac{1}{2}$ miles or more for secondary school pupils. In some districts where necessary bus routes are established and buses are not filled, pupils living within the 2 miles area are permitted to ride on school buses. Naturally many schools, particularly in city and town areas, have their entire school population within the 2 mile area and do not need to provide transportation.

In New Jersey some Boards of Education operate their own buses, but in most cases contracts are made with private owners to provide the necessary transportation. Under either arrangement the State subsidizes the cost to the extent of 75% whenever the necessity, method, and costs have been approved by the county superintendent of schools. All transportation costs, including purchase of buses, are budgeted under current expenditures and are not taken from capital outlay funds.

- 142,810 or 19.6% of the pupils in the state are transported to school.
483 or 88.3% of the 548 local administrative school units transport pupils at public expense.
 - 106,165 or 74.3% of the pupils transported at public expense ride in privately-owned buses.
 - 24,866 or 17.4% of the pupils transported at public expense ride in school-owned buses.
 - 11,779 or 8.3% of the pupils transported at public expense ride in common carrier vehicles.
- 144 or 43.9% of the 328 school-owned buses have a capacity of 54 or more pupils.
237 or 72.3% of the school-owned buses have a capacity of 48 or more pupils.
 - Almost 50% of the school-owned buses are 3 years, or less than 3 years, old.
103 or 31.4% of the school-owned buses are 6 or more years old.
27 or 8.2% of the school-owned buses are over 10 years old.



An example of modern school planning where a bus port has been provided to protect pupils during loading and unloading of buses.

TRANSPORTATION OF PUPILS¹

1. Number of local administrative units transporting pupils at public expense: 483

2. Number of pupils transported at public expense:

In privately-owned vehicles	106,165
In common carrier vehicles	11,779
In school-owned buses	24,866
Total number of pupils transported	142,810

3. Capacity and age of school-owned buses:

Rated Capacity ²	Age in years											Total
	0 to 1	2	3	4	5	6	7	8	9	10	over 10	
24 or less	7	1	2	3	2	3	—	—	—	—	—	18
30	—	1	2	1	—	—	1	—	1	—	2	8
36	2	1	—	3	1	5	7	—	1	2	5	27
42	3	3	6	3	4	6	6	3	1	—	3	38
48	14	13	11	14	9	8	7	5	2	3	7	93
54	38	26	21	12	14	3	—	7	1	3	9	134
60 or over	2	2	2	1	1	1	—	—	—	—	1	10
Total	66	47	44	37	31	26	21	15	6	8	27	328

4. Present value of all SCHOOL-owned buses²: \$1,226,800.00

¹Number of pupils transported as of the reporting date of February 1, 1953.

²Value is determined at the State level by applying average costs less standard depreciation ratios as used by the State.

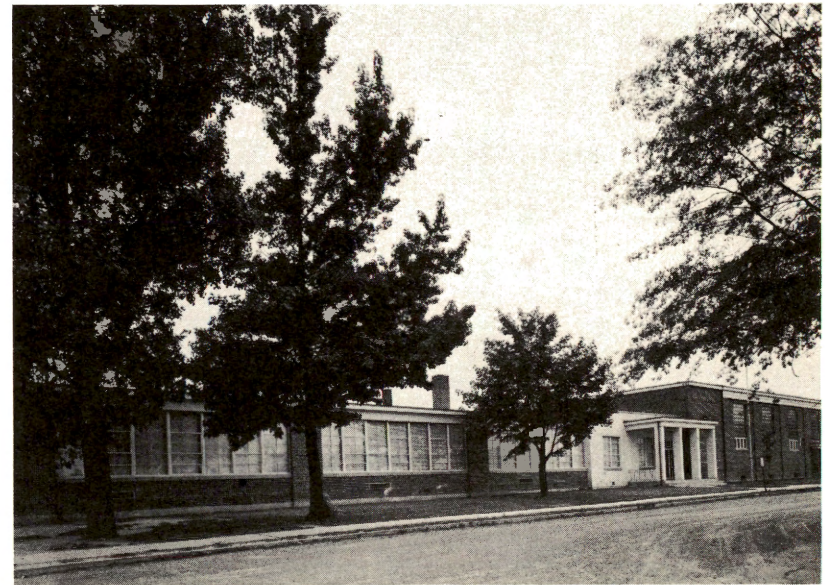
PART VI. NEW BUILDINGS AND MAJOR ADDITIONS AND REHABILITATING

January 1945 to September 1953

Throughout the state, local school districts have been attempting to meet school facility needs through construction and rehabilitation. The extent to which recent construction has taken place in New Jersey is shown in Table VI and Chart C. Some details of the construction during the period between March 1951 and September 1953 are disclosed in Table VII and Chart D. Data as to how much of the construction of new buildings and major additions as reported in Table VI is devoted to construction of new school plants are revealed in Table VIII. Estimates of how much construction and rehabilitation was needed by September 1953 but was *not* done are given in Tables XIV and XV.

Among the findings of Table VI are:

- Of the 1855 public school buildings in the state
385 or 20.8% are newly constructed or have had major additions; and
304 or 16.4% have been rehabilitated.
- Of the 385 buildings newly-constructed or with major additions
321 or 83.4% are elementary schools; 40 or 10.4% are secondary schools; and 24 or 6.2% are combined elementary and secondary schools.
- Of the 304 buildings rehabilitated
248 or 8.6% are elementary schools; 33 or 10.8% are secondary schools; and 23 or 7.6% are combined elementary and secondary schools.
- Of the 1521 elementary school buildings
321 or 21.1% are newly-constructed or have major additions; and
248 or 16.3% have been rehabilitated.
- Of the 222 secondary school buildings
40 or 18% are newly-constructed or have major additions; and
33 or 14.9% have been rehabilitated.
- Of the 112 combined elementary and secondary schools
24 or 21.4% are newly-constructed or have major additions; and
23 or 20.5% have been rehabilitated.
- Of the 730,030 pupils enrolled in public schools in New Jersey
92,978, or 12.7% are housed in buildings newly-constructed or with major additions; and
78,348 or 10.7% are housed in buildings recently rehabilitated.
- \$33,280 was the average cost of rehabilitation for the 304 buildings reported in this table.
\$288,172 was the average cost for new buildings and major additions during the period from January 1945 to March 1951.
\$323,256 was the average cost for new buildings and major additions during the period from March 1951 to September 1953.



A recent addition to an older building.

NEW BUILDINGS AND MAJOR ADDITIONS AND REHABILITATING — JANUARY 1945 to SEPTEMBER 1953

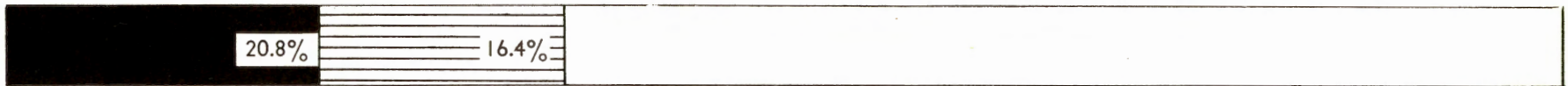
	Elementary	Secondary	Combined Elem. & Sec.	Total
1. New Buildings and Major Additions				
a. January 1945 - March 1951				
(1) Number of units	116	18	17	151
(2) Number of classrooms ¹	807	124	145	1,076
(3) Total pupil capacity ²	24,544	3,669	4,193	32,406
(4) Net increase in pupil capacity ³	22,364	3,256	3,717	29,337
(5) Cost (including site & equipment)	\$31,464,000	\$6,159,000	\$5,891,000	\$43,514,000
b. March 1951 - September 1953				
(1) Number of units	205	22	7	234
(2) Number of classrooms ¹	1,650	298	57	2,005
(3) Total pupil capacity ²	50,220	8,672	1,680	60,572
(4) Net increase in pupil capacity ³	45,602	7,317	1,680	54,599
(5) Cost (including site & equipment)	\$59,230,000	\$14,494,000	\$1,918,000	\$75,642,000
2. Rehabilitating and Remodeling				
a. No. of bldgs. rehabilitated	248	33	23	304
b. No. of pupils directly benefited by such improvements	49,729	21,073	7,546	78,348
c. Total cost of such improvements	\$5,692,000	\$3,246,000	\$1,179,000	\$10,117,000
3. Cost — Grand total	\$96,386,000	\$23,899,000	\$8,988,000	\$129,273,000

¹Including recitation rooms, laboratories, and shops.²Room capacities are determined on the basis of State and local standards.³This is the capacity shown in line "c" less the capacity of publicly-owned classrooms abandoned and replaced as a result of the construction of these units.

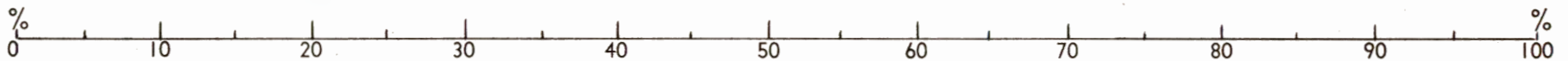
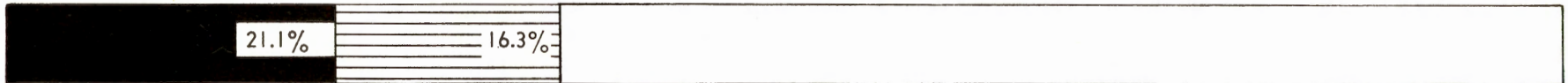
CHART C

PERCENT OF NEW BUILDINGS AND MAJOR ADDITIONS AND REHABILITATING— JANUARY 1945 to SEPTEMBER 1953

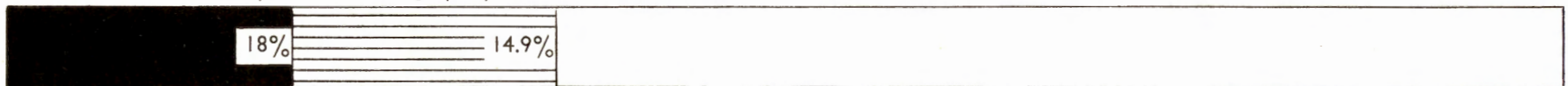
Percent of all public school buildings (1855)



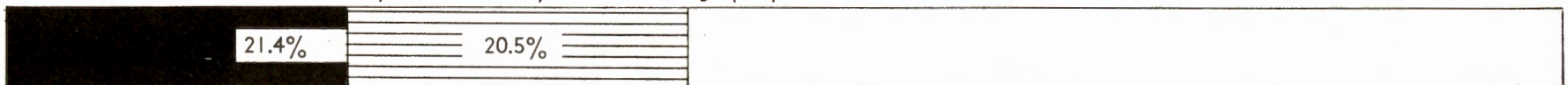
Percent of elementary school buildings (1521)



Percent of secondary school buildings (222)



Percent of combined elementary and secondary school buildings (112)

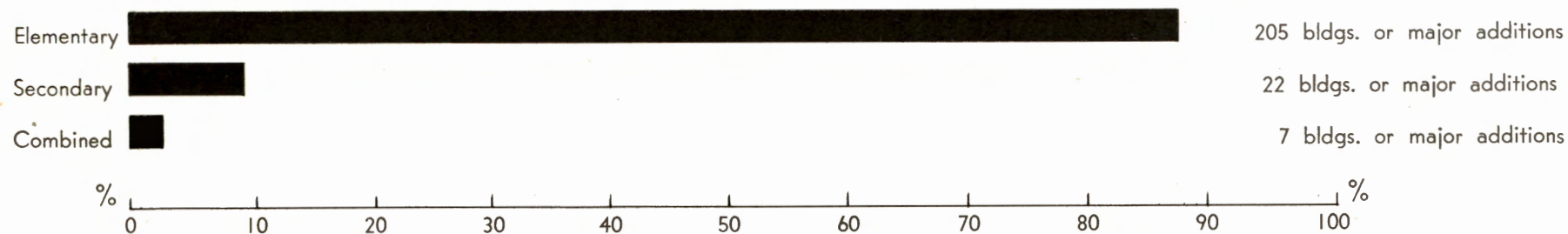


■ New Bldgs. and Major Additions

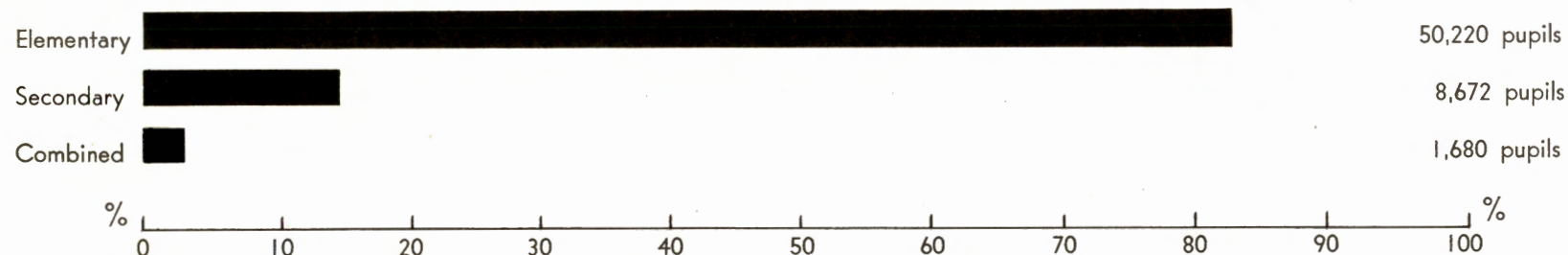
▨ Bldgs. Rehabilitated and/or Remodeled

DETAILS OF NEW BUILDINGS AND MAJOR ADDITIONS — MARCH 1951 to SEPTEMBER 1953

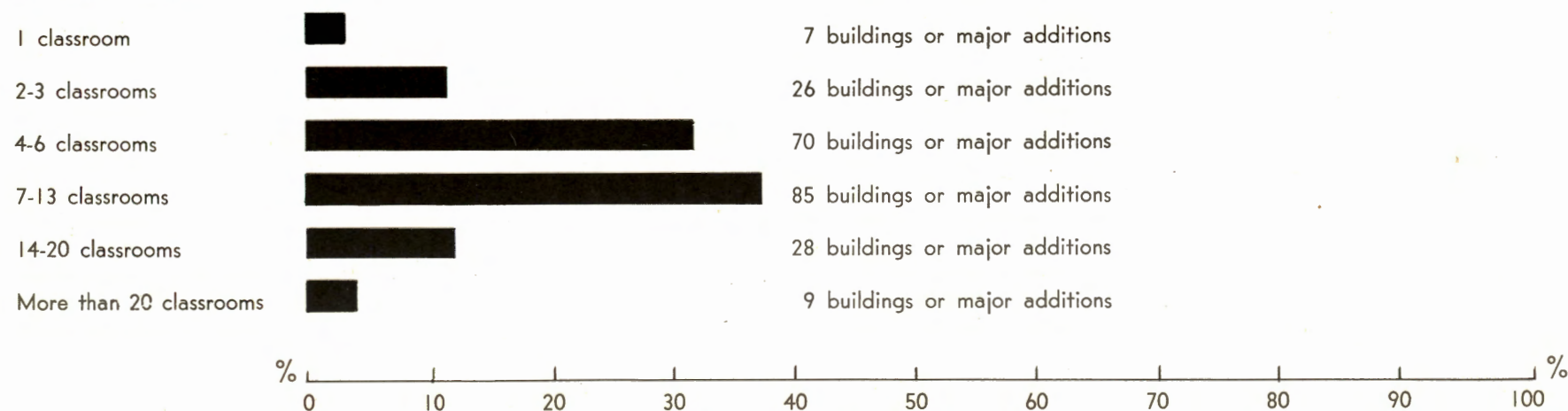
Number of Buildings and Major Additions under Construction — 234



Total Pupil Capacity — 60,572



Distribution of Buildings and Major Additions by Number of Classrooms



PART VII. DETAILS OF NEW BUILDINGS AND MAJOR ADDITIONS—MARCH 1951 to SEPTEMBER 1953

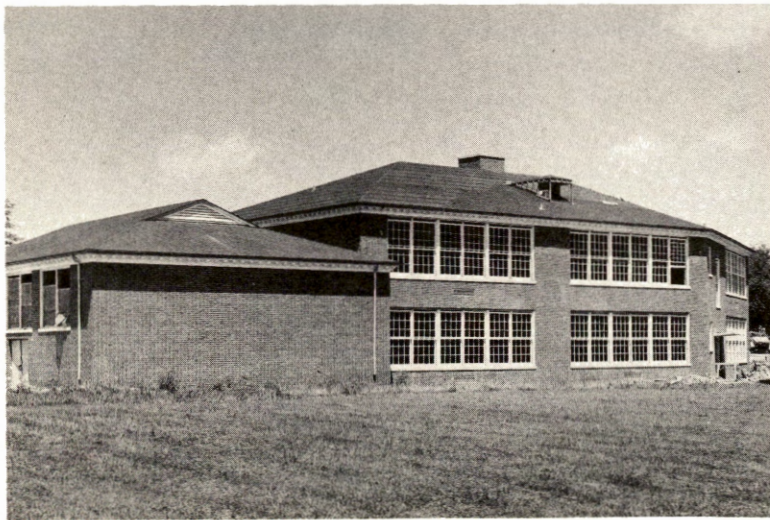
Table VII lists new buildings and major additions under construction as of or since March 1951. It supplements Section 1 of Table VI to give a picture of recent schoolhouse construction. A comparison of these two tables reveals that an accelerated school building program is underway in New Jersey. During the six year period between January 1945 and March 1951, 151 new buildings and major additions were constructed. During the two and a half year period from March 1951 to September 1953, 234 new buildings and major additions were under construction or completed. The total for the two periods is 385 buildings and major additions. Reference to Table XV (New Construction Needed, as of September 1953) will help complete the schoolbuilding picture by indicating the construction that is currently needed but was not done.

Some clarification of the kind of construction represented in Table VII may be gained by consulting column 1 in Table VIII. (New School Plants under Construction as of or since March 1951). The combined information in Tables VII and VIII shows that:

- 104 of the 234 buildings and major additions represented in Table VII were new school plants.
 - 92 of the 205 elementary buildings and major additions were new elementary school plants.
 - 11 of the 22 secondary buildings and major additions were new secondary school plants.
 - 1 of the 7 combined elementary and secondary buildings and major additions was a new combined elementary and secondary school plant.

An analysis of Table VII reveals that:

- 198 of the 205 elementary buildings and major additions included classroom construction.
 - 20 of the 22 secondary buildings and major additions included classroom construction.
 - 7 of the 7 combined elementary and secondary buildings and major additions included classroom construction.



School under construction.

- Construction represented in this table resulted in a net increase in pupil capacity of 54,599, or 90.1% of the 60,572 pupil is the total capacity of the units involved. This figure is 90.1% of the 60,572 total pupil capacity of the units involved. The difference between total pupil capacity and net increase in pupil capacity is due to the fact that some of the construction reported replaced existing classrooms.
- 54,599 pupils or 7.5% of the 730,030 pupils in the state were benefited by this construction.

DETAILS OF NEW BUILDINGS AND MAJOR ADDITIONS — MARCH 1951 to SEPTEMBER 1953

	Elementary	Secondary	Comb. Elem. & Sec.	Total
1. Buildings and Major Additions				
a. Number under construction	205	22	7	234
b. Total pupil capacity in these units ²	50,220	8,672	1,680	60,572
c. Net increase in pupil capacity resulting from this construction	45,602	7,317	1,680	54,599
d. Cost (including sites and equipment)	\$59,230,000	\$14,494,000	\$1,918,000	\$75,642,000
2. Distribution of Buildings and Major Additions Under Construction by Number of Classrooms				
a. 1 classroom	6	1	—	7
b. 2 or 3 classrooms	22	4	—	26
c. 4-6 classrooms	65	2	3	70
d. 7-13 classrooms	79	3	3	85
e. 14-20 classrooms	20	7	1	28
f. More than 20 classrooms	6	3	—	9
g. Total number of classrooms in these units ³	1,650	298	57	2,005
3. Number of General-Use Rooms in these Buildings and Major Additions				
a. Libraries	28	11	1	40
b. Gymnasiums	10	12	—	22
c. Auditoriums	12	5	—	17
d. Aud-Gyms.	32	1	1	34
e. Cafeterias	29	13	2	44
f. Cafeteriums	15	—	—	15
g. Multi-purpose rooms	40	—	—	40
h. Medical suites	95	10	1	106
i. Other	46	27	2	75
j. Total number of general-use rooms provided by this construction	307	79	7	393

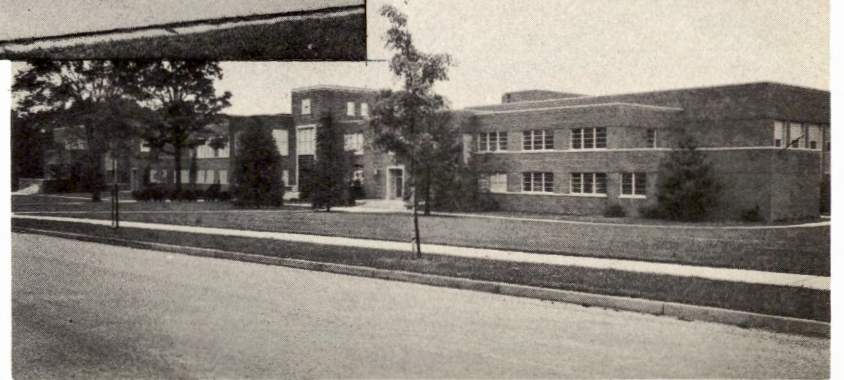
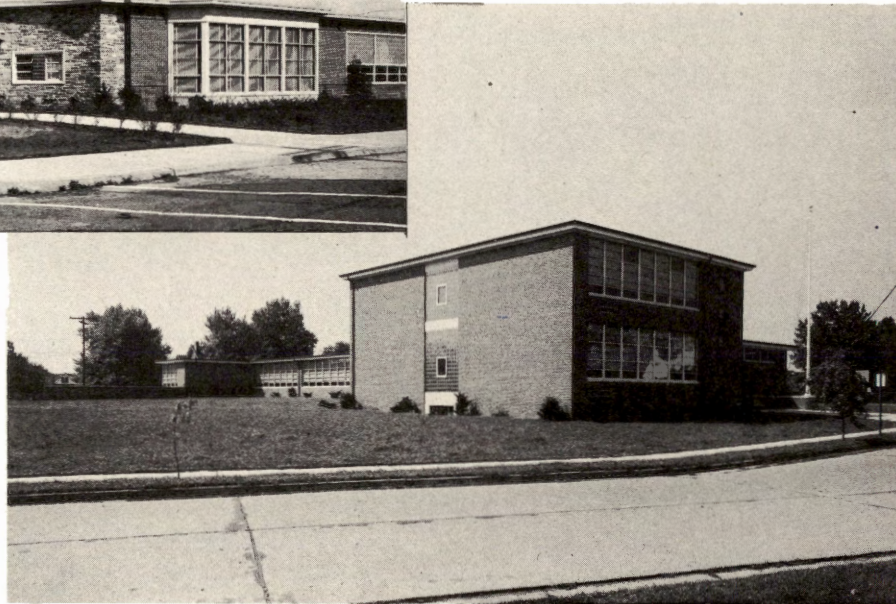
¹See definition under Part VII.²Room capacities are determined on the basis of State and local standards.³Including recitation rooms, laboratories, and shops. The totals in line "g" are not the totals of the respective columns for Item 2 (lines a-f).

SOME EXAMPLES OF RECENT SCHOOL CONSTRUCTION



NEW JERSEY NEEDS NEW SCHOOL BUILDINGS TO

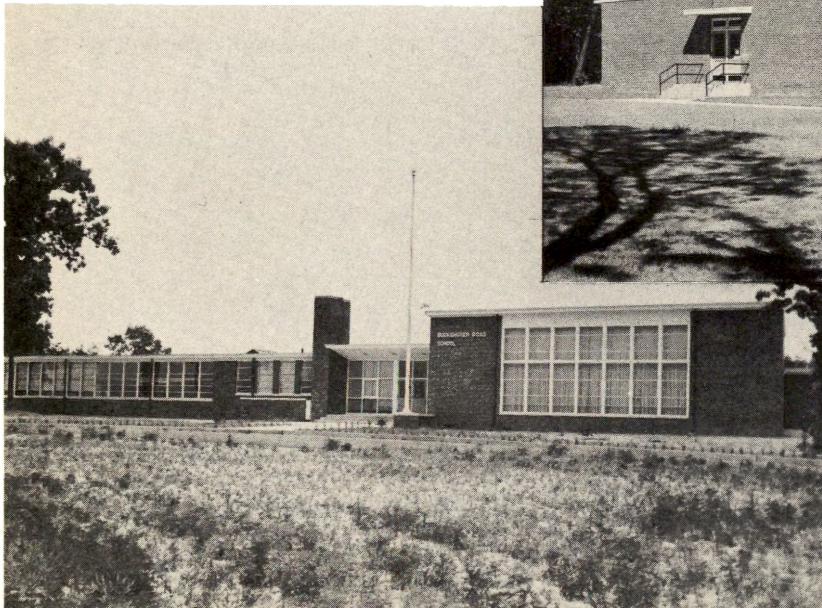
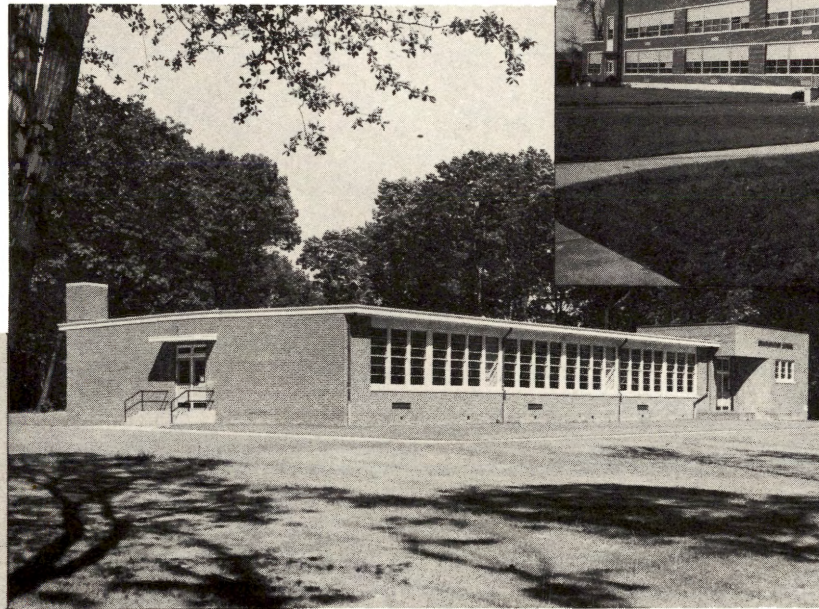
House Increasing Enrollments
Eliminate Overcrowding
Replace Obsolete Structures
and
Provide Adequate Facilities
for Modern Educational Programs



SOME EXAMPLES OF RECENT SCHOOL CONSTRUCTION

SINCE MARCH 1951 NEW JERSEY HAS BUILT OR IS BUILDING

137 School Plants, for
51,204 Pupils, at a cost of
\$64,559,000



PART VIII. NEW SCHOOL PLANT CONSTRUCTION

(1) JANUARY 1945 to MARCH 1951, and

(2) MARCH 1951 to SEPTEMBER 1953

The material presented in Table VIII deals only with the construction of new school plants. Column 1—Constructed since January 1945 and Occupied prior to March 1951—indicates what portion of the building reported in Table VI consisted of new school plants. Column 2—Under Construction as of or since March 1951—deals similarly with the construction noted in Table VII.

By itself, Table VIII points up a number of factors regarding recent construction of school plants:

- Acceleration of the school building program is indicated by a comparison between the 104 school plants under construction as of and since March 1951 and the 33 school plants constructed between January 1945 and March 1951. Column (2) of Table VIII, representing approximately a 2½ year period, would average out to the construction of 41.6 school plants per year. Column (1) representing 6 years, gives an average of 5.5 school plants a year.
- The 137 school plants constructed since January 1945 represents 7.8% of the 1745 school plants in the state.
- The average cost of school plants constructed between January 1945 and March 1951 was \$423,636. The average cost of school plants under construction as of and since March 1951 was \$486,336.
- The average number of pupils accommodated in school plants constructed between January 1945 and March 1951 was 340. The average number of pupils accommodated in school plants under construction as of and since March 1951 was 384.
- The average per pupil cost of school plants constructed between January 1945 and March 1951 was \$1,245. The average per pupil cost of school plants under construction as of and since March 1951 was \$1,265.
- Of the \$50,561,000 which was the plant cost of 104 schools constructed as of or since March 1951:
 - 90.6% was spent for buildings;
 - 3% was spent for sites; and
 - 6.4% was spent for equipment and furniture.

NEW SCHOOL PLANT CONSTRUCTION
(1) JANUARY 1945 to MARCH 1951, and
(2) MARCH 1951 to SEPTEMBER 1953

	(1) Constructed since January 1945 and Occupied prior to March 1951	(2) Under Construction as of or since March 1951
1. Elementary		
a. Number of Plants	92	31
b. Total plant cost	\$38,709,000	\$13,119,000
(1) Buildings	\$35,255,000	\$12,266,000
(2) Sites	\$ 1,138,000	\$ 196,000
(3) Equipment & furniture	\$ 2,316,000	\$ 657,000
c. Number of pupils	32,096	10,508
2. Secondary		
a. Number of plants	11	1
b. Total plant cost	\$11,197,000	\$ 656,000
(1) Buildings	\$ 9,914,000	\$ 608,000
(2) Sites	\$ 384,000	—
(3) Equipment & furniture	\$ 899,000	\$ 48,000
c. Number of pupils	7,340	450
3. Combined Elem. & Sec.		
a. Number of plants	1	1
b. Total plant cost	\$ 673,000	\$ 205,000
(1) Buildings	\$ 627,000	\$ 200,000
(2) Sites	\$ 7,000	—
(3) Equipment & furniture	\$ 39,000	\$ 5,000
c. Number of pupils	540	270
4. Totals of above		
a. Number of plants	104	33
b. Total plant cost	\$50,579,000	\$13,980,000
(1) Buildings	\$45,796,000	\$13,074,000
(2) Sites	\$ 1,529,000	\$ 196,000
(3) Equipment & furniture	\$ 3,254,000	\$ 710,000
c. Number of pupils	39,976	11,228

PART IX. RATING OF PUBLICLY-OWNED SCHOOL PLANTS AS SATISFACTORY, FAIR, AND UNSATISFACTORY

For information as to the meaning of Satisfactory (S), Fair (F), and Unsatisfactory (U), refer to the Definition of Terms in the Introduction. It may be noted that some of the 10 major defects, as listed under Unsatisfactory in Table IX, relate to material which appears in other tables. For example, Table I (General Characteristics of School Buildings) is pertinent to (b) under footnote 3—non-correctible fire hazard. Table IV (Service Systems) indicates existing conditions relevant to (h), (i), and (j) under footnote 3. However, it should be remembered that information in Table IX refers to school plants, while Tables I and IV are based on school buildings.

Table IX reveals:

- Of the 1745 school plants in New Jersey 460 or 26.4% are Satisfactory;
824 or 47.2% are Fair;
461 or 26.4% are Unsatisfactory.
- Of the 730,030 pupils in New Jersey 210,558 or 28.8% attend schools that are rated Satisfactory;
393,597 or 53.9% attend schools that are rated Fair;
125,875 or 17.3% attend schools that are rated Unsatisfactory.
- Almost the same number of school plants are rated Unsatisfactory as are rated Satisfactory. However, the Unsatisfactory plants house only 17.3% of the pupils while the Satisfactory plants house 28.8% of the pupils. This is due to the fact that the average school population of the "U" plant is approximately 273 pupils, while the average school population of the "S" plant is approximately 458. The average school population of "F" plants is 478 pupils.
- Of the 1,461 elementary school plants, 361 or 24.7% are rated Satisfactory;
673 or 46.1% are rated Fair;
427 or 29.2% are rated Unsatisfactory.
- Of the 186 secondary school plants, 67 or 36% are rated Satisfactory;
93 or 50% are rated Fair;
26 or 14% are rated Unsatisfactory.
- Of the 98 combined elementary and secondary schools, 32 or 32.6% are rated Satisfactory;
58 or 59.2% are rated Fair;
8 or 8.2% are rated Unsatisfactory.

**RATING OF PUBLICLY-OWNED SCHOOL PLANTS AS SATISFACTORY, FAIR, OR UNSATISFACTORY
DISTRIBUTED BY NUMBER OF PLANTS AND NUMBER OF PUPILS
UNDER TYPE OF EDUCATIONAL ORGANIZATION**

Rating Classification of School Plants ¹	Elementary		Secondary		Comb. Elem. & Sec.		Total			
	No. of Plants	No. of Pupils ²	No. of Plants	No. of Pupils ²	No. of Plants	No. of Pupils ²	No. of Plants	No. of Pupils ²		
S Plants sufficiently satisfactory to continue in service for 20 or more years	361	131,897	67	57,079	32	21,582	460	210,558		
F Plants which by rehabilitating and remodeling could continue to serve for 10 to 15 years	673	263,376	93	85,415	58	44,806	824	393,597		
U Unsatisfactory plants which should be abandoned as soon as possible ³	Number of defects	1	148	39,022	9	6,632	0	—	157	45,654
		2	93	27,543	7	4,516	6	3,028	106	35,087
		3	84	20,677	3	1,438	0	—	87	22,115
		4	48	9,512	5	1,611	1	311	54	11,434
		5	26	7,242	1	738	1	761	28	8,741
		6	17	1,422	0	—	0	—	17	1,422
		7	5	606	1	555	0	—	6	1,161
		8	6	261	0	—	0	—	6	261
		9	0	—	0	—	0	—	0	—
		10	0	—	0	—	0	—	0	—
Total Unsatisfactory	427	106,285	26	15,490	8	4,100	461	125,875		

¹ In rating school plants, location, site safety, and educational and structural adequacy are considered. (See Definition of Terms in Introduction.)

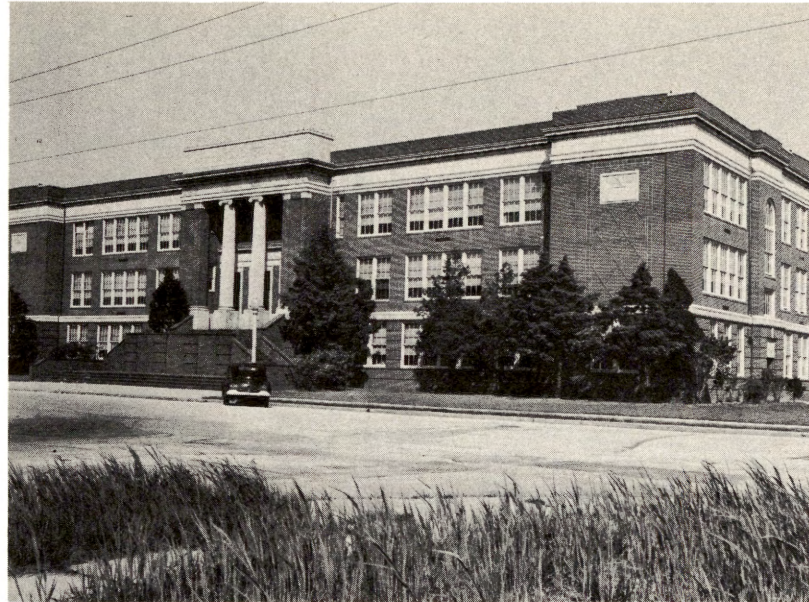
² Number of pupils housed in these plants as of February 1, 1953.

³ In section "U" the number of plants and number of pupils for each type of school are shown as having the indicated number of the following 10 major defects: (a) structurally unsafe; (b) non-correctible fire hazard; (c) very poorly located with respect to school population and school organization; (d) completely inadequate site which cannot be enlarged; (e) unsatisfactory and hazardous environment; (f) completely obsolete as to educational adequacy; (g) no artificial lighting; (h) without water-flush toilets; (i) without fixed hand-washing facilities; (j) without central heat.

For example: In line 4 of section "U" under Elementary the number 48 and 5,512 would mean that there are in use in the state 48 elementary school plants with 4 of the foregoing major defects, and that these 48 plants house 9,512 elementary school pupils.

1284 OF THE 1745 SCHOOL PLANTS IN THE STATE ARE RATED "SATISFACTORY" OR "FAIR"

A "fair" school plant is structurally and educationally adequate to warrant its continuance in effective service for 10 to 15 years through a reasonable expenditure for rehabilitating.



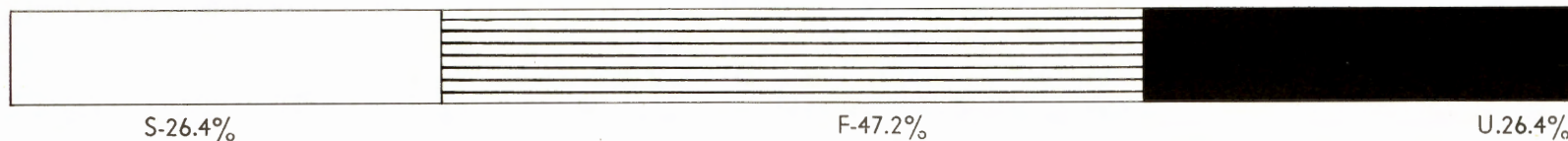
A "satisfactory" school plant is structurally and educationally adequate to warrant its continuance in use for a period of 20 or more years.



RATING OF PUBLICLY-OWNED SCHOOL PLANTS AS SATISFACTORY, FAIR, OR UNSATISFACTORY BY

1. (a) PERCENT OF ALL SCHOOLS

1" - 200 plants



(b) PERCENT BY TYPE OF EDUCATIONAL ORGANIZATION

Elementary



Secondary



Combined



S-36%
F-50%
U-14%

S-32.6%
F-59.2%
U- 8.2%

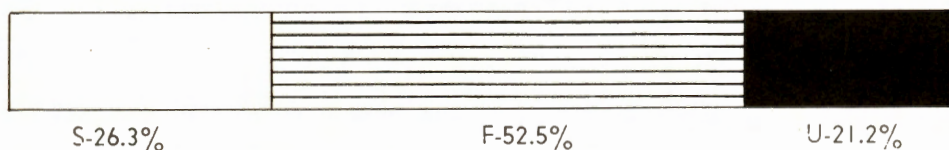
2. (a) PERCENT OF ALL PUPILS HOUSED

1" - 100,00 pupils



(b) PERCENT OF ALL PUPILS HOUSED BY TYPE OF EDUCATIONAL ORGANIZATION

Elementary



Secondary



Combined



S-36.1%
F-54.1%
U- 9.8%

S-30.6%
F-63.6%
U- 5.8%



Satisfactory



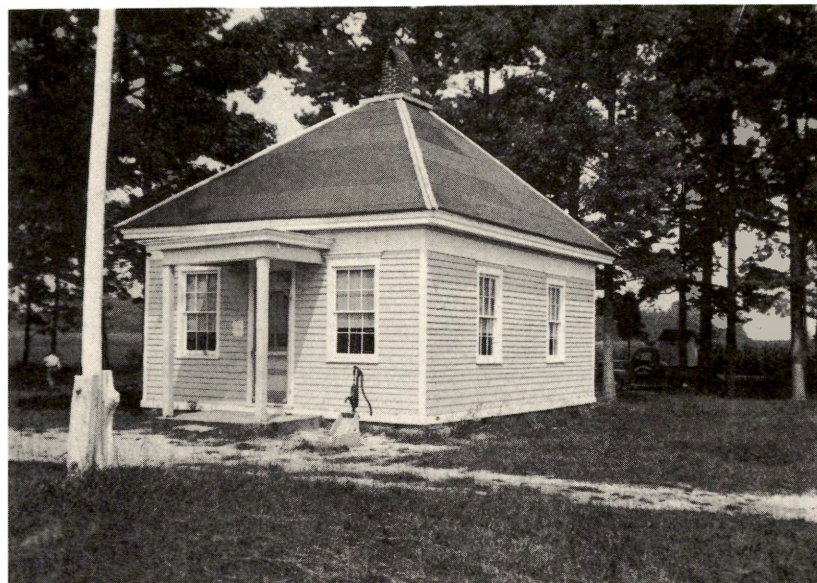
Fair



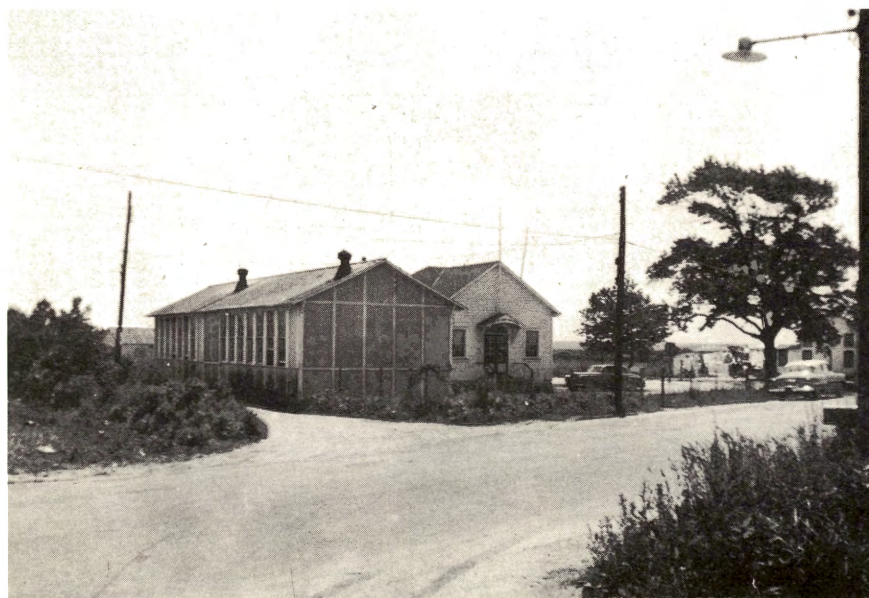
Unsatisfactory

A SCHOOL PLANT MAY BE "UNSATISFACTORY" FOR A NUMBER OF DIFFERENT REASONS

It may not be equipped with reasonably adequate service systems.

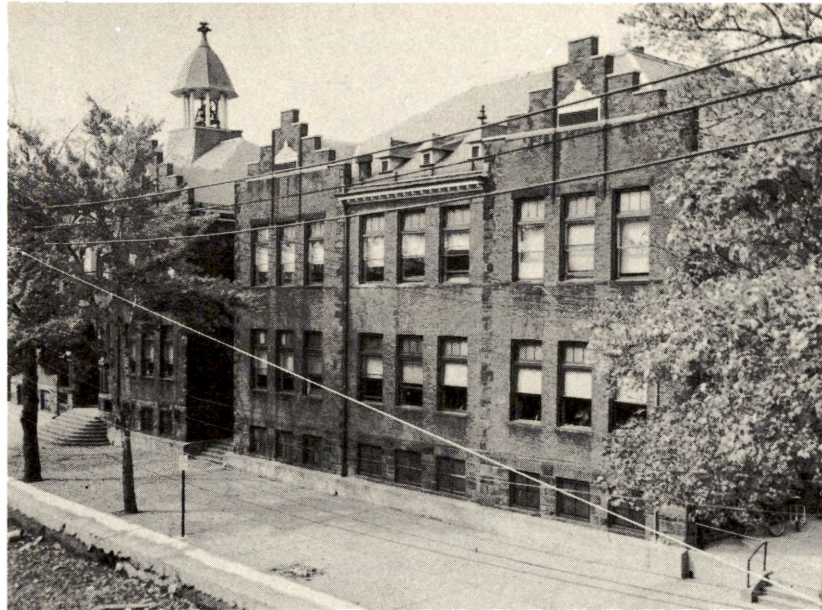


It may have a completely inadequate site which cannot be enlarged or be situated in an unsatisfactory or hazardous environment.

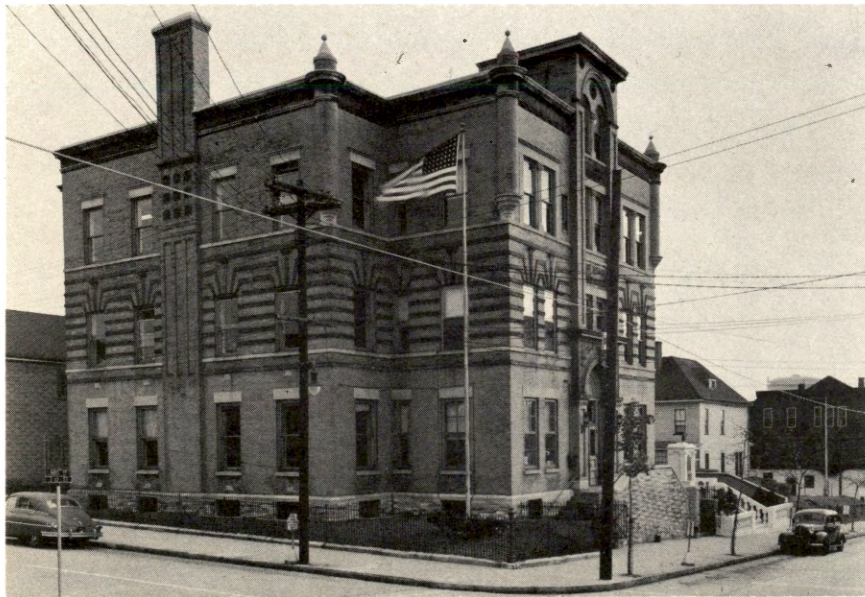


A SCHOOL PLANT MAY BE "UNSATISFACTORY" FOR A NUMBER OF DIFFERENT REASONS

It may be structurally unsafe or may have a non-correctible fire hazard.



It may be completely obsolete as to educational adequacy or very poorly located with respect to school population and school organization.



PART X. NUMBER OF PUPILS PER CLASSROOM IN "S" AND "F" SCHOOL PLANTS

Table X applies only to the 460 school plants rated Satisfactory and the 824 school plants rated Fair in Table IX. This total of 1,284 school plants is 73.6% of the total of 1,745 school plants in the State, in which are housed 82.8% of the total number of pupils in the State.

It is important to note that this table represents an average number of pupils per classroom. This means that within any given category of number of pupils per classroom many of the schools reporting will have classrooms with pupil loads both under and in excess of the limits of the category. For example: In the category 31-40 pupils per classroom 328 elementary schools report 3,968 classrooms. Some of the classrooms in this group may have a pupil load in excess of 40 and others may have a pupil load of under 31. If they average out to between 31-40 pupils per classroom they will be recorded in that category. Recognition of the particular problems of secondary schools has been made through the recording procedure noted in footnote (4).

Among the findings indicated in Table X are:

- Under each type of educational organization the majority of the schools, which includes a majority of the classrooms, reports an average pupil load of between 21 and 30 per classroom.
- 415 or 32.3% of the 1,284 school plants rated "S" and "F" have an average pupil load per classroom in excess of 30. These 415 schools contain 5,682 or 25.4% of the classrooms in "S" and "F" schools.
- 376 or 36.4% of the 1,034 elementary schools rated "S" and "F" have an average pupil load per classroom in excess of 30.
- 22 or 13.8% of the 160 secondary schools rated "S" and "F" have an average pupil load per classroom in excess of 30.
- 17 or 18.9% of the 90 combined elementary and secondary schools rated "S" and "F" have an average pupil load per classroom in excess of 30.

NUMBER OF PUPILS PER CLASSROOM IN "S" AND "F" SCHOOL PLANTS¹

Number of Pupils per Classroom ²	Number of Schools and Classrooms							
	Elementary		Secondary		Comb. Elem. & Sec.		Total	
	Schools ³	Classrooms	Schools ³	Classrooms ⁴	Schools ³	Classrooms ⁴	Schools ³	Classrooms ⁴
Under 20	98	1,356	37	1,121	16	472	151	2,949
21-30	560	8,339	101	3,761	57	1,645	718	13,745
31-40	328	3,968	17	630	17	471	362	5,069
41-50	35	378	4	106	—	—	39	484
Over 50	13	100	1	29	—	—	14	129
TOTAL	1,034	14,141	160	5,647	90	2,588	1,284	22,376

¹ Includes only school plants which have been rated as "S" and "F" in Table 9.

² Including recitation rooms, laboratories, and shops.

³ Distribution of schools by the average number of pupils per classroom, including each school only once.

⁴ Distribution of classrooms by the average number of pupils daily assigned to such rooms. In cases where rooms are used on a multiple-shift schedule because of inadequate space, total pupils have been counted for all shifts. For rooms used on a department schedule, as in high school, the "average number of pupils" is the total weekly pupil-period load divided by the number of periods the room is used during the week.

PART XI. USE OF SUB-STANDARD OR NON-PUBLICLY-OWNED FACILITIES

In Table XI it is important to note that the number of schools and number of pupils may not be totaled because of possible duplication. In some cases the information in categories 2 and 3 also appears in category 4, because the buildings or classrooms concerned were part of a school plant rated Unsatisfactory in Table IX. It is also important to consider the fact that category 4 applies to school plants whereas categories 1, 2, and 3 apply generally to additional buildings or some classrooms within school plants.

Table XI presents some of the results of inadequate school facilities. Other results may be found in Table XII (Classrooms Distributed According to Size and Pupil Load) and Table XIII (Multiple Sessions). The findings of these tables cannot be totaled together, nor can they be totaled with Table XI, because of some duplication.

Among the findings and possible deductions from Table XI are:

- 344 or 19.7% of the schools in the state have found it necessary to use makeshift quarters. In many cases this means that classrooms have been contrived from rooms originally planned as libraries, teachers' rooms, and supply areas.
- The small number of schools listed under categories 1 and 2 seems to indicate that the school districts are trying to meet their school facility needs without resorting to such undesirable measures as rented quarters and school-owned barracks buildings.



Left: An example of makeshift quarters.

Right: One of New Jersey's 461 Unsatisfactory schools.



USE OF SUB-STANDARD OR NON-PUBLICLY-OWNED FACILITIES BY NUMBER OF SCHOOLS AND NUMBER OF PUPILS UNDER TYPE OF EDUCATIONAL ORGANIZATION

	Elementary		Secondary		Comb. Elem. & Sec.		Total	
	No. of Schools ¹	No. of Pupils ²	No. of Schools ¹	No. of Pupils ²	No. of Schools ¹	No. of Pupils ²	No. of Schools ¹	No. of Pupils ²
1. In rented quarters or other facilities outside of school buildings	74	6,084	4	145	5	469	83	6,698
2. In school-owned barrack bldgs. or similar structures not designed for school use	12	694	5	246	—	—	17	940
3. In makeshift quarters in bldgs. designed for permanent school use	289	16,324	31	3,213	24	1,721	344	21,258
4. In school plants which should be abandoned ³	427	106,285	26	15,490	8	4,100	461	125,875

¹ Number of schools in which at least a portion of the enrollment is housed.

² Number of pupils housed in such facilities as of February 1, 1953.

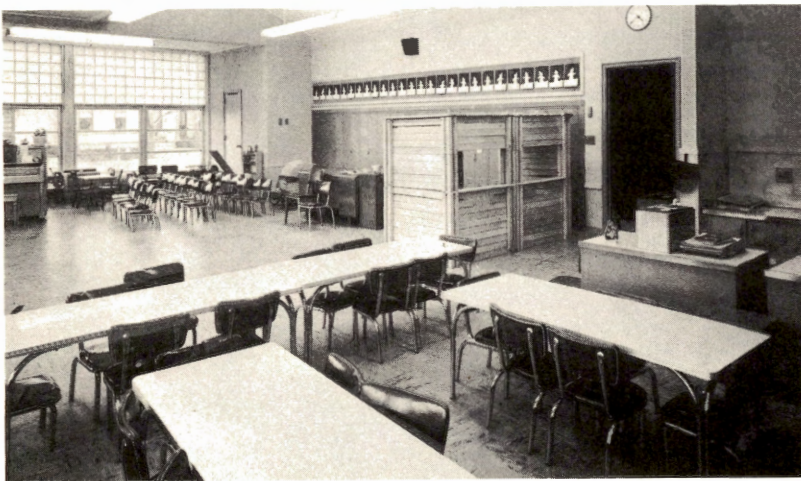
³ Plants rated as "U" in Table IX are included.

PART XII. CLASSROOMS DISTRIBUTED BY SIZE AND PUPIL LOAD

Table XII applies only to school classrooms, excluding shops and laboratories, in "S" and "F" school plants. Its broad categories of number of pupils per classroom and net classroom floor area do not permit any precise assessment of adequacy or inadequacy of floor area of pupil load. For example: in the category 21 to 30 pupils per classroom there is considerable difference between the minimum 21 and the maximum 30 in estimating adequacy of floor area.

A standard for judging the relation between floor area and pupil load has been set by the New Jersey Guide For Schoolhouse Planning and Construction (March 1952) for new buildings and additions. Its *minimum requirements* for floor area are: "Every instructional area shall contain at least 20 square feet for each child to be accommodated exclusive of lockers, clothing wardrobes, and other fixed storage space, and cabinets, except that kindergartens shall contain not less than 24 square feet per pupil." Standards as to average number of pupils per classroom and maximum number of pupils per classroom differ widely between states and within this state. The New Jersey Guide for Schoolhouse Planning and Construction recommends that: "Classes should not average more than twenty-five pupils, if the community hopes to provide an educational program fitted to the individual needs of children and to achieve a wide horizon of objectives." The platform of the National Education Association calls for ". . . class enrollments not to exceed 30 pupils."

Some facts disclosed by Table XII, with percentages based on the 18,788 classrooms now in use in "S" and "F" school plants are:



Many modern classrooms provide adequate space for multi-curricular activities.

- 10,606 or 56.5% of the classrooms have between 21 and 30 pupils per classroom.
- 6,884 or 36.6% of the classrooms have more than 30 pupils per classroom.
- 1,059 or 5.6% of the classrooms have a floor area of over 900 sq. ft.
- Using the minimum number of pupils in each category the findings disclose that 1,098 or 5.8% of the classrooms provide less than 20 square feet per pupil.
- Using the median point in each category of number of pupils per classroom, the findings indicate that 3,441 or 18.3% of the classrooms provide less than 20 square feet per pupil.
- Of the reported 1,004 classrooms not in use, the great majority are located in urban areas where population shifts have resulted in lower school enrollments.

CLASSROOMS DISTRIBUTED ACCORDING TO SIZE AND PUPIL LOAD¹

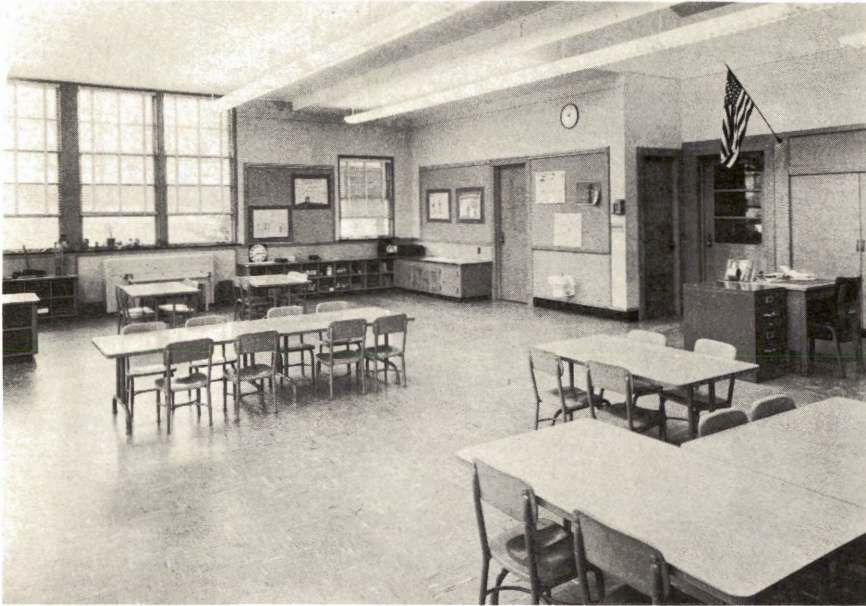
Number of Pupils ² Per Classroom ³	Net Classroom Floor Area						Total
	Less than 400 sq. ft.	400-600 sq. ft.	600-700 sq. ft.	700-800 sq. ft.	800-900 sq. ft.	Over 900 sq. ft.	
Not used	15	101	215	396	222	55	1,004
Under 20	83	208	337	443	119	108	1,298
21-30	131	1,398	3,575	3,714	1,286	502	10,606
31-40	26	502	2,305	2,417	763	278	6,291
41-50	2	12	110	99	38	60	321
Over 50	1	19	53	102	41	56	272
TOTAL	258	2,240	6,595	7,171	2,469	1,059	19,792

¹ This table includes only the classrooms in "S" and "F" school plants.

² Number of pupils in classrooms of these sizes as of the reporting date of February 1, 1953.

³ For the purpose of this table only, the term "classroom" excludes laboratories and shops.

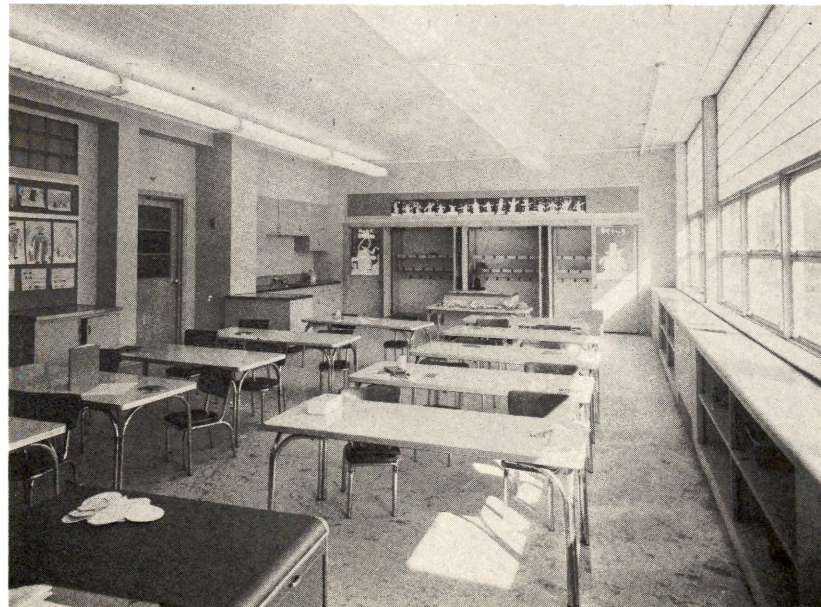
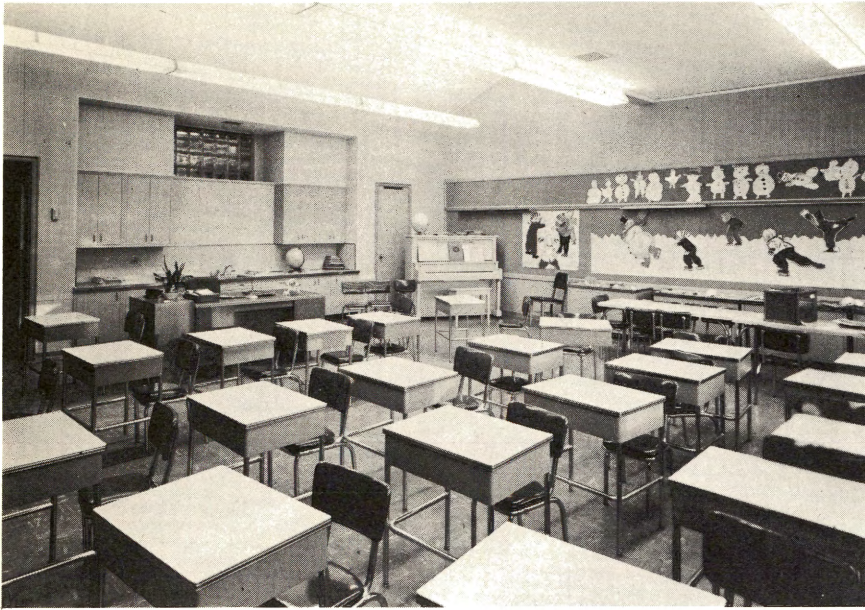
SOME VIEWS OF MODERN CLASSROOMS



Light-weight, movable desks permit great flexibility in the classroom program.

Planned areas for activity programs are particularly important in the kindergarten and primary grades.

SOME VIEWS OF MODERN CLASSROOMS



More efficient use of the classroom generally results when adequate built-in storage spaces are provided.

Careful attention is given to heating, ventilating, and lighting in the planning of modern school buildings.

PART XIII. MULTIPLE SESSIONS

Table XIII presents some of the existing conditions which are due to inadequate facilities. It should be noted that, in general, school districts are most reluctant to employ multiple sessions as a solution (even temporarily) to their schoolhousing problems. Multiple sessions are frequently a "last resort" which has been preceded by the acceptance of maximum classroom loads, conversion of auxiliary spaces (as libraries, medical suites) into classrooms, and use of rented quarters. As more and more school districts find themselves compelled to such undesirable practices, an increasing number of multiple sessions will be initiated unless new schoolhousing can be provided.

Table XIII shows that:

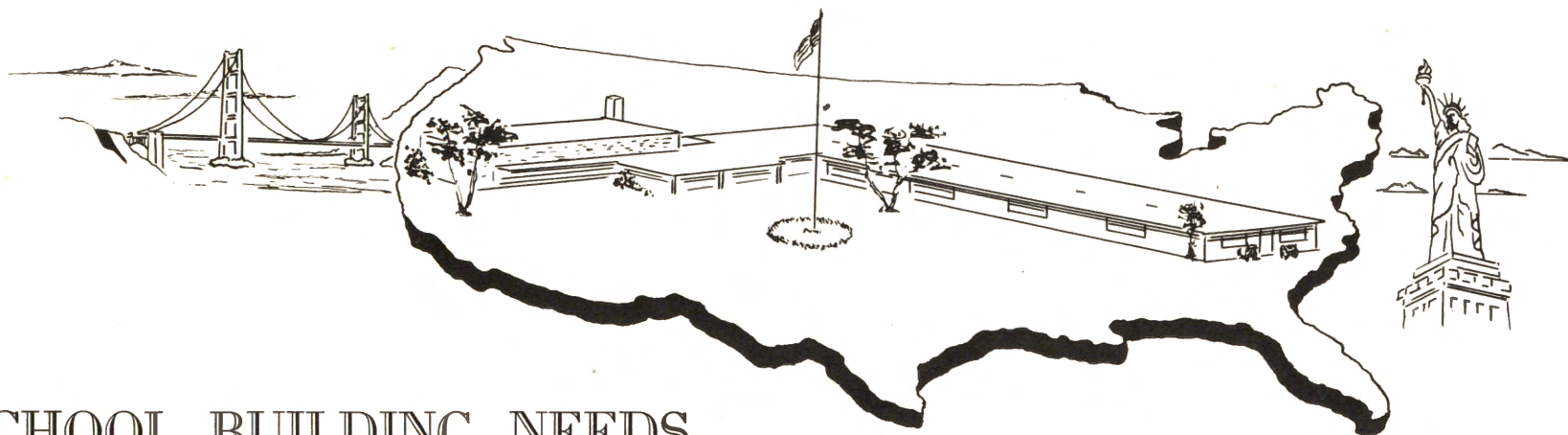
- 128 or 7.4% of the schools have found it necessary to resort to multiple sessions or some other form of the shortened school day for some of their student body.
- 23,923 or 3.3½ of the 730,030 school children are enrolled in multiple sessions.

TABLE XIII

MULTIPLE SESSIONS BY NUMBER OF SCHOOLS AND NUMBER OF PUPILS UNDER TYPE OF EDUCATIONAL ORGANIZATION

	Elementary		Secondary		Comb. Elem. & Sec.		Total	
	No. of Schools	No. of Pupils	No. of Schools	No. of Pupils	No. of Schools	No. of Pupils	No. of Schools	No. of Pupils
1. Triple Sessions	1	93	—	—	—	—	1	93
2. Double Sessions	110	20,399	3	1,194	9	1,617	122	23,210
3. Other Form of Shortened School Day	4	132	1	488	—	—	5	620

- (1) Total number of pupils now attending school for half-day session or otherwise shortened school day because of building space to accommodate all pupils on a full-day basis as of February 1, 1953.
- (2) A half-day kindergarten is not considered as part of a double session. In cases where morning and afternoon kindergartens are conducted, this practice is not deemed a double session.
- (3) A standard school day is defined as one during which children receive at least five hours of continuous instruction, either in classrooms or in extra-curricular activities, and shall provide a period for lunch purposes exclusive of the five hour day.



SCHOOL BUILDING NEEDS

Phase I of the Federal School Facilities Survey, based on reports from 43 states not including New Jersey "reveals a current need for public elementary and secondary school facilities equivalent to a single-story structure 50 feet wide extending from the Statue of Liberty to the Golden Gate Bridge".

III. NEEDS FOR PUBLIC SCHOOL FACILITIES

(As of September 1953)

The preceding inventory of public school facilities as of September 1953 has presented a comprehensive picture of existing school building and school plant conditions in New Jersey. The tables provide a factual basis for an appraisal of current needs. This section of the report (Tables XIV through XIX) indicates those needs, summarized on a county and state basis, as they have been reported by local school districts.

In all tables needs are as of September 1953. Future needs will be projected in Phase II of the Survey. The needs include any school remodeling or construction projects, site acquisitions and improvements, and school bus requirements which the local school district might be expected to provide out of their own resources if funds were available. Estimated costs are included.

The suggested current needs involve projects that would satisfy one or more of the following conditions:

1. Relieve overcrowding and eliminate multiple sessions;
2. Replace, remodel, or improve obsolete, improvised, and unsafe facilities;
3. Provide facilities made necessary by current school district reorganization.

Table XIX relates the estimated cost of satisfying current needs to the number of school administrative units, debt limit, net debt, number of units exceeding their borrowing capacity and by what amount, and additional borrowing capacity.

PART XIV. NEED FOR REHABILITATING

Table XIV indicates needed rehabilitating (exclusive of normal maintenance) and estimated costs as of September 1953. Only those buildings are included which rehabilitating and remodeling will make usable for at least another ten years. Non-instructional spaces include such items as service areas, roofs, and exteriors. Cost estimates are adapted to local conditions and recent experience. All rehabilitating and remodeling underway or begun since September 1952 is included. Some duplication is involved in the table because, in some cases, a school may wish to improve facilities under more than one category.

TABLE XIV

NEED FOR REHABILITATING (1) TO IMPROVE FACILITIES NOW IN USE AND (2) TO MAKE IDLE FACILITIES USABLE (As of September 1953)

	(1) To Improve Facilities Now Being Used		(2) To Make Idle Facilities Usable	
	Instructional Spaces	Non-instructional Spaces	Instructional Spaces	Non-instructional Spaces
Elementary				
a. Number of schools	46	34	18	6
b. Net change in pupil capacity	1,385	—	1,144	—
c. Estimated cost	\$3,488,000	\$636,000	\$142,000	\$17,000
Secondary				
a. Number of schools	14	10	3	2
b. Net change in pupil capacity	639	—	620	—
c. Estimated cost	\$1,028,000	\$241,000	\$49,000	\$67,000
Combined Elementary & Secondary				
a. Number of schools	4	3	—	1
b. Net change in pupil capacity	225	—	—	—
c. Estimated cost	\$1,284,000	\$53,000	—	\$4,000
Total				
a. Number of schools	64	47	21	9
b. Net change in pupil capacity	2,249	—	1,774	—
c. Estimated cost	\$5,800,000	\$930,000	\$191,000	\$88,000

REHABILITATING NEEDS FOR INSTRUCTIONAL SPACES BY COUNTIES

(As of September 1953)

County	Elementary			Secondary			Comb. Elem. & Sec.			Total		
	No. of Schools	Net Change in Pupil Capacity	Est. Cost	No. of Schools	Net Change in Pupil Capacity	Est. Cost	No. of Schools	Net Change in Pupil Capacity	Est. Cost	No. of Schools	Net Change in Pupil Capacity	Est. Cost
Atlantic	2	42	\$162,000	1	600	\$ 35,000	—	—	—	3	642	\$ 197,000
Bergen	6	113	106,000	3	—	122,000	1	115	\$ 40,000	10	228	268,000
Burlington	1	30	6,000	—	—	—	—	—	—	1	30	6,000
Camden	2	120	86,000	1	—	72,000	—	—	—	3	120	158,000
Cape May	1	30	2,000	—	—	—	—	—	—	1	30	2,000
Cumberland	3	150	7,000	—	—	—	—	—	—	3	150	7,000
Essex	3	100	91,000	2	55	66,000	1	75	32,000	6	230	189,000
Gloucester	2	170	10,000	—	—	—	—	—	—	2	170	10,000
Hudson	5	150	1,560,000	1	30	8,000	—	—	—	6	180	1,568,000
Hunterdon	2	75	34,000	—	—	—	—	—	—	2	75	34,000
Mercer	5	425	40,000	2	—	13,000	—	—	—	7	425	53,000
Middlesex	8	330	196,000	2	350	400,000	—	—	—	10	680	596,000
Monmouth	5	180	52,000	2	34	258,000	—	—	—	7	214	310,000
Morris	3	140	66,000	1	200	50,000	—	—	—	4	340	116,000
Ocean	3	60	12,000	—	—	—	—	—	—	3	60	12,000
Passaic	3	180	1,150,000	—	—	—	1	—	1,200,000	4	180	2,350,000
Salem	1	30	4,000	—	—	—	—	—	—	1	30	4,000
Somerset	1	30	5,000	1	—	3,000	—	—	—	2	30	8,000
Sussex	2	30	9,000	1	—	50,000	—	—	—	3	30	59,000
Union	2	35	21,000	—	—	—	—	—	—	2	35	21,000
Warren	4	109	11,000	—	—	—	1	35	12,000	5	144	23,000

PART XV. NEED FOR NEW CONSTRUCTION

Table XV is a compilation of the estimates of local school districts as to new construction, either additions to existing buildings or new structures, needed to house anticipated enrollments up to and including the opening of the 1953-54 school year. These estimates include new buildings begun since September 1952, construction needed to implement school district organization, and construction needed to improve the school program. Classroom needs are based on a pupil load per classroom of 30 pupils. Estimates of cost are related to local conditions and recent experience.

The following information may serve to clarify the figures presented in Table XV:

1. Administrative units cannot be totaled because an administrative unit may have construction needs in more than one category and/or may have construction needs under more than one type of educational organization.
2. The column on administrative units does not present the number of school plants involved. Therefore estimates of cost cannot be averaged on a school plant basis.
3. In general the construction represented in a.(1), a.(2), and b. is for additions to existing school plants.
4. Construction represented in a.(3) is for new school plants to replace obsolete buildings. For this reason the averaged estimated costs per pupil, per classroom, and per square foot are higher than are the averaged estimate costs in a.(1) and a.(2).
5. The number of pupils under a.(1)—relieve overcrowding—does not represent the total number of pupils now housed in overcrowded classrooms. An example of this is a classroom of 40 pupils, all of whom are now subjected to overcrowded conditions. By providing new classroom space for ten of those pupils, all 40 of the pupils would be housed under acceptable conditions as to classroom load. Therefore, the figures presented under a.(1), column 2, show the number of pupils who need to be provided with new schoolhousing so that existing overcrowding will be relieved.

The estimates in Table XV show that:

- 120,180 or 16.5% of the 730,030 pupils in New Jersey public schools are currently in need of new school housing.
- Of the 4,006 new classrooms currently needed:
 - 1,407 or 35.1% are needed to relieve overcrowding;
 - 811 or 20.3% are needed to house enrollment increases;
 - 1,788 or 44.6% are needed to replace obsolete buildings.
 - 3,241 or 80.9% are needed for elementary school classes;
 - 539 or 13.5% are needed for secondary school classes;
 - 226 or 5.6% are needed for combined elementary and secondary school classes.
- Of the \$139,214,000 estimated as currently needed for classroom construction:
 - \$42,362,000 or 30.4% is needed to relieve overcrowding;
 - \$24,016,000 or 17.3% is needed to house enrollment increases;
 - \$72,836,000 or 52.3% is needed to replace obsolete buildings.
 - \$105,617,000 or 75.9% is needed for elementary schools;
 - \$26,270,000 or 18.9% is needed for secondary schools;
 - \$ 7,327,000 or 5.2% is needed for combined elementary and secondary schools.

(Continued on page 60)

NEED FOR NEW CONSTRUCTION
(As of September 1953)

Type of School	No. Adm. Units Involved	No. of Pupils	No. of Classrooms	Area in Sq. Ft.	Estimated ² Cost
1. Elementary					
a. New classrooms ¹ needed to:					
(1) relieve overcrowding	226	33,840	1,128	1,773,500	\$ 33,955,000
(2) house enrollment increases	210	19,590	653	1,261,100	19,287,000
(3) replace obsolete bldgs.	130	43,800	1,460	1,762,000	52,375,000
(4) total	—	97,230	3,241	4,796,600	105,617,000
b. Needed additions to existing bldgs. other than classrooms	100	—	—	661,600	12,483,000
2. Secondary					
a. New classrooms ¹ needed to:					
(1) relieve overcrowding	32	5,820	194	193,200	5,905,000
(2) house enrollment increases	49	2,670	89	85,900	2,802,000
(3) replace obsolete bldgs.	12	7,680	256	605,100	17,563,000
(4) total	—	16,170	539	884,200	26,270,000
b. Needed additions to existing bldgs. other than classrooms	42	—	—	591,400	11,600,000
3. Combined Elementary and Secondary					
a. New classrooms ¹ needed to:					
(1) relieve overcrowding	13	2,550	85	85,900	2,502,000
(2) house enrollment increases	14	2,070	69	70,600	1,927,000
(3) replace obsolete bldgs.	5	2,160	72	98,400	2,898,000
(4) total	—	6,780	226	254,900	7,327,000
b. Needed additions to existing bldgs. other than classrooms	12	—	—	120,900	1,233,000
4. Total					
a. New classrooms ¹ needed to:					
(1) relieve overcrowding	—	42,210	1,407	2,052,600	\$ 42,362,000
(2) house enrollment increases	—	24,330	811	1,417,600	24,016,000
(3) replace obsolete bldgs.	—	53,640	1,788	2,465,500	72,836,000
(4) total	—	120,180	4,006	5,935,700	139,214,000
b. Needed additions to existing bldgs. other than classrooms	—	—	—	1,373,900	25,316,000
c. Grand total of a(4) and b.	—	120,180	4,006	7,309,600	\$164,530,000

¹Includes special instruction rooms.

²Cost estimates are related to local conditions and recent experience.

Many of the tables in the inventory section of this Survey help to provide a basis for estimating current needs for school facilities. An examination of the findings in the Inventory in relation to Table XV will serve to disclose the extent to which the report on currently needed new construction would relieve or eliminate the school facility inadequacies as revealed in the inventory. Tables IX through XIII are particularly pertinent to such an appraisal.

A comparison of the inventory tables with Table XV indicates that the currently needed new construction reported in Table XV would not completely satisfy the needs as revealed in the Inventory. An example of this is the fact that Table IX of the Inventory records 125,875 pupils in need of new schoolhousing because of the single factor that they are now housed in obsolete school plants which should be abandoned. This figure of 125,875 pupils exceeds the total of 120,180 pupils reported in Table XV as needing new schoolhousing for all categories of need. In this case some school districts did not include all school plants rated "Unsatisfactory" in Table IX among their current needs for new construction.

The table on number of live births in New Jersey presented in the Introduction relates to the category in Table XV on new classrooms needed to house enrollment increases. Most of the graduating class of 1953 were born in 1935 when the number of live births in the state was 55,059. The members of the entering class for 1953-54 were born in 1948 when the live births were 97,278. This has resulted in a school population for 1953-54 which exceeds the school population for 1952-53 by more than 40,000 pupils. Table XV shows that local school districts feel a need for new classrooms to house 24,330 pupils as enrollment increases. This indicates that more than 15,000 pupils in increased enrollment can be absorbed in existing classrooms without presenting any need for additional school facilities.

The apparent discrepancies between the findings of the Inventory and the estimates in Table XV may be attributed to different methods of estimating needs; (1) Some school districts may have reported only their most acute needs; (2) Some school districts may have reported only those needs which might be met through the existing financial resources of their respective districts; (3) Some school districts may not have used the findings of the Inventory as a basis for estimating their needs. The overall implication of a comparison between the findings of the Inventory and the estimates of Table XV is that many school districts have considered factors other than those of school facility needs as indicated in the Inventory.

NEED FOR NEW CLASSROOM CONSTRUCTION BY COUNTIES
(As of September 1953)

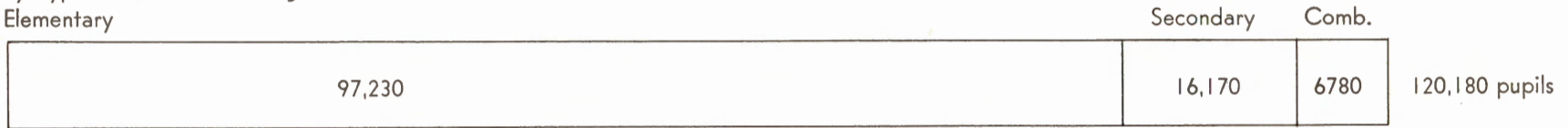
	Elementary			Secondary			Comb. Elem. & Sec.			Total		
	No. ¹ Class- rooms	No. Pupils	Est. ² Cost (In Thousands)	No. ¹ Class- rooms	No. Pupils	Est. ² Cost (In Thousands)	No. ¹ Class- rooms	No Pupils	Est. ² Cost (In Thousands)	No. ¹ Class- rooms	No. Pupils	Est. ² Cost (In Thousands)
Atlantic	71	2,130	\$ 1,902	11	330	\$ 330	—	—	\$ —	82	2,460	\$ 2,232
Bergen	349	10,470	13,201	41	1,230	1,550	20	600	640	410	12,300	15,391
Burlington	111	3,330	3,132	25	750	715	—	—	—	136	4,080	3,847
Camden	281	8,430	7,726	59	1,770	1,475	26	780	780	366	10,980	9,981
Cape May	15	450	325	16	480	900	2	60	60	33	990	1,285
Cumberland	73	2,190	2,090	20	600	600	—	—	—	93	2,790	2,690
Essex	285	8,550	12,684	38	1,140	2,561	12	360	1,077	335	10,050	16,322
Gloucester	125	3,750	2,755	—	—	—	—	—	—	125	3,750	2,755
Hudson	—	—	—	32	960	2,000	—	—	—	32	960	2,000
Hunterdon	57	1,710	1,432	—	—	—	2	60	40	59	1,770	1,472
Mercer	134	4,020	4,131	12	360	380	—	—	—	146	4,380	4,511
Middlesex	259	7,770	8,435	57	1,710	1,765	68	2,040	1,611	384	11,520	11,811
Monmouth	312	9,360	9,231	86	2,580	6,954	16	480	490	414	12,420	16,675
Morris	317	9,510	10,612	23	690	740	34	1,020	1,020	374	11,220	12,372
Ocean	93	2,790	2,490	9	270	270	—	—	—	102	3,060	2,760
Passaic	137	4,110	4,956	52	1,560	3,252	35	1,050	1,257	224	6,720	9,465
Salem	57	1,710	1,500	2	60	60	3	90	70	62	1,860	1,630
Somerset	192	5,760	6,205	14	420	540	—	—	—	206	6,180	6,745
Sussex	84	2,520	2,783	34	1,020	1,978	—	—	—	118	3,540	4,761
Union	229	6,870	8,190	8	240	200	—	—	—	237	7,110	8,390
Warren	60	1,800	1,837	—	—	—	8	240	282	68	2,040	2,119
STATE TOTALS	3,241	97,230	\$105,617	539	16,170	\$26,270	226	6,780	\$7,327	4,006	120,180	\$139,214

¹Includes special instruction rooms.

²Estimates of cost are given in thousands of dollars. Estimates of cost are related to local conditions and recent experience.

NUMBER AND PERCENT OF PUPILS NEEDING NEW HOUSING

By Type of Educational Organization
Elementary



By Category of Need



By Category of Need under Type of Educational Organization
Elementary Schools



Secondary Schools



Combined Elementary and Secondary Schools



Relieve overcrowding



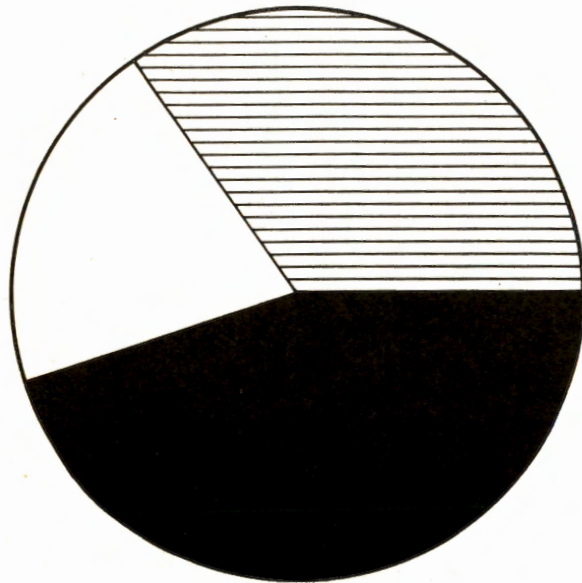
House enrollment increases



Replace obsolete buildings

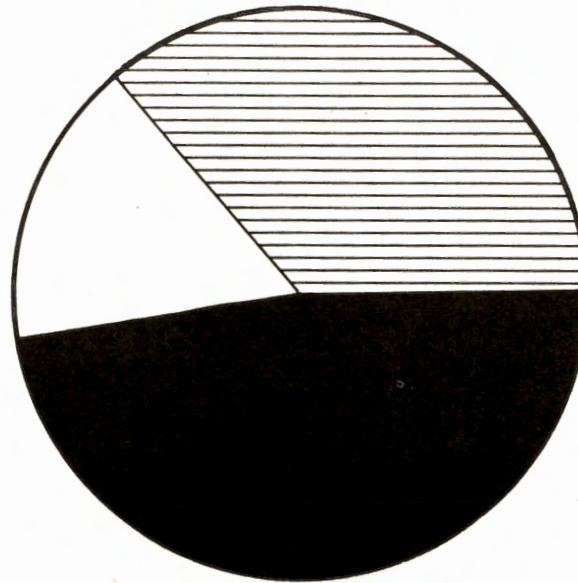
NUMBER OF NEW CLASSROOMS NEEDED

Elementary



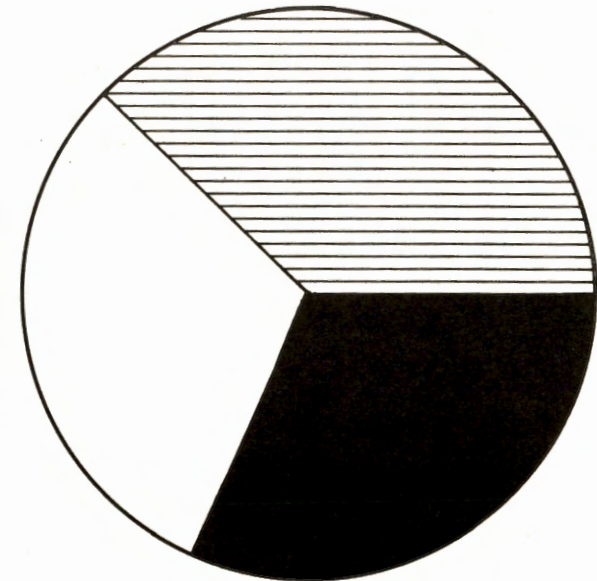
3,241 classrooms

Secondary



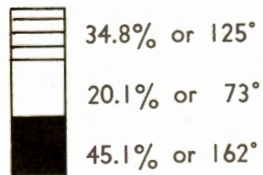
539 classrooms

Combined Elementary & Secondary

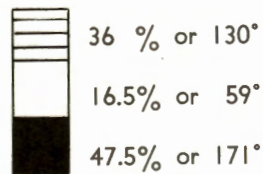


226 classrooms

Elementary





Secondary



Combined



 Rooms needed to relieve overcrowding

 Rooms needed to house enrollment increases


 Rooms needed to replace obsolete bldgs.

CHART H

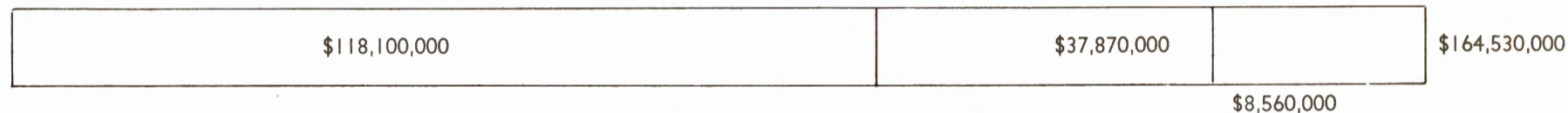
PERCENT AND AMOUNT OF ESTIMATED COST OF NEW CONSTRUCTION NEEDED

By Type of Educational Organization

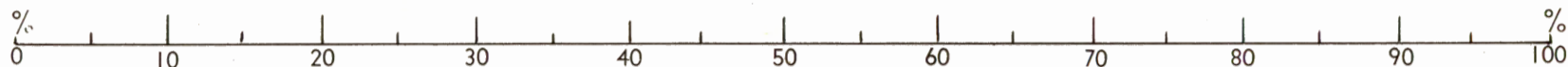
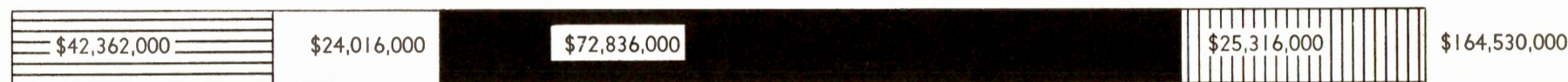
Elementary

Secondary

Comb.

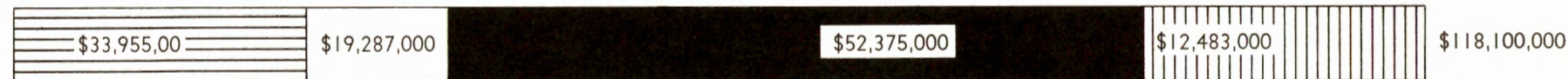


By Category of Need



By Category of Need under Type of Educational Organization

Elementary



Secondary



Combined Elementary and Secondary



Relieve overcrowding

House enrollment increases

Replace obsolete bldgs.

Other than classrooms

**SUMMARY OF NEED BY NUMBER OF PUPILS NEEDING NEW HOUSING, NUMBER OF NEW CLASSROOMS,
AND ESTIMATED COST OF NEW CONSTRUCTION
(As of September 1953)**

NUMBER OF PUPILS CURRENTLY NEEDING NEW HOUSING

Needed new housing	Number of pupils to be housed			
	Elementary schools	Secondary schools	Comb. Elem. & Sec.	All schools
To relieve overcrowding	33,840	5,820	2,550	42,210
To house enrollment increases	19,590	2,670	2,070	24,330
To house pupils currently in obsolete bldgs.	43,800	7,680	2,160	53,640
Total	97,230	16,170	6,780	120,180

NUMBER OF NEW CLASSROOMS CURRENTLY NEEDED

Needed new classrooms	Number of classrooms			
	Elementary schools	Secondary schools	Comb. Elem. & Sec.	All schools
To relieve overcrowding	1,128	194	85	1,407
To house enrollment increases	653	89	69	811
To house pupils currently in obsolete bldgs.	1,460	256	72	1,788
Total	3,241	539	226	4,006

ESTIMATED COST OF NEW CONSTRUCTION CURRENTLY NEEDED

Needed new construction	Estimated Cost			
	Elementary schools	Secondary schools	Comb. Elem. & Sec.	All schools
To relieve overcrowding	\$ 33,955,000	\$ 5,905,000	\$2,502,000	\$ 42,362,000
To house enrollment increases	19,287,000	2,802,000	1,927,000	24,016,000
To replace obsolete buildings	52,357,000	17,563,000	2,898,000	72,836,000
For non-instructional additions to existing buildings	12,483,000	11,600,000	1,233,000	25,316,000
Total	\$118,100,000	\$37,870,000	\$8,560,000	\$164,530,000

PART XVI. NEED FOR SITE ACQUISITIONS AND IMPROVEMENTS

In Table XVI the estimate of need is based on the opening of the 1953-54 school year. Costs are related to local conditions and recent experience. The existing conditions as to size of school site and concentration of pupils per acre of site are presented in the Inventory under Table III.

Among the needs indicated in Table XVI are:

- 1,439 or 79.5% of the 1,811 acres needed are for new sites.
372 or 20.5% of the 1,811 acres needed are for enlargement of existing sites.
- In the total of \$6,528,000 of estimated costs for needed site acquisitions and improvements:
\$3,627,000 or 55.5% of the total is for new sites and improvements thereto;
\$1,435,000 or 22 % of the total is for enlargement of existing sites and improvement of additional land;
\$1,466,000 or 22.5% of the total is for improvement of existing sites.

Category b. in Table XVI is the only factor which may be immediately related to the inventory of school sites (Table III) which reports the existing conditions as to size of site and concentration of pupils per acre of site. Table III discloses that over 40% of the school plants of the state are situated on sites of less than three acres and that over 60% of the school sites have a concentration of over 100 pupils per acre of site. The New Jersey Guide for Schoolhouse Planning and Construction recommends that the minimum site for elementary schools be five acres, plus an additional acre for every 100 pupils enrolled. The recommended minimum site for junior and senior high schools is 10 acres, plus an additional acre for every 100 pupils enrolled.

Since 704 of the school plants in the state are situated on sites of less than three acres, it is apparent that the reported current need for 372 acres to enlarge existing sites is a conservative estimate that is not planned to effect any substantial enlargement of existing sites. A wide-spread attempt to meet the recommended minimum sites of the New Jersey Guide would have involved a considerably larger estimate of acres needed for the enlargement of existing sites.

The average estimated cost per acre for enlargement of existing sites and improvement thereto is \$3,857. The average estimated cost per acre for new sites and improvements thereto is \$2,520. The higher estimated cost of enlargement of existing sites may be a major factor in the low estimate of need for that purpose. Another factor which affects many school districts, particularly those in congested and urban areas, is the difficulty of obtaining land adjacent to the existing site and the high cost of land in developed areas.

NEED FOR SITE ACQUISITIONS AND IMPROVEMENTS
(As of September 1953)

Type of School	No. of Adm. Units Involved	Acres Needed	Estimated ¹ Cost
1. Elementary			
a. New sites and improvements thereto	99	1,151	\$3,009,000
b. Enlargement of existing sites and improvement of additional land	61	299	999,000
c. Improvement of existing sites	79	—	1,011,000
d. Total		1,450	5,019,000
2. Secondary			
a. New sites and improvements thereto	10	210	396,000
b. Enlargement of existing sites and improvement of additional land	8	23	202,000
c. Improvement of existing sites	16	—	303,000
d. Total	—	233	901,000
3. Combined Elementary and Secondary			
a. New sites and improvements thereto	8	78	222,000
b. Enlargement of existing sites and improvement of additional land	9	50	234,000
c. Improvement of existing sites	12	—	152,000
d. Total	—	128	608,000
4. Totals			
a. New sites and improvements thereto	—	1,439	\$3,627,000
b. Enlargement of existing sites and improvement of additional land	—	372	1,435,000
c. Improvement of existing sites	—	—	1,466,000
d. Grand total	—	1,811	6,528,000

¹Estimated costs are related to local conditions and recent experience.

PART XVII. NEED FOR SCHOOL BUSES

Table XVII shows the current need for school buses as reported under the categories of need. It is related to Table V in the Inventory, which records the existing situation in regard to public transportation of pupils. The number of administrative units involved cannot be tallied because some units report need for school buses under more than one category.

Item 4 in Table V (age of school-owned buses) is a factor in judging the adequacy of item 1 in Table XVII (buses needed to replace obsolete publicly-owned equipment). Table V reports 103 school-owned buses that are 6 or more years old and 35 buses that are 10 or more years old. Table XVII shows that only 35 new buses are reported as needed to replace obsolete publicly-owned equipment.

Table XVII also discloses that:

- 610 or 72.9% of the 837 new school buses needed are to accommodate increased enrollments.
- The averaged estimated cost of school buses in Table XVII is \$5,214.

TABLE XVII

NEED FOR SCHOOL BUSES (As of September 1953)

Reason Needed	No. of Adm. Units	No. of New Buses Needed	Estimated Cost of New Buses
1. To replace obsolete publicly-owned equipment	25	35	\$ 193,200
2. To improve and extend service	76	115	636,400
3. To accommodate new consolidations	5	77	61,700
4. To accommodate increased enrollments	235	610	3,473,200
Total	—	837	\$4,364,500

¹Such as shortening routes and providing service to pupils now walking excessive distances.

PART XVIII. SUMMARY OF ESTIMATED NEED FOR PUBLIC SCHOOL FACILITIES

Table XVIII is a summary of selective factors in Tables XIV, XV, XVI, and XVII, presented under types of educational organization with totals. Table XVIII-A is a summary of estimated costs to meet current school facility needs by counties. Chart I is a graphic presentation of percentage costs for rehabilitating and remodeling, new construction, and new sites and improvement as estimated for school facility needs in Tables XIV, XV, and XVI.

Table XVIII shows that of the total estimated cost exclusive of new buses, 71.5% is reported as needed for elementary schools, 22.6% for secondary schools, and 5.9% for combined elementary and secondary schools. Of the estimated total, including school bus needs, 90.2% is estimated as needed for new construction, 3.8% for rehabilitating and/or remodeling, 3.6% for site acquisitions and improvements, and 2.4% for new buses.

TABLE XVIII

SUMMARY OF ESTIMATED NEED FOR PUBLIC SCHOOL FACILITIES (As of September 1953)

Needed for	Elementary	Secondary	Comb. Elem. & Sec.	Total
1. Rehabilitating and/or Remodeling				
a. Number of schools	104	29	8	141
b. Net change in pupil capacity	2,529	1,259	225	4,013
c. Estimated cost	\$ 4,283,000	\$ 1,385,000	\$ 1,341,000	\$ 7,009,000
2. New Construction				
a. Number of pupils	97,230	16,170	6,780	120,180
b. Number of classrooms	3,241	539	226	4,006
c. Area in square feet	5,458,200	1,475,600	375,800	7,309,600
d. Estimated cost	\$118,100,000	\$37,870,000	\$ 8,560,000	\$164,530,000
3. Site Acquisitions and Improvements				
a. Acres needed	1,450	233	128	1,811
b. Estimated cost	\$ 5,019,000	\$ 901,000	\$ 608,000	\$ 6,528,000
Total Estimated cost of above	<u>\$127,402,000</u>	<u>\$40,156,000</u>	<u>\$10,509,000</u>	<u>\$178,067,000</u>
4. School Buses				
a. Number of new buses needed				837
b. Estimated cost				\$ 4,364,500
Total Cost				<u>\$182,431,500</u>

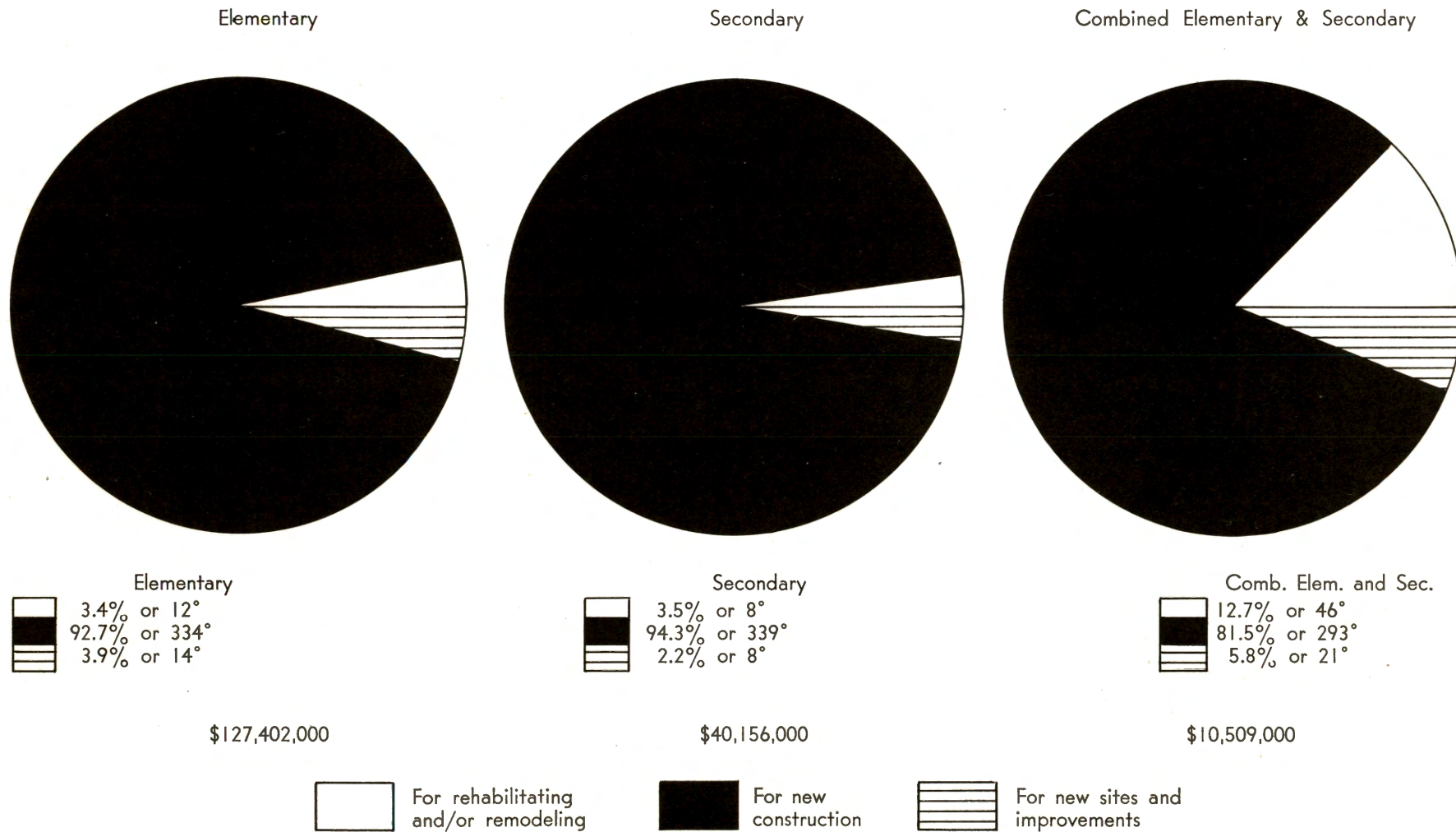
TABLE XVIII—A

SUMMARY OF ESTIMATED COSTS TO MEET SCHOOL FACILITY NEEDS BY COUNTIES

(As of September 1953)

County	Rehabilitating and/or Remodeling	New Construction			Sites and Improvements	New Buses	Total
		Classrooms	Additions other than classrooms	Total			
Atlantic	\$ 300,000	\$ 2,232,000	\$ 744,000	\$ 2,976,000	\$ 95,000	\$ 93,400	\$ 3,464,400
Bergen	396,000	15,391,000	1,555,000	16,946,000	422,000	235,900	17,999,900
Burlington	17,000	3,847,000	1,516,000	5,363,000	238,000	314,300	5,932,300
Camden	217,000	9,981,000	1,162,000	11,143,000	671,000	168,500	12,199,500
Cape May	31,000	1,285,000	320,000	1,605,000	67,000	73,000	1,776,000
Cumberland	20,000	2,690,000	895,000	3,585,000	39,000	156,900	3,800,900
Essex	351,000	16,322,000	144,000	16,466,000	887,000	38,000	17,742,000
Gloucester	10,000	2,755,000	260,000	3,015,000	116,000	224,300	3,365,300
Hudson	1,569,000	2,000,000	620,000	2,620,000	45,000	4,500	4,238,500
Hunterdon	34,000	1,472,000	95,000	1,567,000	31,000	166,800	1,798,800
Mercer	104,000	4,511,000	1,780,000	6,291,000	463,000	265,000	7,123,000
Middlesex	715,000	11,811,000	1,255,000	13,066,000	406,000	370,900	14,557,900
Monmouth	400,000	16,675,000	2,450,000	19,125,000	966,000	617,500	21,108,500
Morris	238,000	12,372,000	2,715,000	15,087,000	537,000	510,800	16,372,800
Ocean	19,000	2,760,000	3,030,000	5,790,000	153,000	244,400	6,206,400
Passaic	2,350,000	9,465,000	1,405,000	10,870,000	570,000	145,600	13,935,600
Salem	18,000	1,630,000	1,015,000	2,645,000	130,000	75,800	2,868,800
Somerset	8,000	6,745,000	2,015,000	8,850,000	270,000	223,800	9,351,800
Sussex	109,000	4,761,000	295,000	5,056,000	59,000	153,600	5,377,600
Union	78,000	8,390,000	1,905,000	10,295,000	274,000	157,300	10,804,300
Warren	25,000	2,119,000	50,000	2,169,000	89,000	124,200	2,407,200
STATE TOTAL	\$7,009,000	\$139,214,000	\$25,316,000	\$164,530,000	\$6,528,000	\$4,364,500	\$182,431,500

PERCENT OF ESTIMATED COSTS TO MEET VARIOUS SCHOOL FACILITY NEEDS



¹ Excludes estimated costs of school buses which are not reported under type of educational organization.

PART XIX. NEEDS IN RELATION TO RESOURCES

Table XIX presents county and state totals of the resources and estimated cost of public school facility needs as compiled from the reports of local school administrative units. Since every school district is responsible for its own financing and the resources of any one district may *not* be applied to the needs of any other district, the findings of Table XIX should be interpreted as a gross presentation of the financial status of school districts in New Jersey as of June 1953.

An explanation of the terms used in Table XIX follows:

- Column 2. School debt limit—The total legal capacity of the school administrative units within the various counties and the state, based on assessed valuation of real property averaged for the past three years. This is limited to 4% for regional school districts, 6% for elementary school districts, and 8% for certified secondary school districts.
- Column 3. School net debt. The indebtedness of school districts as of June 1953. (Does not include municipal debt.)
- Column 4. Number of administrative units exceeding borrowing capacity. The number of school administrative units within each county, and within the state, that have been permitted to exceed their borrowing capacity either by invading the borrowing capacity of their municipality or by being permitted to exceed the combined borrowing capacity of the school district and the municipality.
- Column 5. Amount by which borrowing capacity is exceeded. Amount of money by which the administrative units listed in column 4 have exceeded their borrowing capacity.
- Column 6. Additional borrowing capacity. Indebtedness that can still be incurred by those districts that have not already used up their borrowing capacity.
- Column 7. Estimated cost of public school facility needs as of September 1953. Total of Tables XIV through XVII.

An analysis of Table XIX and other related information indicates that:

At the State level:

- 199 or 36.4% of the 547 administrative units exceeded their borrowing capacity as of June 1953. Since that time many other administrative units have applied for permission to extend their debt limit. By March 1954 the amount by which permission was granted to exceed borrowing capacity reached \$100,000,000, or 236% of the total in column 5.
- The total debt limit exceeds the net debt by \$166,248,370. If all that amount could be applied to satisfy the recognized need as of September 1953 (\$182,431,500.), there would be a deficit of \$16,183,129. In practice, a county or state wide application of resources to needs cannot be made and a surplus of borrowing capacity over needs cannot be utilized outside of any one school district.
- If the additional borrowing capacity and estimated cost of school facility needs of the two first-class counties—Essex and Hudson—are subtracted from the state totals in columns 6 and 7, a deficit of \$51,959,144.63 is reported for the nineteen other counties between their estimated cost of school facility needs (\$160,451,000) and additional borrowing capacity (\$108,491,855.37).

At the County level:

- 20 of the 21 counties have administrative units exceeding their borrowing capacity as of September 1953.
- 5 counties have a net debt that exceeds their total debt limit.
- 13 counties have estimated costs of needed school facilities that exceed their additional borrowing capacity.

COUNTY NEEDS AND RESOURCES, WITH STATE TOTALS

	1	2	3	4	5	6	7
	No. of Adm. Units ¹	School Debt Limit ¹	School Net Debt ¹	No. of Adm. Units Exceed- ing Borrowing Capacity ¹	Amount by which Borrowing Capacity is Exceeded ¹	Additional Borrowing Capacity ¹	Estimated Cost of Current Needs ²
Atlantic	22	\$ 9,865,860.96	\$ 1,716,093.61	5	\$ 275,755.52	\$ 8,425,522.87	\$ 3,464,400.00
Bergen	69	43,670,777.46	37,261,739.25	36	9,143,020.14	15,552,058.35	17,999,900.00
Burlington	40	4,601,796.82	4,151,000.00	12	1,061,957.62	1,512,754.44	5,932,300.00
Camden	38	19,500,444.62	7,650,633.34	5	456,371.96	12,306,183.24	12,199,500.00
Cape May	16	4,228,361.22	1,387,500.00	4	149,970.74	2,990,831.96	1,776,000.00
Cumberland	14	4,032,145.14	2,599,250.00	4	287,506.44	1,720,401.58	3,800,900.00
Essex	20	97,970,498.06	48,765,240.89	3	3,031,546.94	52,236,804.11	17,742,000.00
Gloucester	23	4,499,774.94	3,058,092.21	9	638,374.46	2,080,057.19	3,365,300.00
Hudson	12	71,063,659.10	23,259,609.84	0	—	47,804,049.26	4,238,500.00
Hunterdon	26	2,487,375.84	3,075,600.00	11	1,370,730.36	782,506.20	1,798,800.00
Mercer	11	19,134,492.82	9,776,251.00	3	779,463.28	10,137,705.10	7,123,000.00
Middlesex	25	17,833,176.26	15,127,774.58	11	6,084,601.50	8,790,003.18	14,557,900.00
Monmouth	48	13,740,337.00	9,021,623.97	17	1,545,321.68	6,264,034.71	21,108,500.00
Morris	39	10,820,186.56	16,815,140.00	26	7,006,854.92	1,011,901.48	16,372,800.00
Ocean	27	3,940,696.66	3,296,500.00	12	715,327.14	1,359,523.80	6,206,400.00
Passaic	17	32,740,584.80	16,557,450.00	3	1,112,955.58	17,296,090.38	13,935,600.00
Salem	13	2,510,787.10	2,770,916.62	6	611,535.29	351,405.77	2,868,800.00
Somerset	20	5,217,105.74	6,698,500.00	10	2,474,175.12	992,780.86	9,351,800.00
Sussex	23	2,123,807.68	2,686,900.00	10	1,514,477.48	951,385.16	5,377,600.00
Union	21	43,511,374.70	32,766,279.61	8	3,668,798.36	14,413,893.45	10,804,300.00
Warren	23	2,850,953.74	1,653,731.25	4	355,593.16	1,552,815.65	2,407,200.00
STATE TOTALS	547	\$416,344,197.22	\$250,095,826.17	199	\$42,284,337.69	\$208,532,708.74	\$182,431,500.00

¹ As of June 1953

² As of September 1953

IV. SOME IMPLICATIONS OF THE SURVEY

Although school construction in New Jersey has been proceeding at an increasing rate, existing school facilities lag far behind the recognized need that has been created by a drastic curtailment of school construction from 1935 to 1950, obsolescence of older buildings, increasing enrollments, and demands for modern educational programs and services. While school facility needs and financial status differ widely throughout the State, a large number of school districts report that, as of September 1953, their schoolhousing facilities are inadequate and many school districts report that their capital outlay resources are insufficient to meet the costs of providing the necessary school facilities.

As of September 1953 the estimated cost of currently needed school facilities is \$182,431,500. Since each local school district is responsible for its own financing and since each municipality determines its own property assessment program, county and state summaries of available capital resources are only meaningful as gross statements of financial status. Information as to estimates of true value, present debt, additional loan capacity, and unobligated capital outlay funds on hand are available on the local school district level at the offices of local school administrators. This information may be compared with local school district needs in order to appraise the financial status of any given district.

Translated into educational practices the findings of the Survey indicate that:

- New Jersey school children are being provided with educational opportunities which differ widely as to safety and comfort factors, multi-curricular activities through the availability of general-use and special instruction rooms, and adequacy of classroom instruction and guidance as influenced by the size of classrooms and of classes and available facilities.
- A large number of New Jersey's school children are housed in overcrowded classrooms or are attending multiple sessions. 17.3% of the pupils are housed in school plants which are rated "Unsatisfactory" in the Survey. School programs must be adjusted to such conditions.
- Local school districts are finding it increasingly difficult to provide schools which meet or maintain minimum standards of health, safety, and adequacy of educational programs.

The findings of the Survey point up the value of achieving wide-spread public understanding of existing and future school facility needs.

- Within the local school districts citizens should (1) be aware of current school needs and the financial status of the district in relation to the cost of meeting those needs; (2) appraise the long term needs of their schools in relation to future enrollments, desired educational programs, and the condition of existing facilities; (3) help to determine the educational program and community services which they believe their schools should provide; and (4) encourage careful planning for the construction of school facilities to meet current and future needs.
- Within the state citizens should (1) know the minimum standards for health, safety, and educational programs which all schools in the State should provide; and (2) help to decide how the necessary school facility needs may be met throughout the State.

It is hoped that the Survey will promote such a public understanding and will serve as a tool for citizens to use as they seek solutions to schoolhousing problems.

The Survey provides the State Department of Education with the statistical data essential to a comprehensive statistical picture of the current schoolhousing situation. It furnishes the School Building Services of the State Department of Education with the basis for a permanent file of information on all public school buildings in the State. This file, which includes pictures and a map showing the location of every elementary and secondary school, will be kept up-to-date.

PHASE II OF THE SCHOOL FACILITIES SURVEY

Phase II of the New Jersey Public School Facilities Survey is designed to present the financial and school facility needs from the present time to the school year 1959-60, to develop a long-range school plant program based on those needs, and to determine the ability of local school districts to finance such a program. Phase II is now underway and will be completed by June 30, 1954.



