

THE PRESERVATION OF PUBLIC
SCHOOL BUILDINGS IN NEW YORK STATE'S
SMALL-CITY SCHOOL DISTRICTS

A Thesis

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by

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ABSTRACT

The public school is a building unlike any other in the scope of its reach and impact as part of the built environment of a community. In cities, villages, and rural areas across the country, public schools are vital community anchors. Yet in New York State, these buildings do not have the protections that are offered other types of historic and culturally significant properties. The public schools of Auburn, New York state are part of a state-mandated system by which public funds are used to subsidize major capital projects and additions. This system of construction underwriting, combined with an inherently anti-preservation mindset, presents challenges to preserving and protecting active historic public school buildings.

The purpose of this work is to provide a framework for school boards to think about how best to address the judicial, legal, and public perception challenges arrayed against the preservation of public school buildings. It illustrates the fallacy of the commonly held belief that newer school buildings produce higher student achievement and are therefore better. It reveals the way in which the current building aid structuring favors new construction projects and incentivizes the deferment of proper school maintenance. It suggests both general approaches and specific ways in which school districts like Auburn's can help to protect its historic school buildings. It is hoped that the introduction of measures that encourage preservation of historic schools through proper maintenance will be supported by New York State's Education Department.

BIOGRAPHICAL SKETCH

Andrew Roblee was born in Cuba, New York on June 23, 1980. After growing up in several communities between upstate New York and Virginia, Andrew graduated from Auburn High School in Auburn, NY with the Class of 1999. He received an Associate's Degree in Music from Finger Lakes Community College in 2006, and worked as a drywall finisher during his time off. In 2011, he graduated *summa cum laude* from Wells College and was inducted into Phi Beta Kappa. After graduating, Andrew combined his experience in carpentry and his love of history as the Facilities Manager at the Seward House Museum, a national Historic Landmark. He left the museum in 2015 to pursue a Master's Degree in Historic Preservation Planning at Cornell University. He has given a number of lectures on history and the built environment, and has received multiple awards and prizes for his writing. He lives in Auburn, NY with his wife, Devon, and sons, Alex and Arthur.

Dedicated to the children of Auburn; past, present, and future.

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INTRODUCTION

As a discipline, historic preservation in America has grown beyond a simple inculcating mission to become an ethical code, sponsored by government at nearly every level, and incentivized into a real estate development tool. The historic and aesthetic tastes that protected structures in the early days of the movement have been joined by additional interests, and the economic and environmental advantages of rehabilitation have gained strength. Yet preservationists remain inherently concerned with public education, involved as they are in the interpretation of historic or cultural assets. For example, in New York and other states, the state education department holds no small degree of power over the various historic sites chartered as museums. Despite this clear relationship between preservation and learning, the buildings and grounds of public education facilities are largely neglected by the world of historic preservation, a state of affairs maintained by certain legal and financial obstacles.

The two major aspects of funding public instruction in New York State are known as Foundation Aid, money that goes to the operations of a school district and personnel, and Building Aid, the money that is put toward capital projects and district consolidation. Foundation Aid has been historically controversial and under significant scrutiny. The physical environment of a classroom is arguably of equal importance to student achievement as the instructor, but Building Aid has remained relatively non-controversial and unchanged for half a century.

The public schools of New York state benefit from a publically-mandated and subsidized construction industry with an inherently anti-preservation mindset. State-regulated design, the patents in construction and pedagogical technology, and periodical advertising have all pushed

notion that “newer is better” in educational facilities, a characterization widely accepted by the public. As one member of Auburn’s Board of Education stated, "Our buildings are aging and technology is leaping forward. I can’t imagine that our buildings at 100 years and older will be able to fully support the educational needs of the students.”ⁱ

The essential formula for funding school capital projects has remained relatively static for some time. In addition to this, legislative and regulatory policy has diverted resources and attention away from the local school district maintenance and upkeep programs. This has resulted in deferred maintenance and incentivized “demolition by neglect” of some of New York’s most widely-used and locally cherished buildings, public schools.

Statement of Purpose

The purpose of this work is to provide a framework for school boards to think about how best to address the judicial, legal, and public perception challenges arrayed against the preservation of public school buildings. It attempts this with the realization that the success of any preservation project depends on the alignment of the goals of various constituencies.

The properties owned and maintained by the Auburn Enlarged City School District (AECSD, or “the District”), in Cayuga County, New York, are illustrative of the historic trends in New York state school building and the current state of the typical upstate district, not including the “Big Five” districts.ⁱⁱ AECSD grew from a few crudely built log school houses funded by the fledgling community to a fully modernized bureaucratic organization maintained by a combination of local and state taxation under considerable oversight by the state education

ⁱ Respondent AECSD board member’s emailed punctuation and grammar have been corrected.

ⁱⁱ Syracuse, Albany, Rochester, Buffalo and New York City. These districts are distinct in that they operate within their respective local governments, with no taxing authority of their own.

department. Through the district's development we see all the advancements of the local, state-wide and national trends in school building. By tracking the origins and growth of AECSD in the context of the development of the state's funding apparatus, we can begin to understand the issues facing the district in the present.

Using AECSD as a model, the work will illustrate how local school boards that dedicate maintenance funding streams to clearly defined aspects of the physical preservation of the school building can reduce the amount of building aid given by the state. The work will suggest possible actions available to the school board according to the powers given to them by the state. The creation of incentives from the New York State Education Department will be suggested to recognize school boards that commit to preservations.

Methodology and Data Collection

Information on the history of school construction, economic development, and education theory in New York State in general, and Auburn in particular, was gathered from books, governmental publications, annual school budgets, periodicals, school-board minutes and memoirs. National data from 238 building studies and 21 trade papers from the late 20th century were reviewed, along with recently published federal reports on the state and quality of American schools. Additional information was gleaned from discussions with the New York State Agency Preservation Officer, AECSD business officer, the superintendent of Auburn's schools, and surveys with sitting board members.

The calculations for inflation rely upon Morgan Friedman's inflation calculator at <http://www.westegg.com/inflation>. This online tool is based on statistical data sourced from the

Consumer Price Index statistics from *Historical Statistics of the United States* for years 1800 to 1975, and the annual *Statistical Abstracts of the United States* for year 1975 to 2016.

Limitations

Records of the Auburn Enlarged City School District are not comprehensive. Early school records were burned in a fire that destroyed the Auburn Academyⁱⁱⁱ in 1816.¹ Reports of the Board of Education are available for select years only until fairly recently. In order to research events of the missing years of board activity the invaluable database created by Tom Tryniski at www.fultonhistory.com was used to search periodicals.

Names of newspaper reporters are included in the endnotes when available, and articles without authors are assumed to be the work of the editorial staff. A fire at the New York State Capitol in 1911 destroyed 450,000 books, 270,000 manuscripts and nearly one million catalogue cards.² Consequently, data from the State Education Department is limited to the 20th century.

Even aside from the missing parts of the historical record, understanding the complex and dense regulatory codes and funding formulas of the New York State Education Department proved challenging. Discussions with the AECSD Business Manager and Dr. Rick Timbs, Executive Director of the Statewide School Finance Consortium, an organization of public school districts in New York State advocating the reform of state funding aid, were helpful. Key to addressing successfully the issues identified in this work is understanding the complex formula used to determine school aid.

The analysis of data on school-building performance relative to age was challenging due to the interrelated issues that accompany older building stock, such as poverty, racial

ⁱⁱⁱ The Auburn Academy was the a quasi-public school established in 1811. See Chapter Two.

segregation, and low property values. Data interpretation was done with care and with consideration of these factors.

Terminology

Much of the language used in the history of education has been subject to changing definitions and meanings that reflect the values of their time of usage. For example, a “public school” in the early nineteenth century was not a mandated, tax-supported school in the modern sense of the word, but instead referred to a non-sectarian tuition school, partially underwritten by government or other sources. In New York, a school was “public” insofar as it did not exclude any particular Christian sect, and specifically favoring Protestants until 1840 with the establishment of the New York City Board of Education. A “free school” was, in fact, free of charge. This type of school was typically a charity institution under the patronage of the wealthy. A “common school” was closest to the public school of modern understanding. It was tuition-free, open to all children of the community, with certain religious or racial exceptions varying by region. The common school model was derived from those started by the Puritans in New England in areas where the community’s racial and religious homogeneity helped make universal education acceptable. As this model moved into other, more diverse areas of the country (i.e. New York), the issue of equal access arose.^{iv} When school boards began forming in the second quarter of the 19th century, they all had to address this issue. The “union” school district was formed when a local Board of Education absorbed the various district schools and academies under one authority.

^{iv} The 1873 New York State Civil Rights Act eliminated, if only in name, discrimination by race or religion in public education. Auburn Schools had achieved this two decades earlier in 1851.

Chapter overview

This work attempts to describe how the present system of funding capital projects in New York's public school system arose in order to judge the validity of the system in modern terms.. It begins with a history section and ends with an analysis of the issues facing the care and maintenance of historic schools, although many of the observations may have implications for non-historic schools as well. The histories of education at the state and local level are necessary in order to explain the contexts in which funding policies evolved, and how the circumstances which created these contexts no longer exist even though some of those policies remain. The following chapters will make the attempt to connect various themes such as the change of per capita expenditures, the growth of state oversight, and the waning control of the local school board.

The first chapter of this work describes the growth and evolution of public education and the design and financial support of its associated structures, by looking at social and economic influences on the planning and construction of schools beginning in colonial America. A brief review of the history of education in Europe through the Reformation and the Renaissance is followed by tracking the emigration of Protestant sects and their educational models to the New World. It will look at the beginning of state control over education in Massachusetts with the first laws of the English-speaking world creating tax districts to support the limited goals of education in the third and fourth decades of the 17th century.

The chapter will then move its focus to the colony, and later the state, of New York. It will follow the small policy steps of the first half of the 19th century that laid the framework for the legislation that culminated in the establishment of a free and public education system

throughout the state. It will then track the progression of organizational changes from that time to the present, resulting in the essential form of the semi-autonomous public educational system in New York.

The chapter will describe, in broad terms, a number of educational models that emerged out of Europe and were transported to the United States, New York and Auburn. Joseph Lancaster's system of standardized education popularized the notion that education could be provided to a greater number at a lower cost. The subsequent eras of school construction in the 20th century will be addressed next. All of these building periods were accompanied by different, evolving federal or state funding formulas used to supplement the local tax contribution, inevitably with constraints or directives placed on design.

The second chapter covers the growth of the education system in Auburn in the context of the state and federal developments described in the preceding chapter. It begins with the 1793 establishment of Hardenbergh's Corners, the settlement eventually renamed Auburn, as a way-point mill town along the Old Genesee Road. The chapter then surveys the cost, size, and architectural embellishment of the various school buildings as Auburn grew into a vibrant industrial city. Opportunities for females and minority students in Auburn will be addressed next.

The chapter will move on to discuss the shrinking population and tax base that led to school closings and district reorganizations in the second quarter of the 20th century. After World War II elementary schools were built to accommodate larger sections of the city than their neighborhood-oriented predecessors. This development culminated in the construction of a single, high-capacity regional high school in 1970, and increasing numbers of closed school buildings

Chapter three deals with current conditions in New York State education from several perspectives. Prior to the 2008 financial crisis there was a “minor Maintenance and Repair” funding stream which restricted state aid money to the active upkeep of facilities. In 2007 this stream was merged into the overall foundation aid formula, and local districts were given the flexibility to redirect those funds at their discretion. This situation encouraged local school boards to allow facilities to deteriorate until they become eligible for significant rehabilitations or upgrades with state capital assistance. Consequently, the cost of replacement or major rehabilitation projects to the State and local taxpayer is higher than it would have been under a properly funded maintenance schedule.³

Chapter four provides some possible resolutions to the challenges set forth in the preceding chapter. Funding structures have been designed to support constant and cyclical building rehabilitation and technology upgrades, and in some cases incentivize the deferment of maintenance. Despite the general conceit that newer is better, various sets of data have been collected and reported in the past decade that show that school-age does not affect learning outcomes. At the same time, annual capital expenditures at the state and local levels have not been able to keep up with infrastructure needs.

This work shows that despite the enormity of the judicial, legal, and public perception challenges arrayed against it, the preservation of public school buildings can benefit every interested party. Directing dedicated maintenance funding streams to clearly defined aspects of the physical preservation of the school building can reduce the amount of building aid applied by the state. School districts, in saving the state money, deserve compensation to an equal or lesser degree than the amount saved.

¹ Harrington, Margaret, ed. *Auburn: An Educational Journey*. Finger Lakes Press (Auburn, NY: 1970), p. 5.

² Grondahl, Paul. "1911 Capitol fire remains seared into city's history." *The Times-Union*. (Albany, NY) March 28, 2011. Online edition. Accessed on April 4, 2017.

<http://www.timesunion.com/local/article/1911-Capitol-fire-remains-seared-into-city-s-1308984.php>

³ Duncan-Poiters, p. 16.

CHAPTER ONE
THE DEVELOPMENT OF EDUCATION IN NEW YORK STATE

The educational system in New York State has its roots in the Protestant Reformation. The emphasis on individual responsibility for educating oneself enough for religious ends arose in the Protestant regions of Europe, turning them into centers of early pedagogical policy. The Latin grammar school model was well established in Northern Europe by 1600. The various sects of Protestantism, with their focus on the religious education of the population, brought their educational ethic to the new world. Calvinistic Dutch and Walloons settled in New Amsterdam, while Anglicans settled up along the Hudson Valley.⁴ Early American settlers brought this understanding of education with them across the Atlantic. It was not long after the initial settlements that the first American Universities were established. John Harvard founded Harvard University in 1636. Yale was established in 1701. Following the same trajectory as the European schools, religious town governments in New England established Latin grammar schools to prepare students for these religious higher learning centers.

The Puritans of Massachusetts passed laws establishing a foundation for the two most important aspects of American education today, public support and compulsory attendance.^v In a community in which the church and state were indivisible, taxation was justified as beneficial to the overall salvation of the community through the education of each individual. The first Massachusetts Law of 1642 required that officers of the towns were to check on the at-home teachers to make sure they were properly educating the young, and fine them if not. It is the first

^v The Massachusetts Laws of 1634 and 1638 established taxation of property to benefit the entire community.

law of its kind in the English-speaking world, and required the state supervision of existing schools. There was, however, no mandate to build schools or hire teachers until the Law of 1647, another landmark in the English speaking world.

It decreed:

- “1. That every town having 50 householders should at once appoint a teacher of reading and writing, and provide for his wages in such manner as the town might determine; and
2. That every town having 100 householders must provide a (Latin) grammar school to fit youths for the university, under a penalty of £5 for failure to do so.”⁵

In addition to the education laws, the planning and construction of the colonial New England village laid the groundwork for the modern school district as a distinct municipal subdivision. During the colonial period, a process of decentralization and reorganization in New England increased the number of schools across the countryside, while reducing the quality of standards. The typical New England town was oriented around the village green or square, with the meeting house as the anchor point. All residents were required to live within a half-mile of the village meeting house, where all municipal business took place, including the first schools. As the process of secularization and decentralization started to take place, this model broke down. Fortunes grew and land was improved, and residents started moving outward from the town center. New towns were formed and divided over time, while attendance at the meeting house fell due to the growing distances between structures and qualified teachers. The old town school was no longer convenient.

As the population moved out from the town, the tax base dissipated, affecting the school in the meeting house, which was required to be maintained by Massachusetts Law. Early schools for young children, known as “dame” schools were formed in the new subdivisions along with private-tuition schools. The towns adapted to this by making attendance at the town schools free,

but had to offset this by a general taxation on all property. The parishes within the town demanded to reap benefits of this taxation through open education. School districts emerged in which either a “moving school” was taught in each local parish for a few weeks, or returned each parish’s share of the taxation to maintain their own school. The practical effect of this was that each district ended up with a one-room district school for children of all ages, rather than schools of variety according to the geography and population.⁶

Site selection for schools often fell to the least desirable piece of property within the district or community boundaries. The cost and central location of the lot, meaning that which was equidistant from the furthest points of the district, were often the deciding factors in school location. Issues of fire-safety and hygiene were often at odds with cost, leaving many urban schools to be set near the least expensive parts of the city. Site selection for school buildings, common or otherwise, was an issue in the United States well into the late 19th century.⁷

During this period there were several types of schools engaged in the education of children outside of their homes. The first school in any pioneer settlement was usually the single-room school house made of rough timber cut from the local supply. In small communities where the population did not yet justify building a school of multiple rooms or graded levels, the attending students could be quite a wide range of ages. A typical log school house was not a spacious nor comfortable learning environment. The character of the pioneer landscape was reflected in the rough-hewn logs that made up the walls. Windows were few in number and small at that. Glass panes were a luxury at that place and time, but very well may have been in place. In lieu of glass panes, a leather square may have functioned as a shade or protection from the elements on inclement days (see Figure 1). Air circulated through the gaps between the floor boards, walls and ceiling. There may have been a stone chimney and a fireplace, which would

supply light and heat the those close enough to enjoy it. Seats were made from hewn logs or planks if a saw mill was present. The demands of pioneer life in curriculum took the form of wood carving lessons. Subsequently the results were expressed in the built environment. Carving of the desks, walls, and fireplaces were extremely common in log schoolhouses.⁸



Fig. 1. 1820 log schoolhouse in Waterloo County, Ontario. An appropriate example given the similar ethnic and cultural ties between Southern Ontario and Central New York. *logschoolhouse.blogspot.com, 2013.*

The “dame school,” was located in the home of a local woman who had some level of education. In some cases, this model is referred to as a “kitchen school.” For a few pennies a week, this often itinerant school-mistress would welcome young children between 4 and 8 into her home to teach rudiments of reading and religion. This practice grew and became further established, until attendance at a dame school became a mandatory prerequisite in many places for the town Latin or English grammar school.

A “writing school” often existed in conjunction the Latin grammar schools in which boys were taught the “three R’s.” This type of school was led by a school master and a “scrivener.”

Sometimes the writing school and the dame school were merged to include a wider range of ages and curriculum. Often the wide range of material and stages of student development contributed in poor quality education. The writing schools often functioned as a supplement to the Latin grammar schools to polish the students in writing and English, subjects not part of the latter institution's curriculum. The structures that supported the writing schools were often not much more than the facilities offered by a dame school. In many areas, a former grammar school teacher (although often the level of the instructor's training varied) might offer lessons in his home for a subscription.

Free schools, sometimes referred to as pauper schools, were often established for a select number of poor children as a charitable act. This level of education was often followed by an apprenticeship in a particular trade. Apprenticeship, both compulsory and voluntary, depending on the wealth of the apprentice's family, was first codified in the Province of New York in 1665 after the British victory over the Dutch.⁹ The purpose was to train the poor and orphaned in some pliable trade or skill, both boys and girls. As the nation began to coalesce around a more democratic ideal of citizenship during the Jacksonian period, the free school idea was transformed.

"Infant schools" emerged in the second quarter of the 19th century to enhance the preparedness of younger children for their admission into the academies and college preparatory schools. The curriculum was derived from the dame schools and focused toward the same 4- to 8-year-olds. These were sometimes referred to, and eventually universally referred to, as primary schools, which then created the notion of a secondary school in contrast.

In 1784, the Board of Regents of the University of the State of New York was founded at Columbia, and New York began appropriating funds for education. The tuition-based public

schools relied on some amount of government underwriting, which justified the state's mandated inspection of all such schools in 1787.¹⁰ This was the beginning of a history of highly complex funding formulas for the Empire State's schools. In 1795, a statute was passed for a period of five years in which \$100,000 a year was to be spent on supporting education throughout the state, distributed by county. With 16 of New York's 23 counties containing "public" schools, the aid amounted to \$6,250 per county, or roughly \$1.66 per child.¹¹ Calculating inflation, this was a still a paltry sum at \$23.76 per child. After 1800, the act concluded and could not be reinstated. The following year, in 1801, a law authorizing the sale of four lotteries was passed, to raise another \$100,000 to be split evenly between the Regents and the State Treasury for the support of common schools. In 1805, another law was enacted to appropriate the money from the sale of 500,000 acres of state land and 3,000 bank shares to support state education. The interest accrued on the first \$50,000 in proceeds were placed in the "Literature Fund." Unfortunately, the state never arrived at a successful method to disperse Literature Funds. As a consequence, many local schools floundered under a lack of state support.

The first permanent school law was passed in New York in 1812, establishing the legal basis for the district system, the first state aid formulas, and the office of State Superintendent of Schools. The state aid funds were to be apportioned to each county according to their population by the State Superintendent. In order for a local district to receive state aid it had to hold classes for three months per year or more to students between 5 and 15 years old.¹² Local property tax was used to match state aid. The county treasurers were to distribute the money to town commissioners who had divided each town into convenient districts. The people living in these districts were required to elect three trustees, a clerk, and a tax collector. This district also designated the site for a schoolhouse and levied taxes to build them, staff them, and maintain

them.¹³ Two years later the state enacted regulations for the examination of teachers, and required towns to establish common school districts.¹⁴ Although this law was not a mandate for free education and was vague in its authority, it established three concepts that would guide the course of New York State education; that schools are a state function and are ultimately under state control; that public school funding is a responsibility met jointly by the state and local districts; and that the school district is the primary agency charged with local education, rather than towns or counties.

Between 1820 and 1850 the education system in New York assumed the basic shape it retains to this day, although it has grown significantly in scale and scope since. This early national period saw the industrial capabilities of the United States increase. Urban centers grew as diverse populations arrived in search of manufacturing jobs. Children without the means to a tuition-based education were often sent to work in these early factories, or left on their own while their parents worked. A movement for reform started from the combined efforts of humanitarians, the emerging industrial working class, and the democratic movements toward more universal suffrage, marked by populist political movements such as the Anti-Masonic Party of Western New York and Andrew Jackson's ascendant Democratic Party. During this period the concept of publically-supported, universal male education started to become synonymous with the well-being of the Republic. As the movement grew, state and local governments experimented with several different types of makeshift measures, none of which were entirely successful.

Various religious groups imported their values and expectations to the educational landscape of upstate New York. The Mid-Atlantic colonies, including New York, were mixtures of denominations as opposed to the largely Puritan homogeneity of New England. This

contributed to the diminishing the role of religion in school as no sect had a majority to be accommodated. Without the cultural hegemony to establish a public tax on education of all children early on, public education became a voluntary and quasi-commercial subscription-based system. The importance of equality and tolerance of some groups helped to further the opportunities of women and minority groups.

One of the most influential religious groups in central and western New York were the Quakers, otherwise known as the Society of Friends. Starting in New England and New Amsterdam in the 1650s, the Quakers had moved from the Hudson Valley, Massachusetts,^{vi} and western Vermont to the central and western areas of New York following the Revolutionary War.¹⁵ Their beliefs in racial and gender equality and their commercial interests greatly influenced the central New York landscape in which they lived and sometimes settled.

African American children generally did not enjoy, broadly speaking, the same educational opportunities as their white male counterparts until 1900.¹⁶ Until then the education of young black Americans was provided for largely by charitable endeavors, or were organized by the local African American church parish. Some early New York State school boards chose to integrate their district by local legislation, such as Auburn in 1850.¹⁷

In the early national period, education for young women and girls was focused on domestic duties and generally kept separate from the boys, although training beyond basic language and math skills and housekeeping was available to girls of wealthy families. Equal education of boys and girls gained popularity alongside the growth of the academy system. Some

^{vi} Many of the members of the Scipio, New York Monthly Meeting hailed from New Bedford, Massachusetts, as did the influential Miller family of Auburn.

communities created female “seminaries” to offer secondary-level instruction to the community’s young women.

A major step in the secularization of the school system was accomplished during the 1820-1850 period as well. William H. Seward was elected New York State governor in 1838, and requested that John Spencer, New York’s Democratic Secretary of State, acting in his dual capacity as Superintendent of Schools, conduct a survey in the New York City school districts regarding equity in education. The study found that 25,000 children lived in the city that did not attend school, mostly because they were too poor to afford public school tuition, Catholic, or not native English speakers. The governor proposed to use public funding to create schools for nonnative English speakers and Catholics. In his state of the state address in 1840 Seward declared that:

“The children of foreigners found in great numbers in our populous cities and towns, and in the vicinity of our public works, are too often deprived of the advantages of our system of public education, in consequence of prejudices arising from differences of language and religion. It ought never to be forgotten that the public welfare is as deeply concerned in their education as in that of our own children. I do not hesitate, therefore, to recommend the establishment of schools in which they may be instructed by teachers speaking the same language... and professing the same faith.”¹⁸

For all of its beneficent aspirations, this idea was not functional. Once the state gave aid to one religious school, the Roman Catholic Orphan Asylum, a flurry of other sectarian schools applied and a controversy erupted. This became a very unpopular part of Seward’s platform, especially among his fellow Whigs, whom Seward stood apart from in his religious tolerance. The outcome of this divisive issue was a compromise by which the New York City Board of Education was established with control over all schools. The Board itself received state aid and none of it went to the sectarian schools. Secretary Spencer supported the measure, declaring that

in the spirit of total non-intervention in religious matters, a common secular school system would be enacted and extended through New York to ensure the state's future through the equitable education of its young and poor. Thus the first entirely secular (by the standards of the time) school system was founded.¹⁹

The manner in which financial aid was funneled to local schools from the state legislature was also a factor in the march toward a universal and free school. Beginning with the 1812 legislation, state aid came from two dedicated revenue sources, the Common School Fund and the Literature Fund. The former, as its name suggests, was set aside for common schools, while the latter for the academies, a public-private hybrid school described later in this work. By the 1840s, these two funding sources were inadequate to meet the growing number of school districts in New York, nearly 10,000 by the middle of the nineteenth century.²⁰ This led to the so-called "rate-bill" controversy of 1849-1851. The rate-bill was part of the 1814 amendment to the 1812 education law. When local tax revenue and state aid did not meet the financial needs of a district, that district would issue a rate bill in the form of a per-capita tax levied on parents with children attending school. Since parents were only charged for the days in which their children were in attendance, the rate-bill had the effect of making it more financially beneficial to keep one's children home. In the public schools set up to aid the children of the poor, this put a premium on truancy, while those who could afford to pay pro-rata could send their children to a private school anyway. The rate-bill was introduced in New York City in 1826. It caused the revenues of the public school to drop so drastically that the rate bill was cancelled and a common, free, tax-supported school system was founded in New York City in 1832.²¹ Statewide, the agitation for free schools culminated in the Free School Act of 1849, which eliminated the rate-bill and began the general taxation of all property for education.²² The unequal execution of

the measure made it incredibly unpopular, and the Act was repealed, with most of the opposition coming from the rural districts. The cities were clearly in favor, though they had more property. This marked a milestone in the dichotomy between rural and urban areas of New York State in a variety of arenas.

As referenced earlier, British Quaker Joseph Lancaster introduced a school plan that influenced the education and school design of many New York communities, including Auburn. Outlined in his books *The British System of Education*, and *The Manual of Instruction*, Lancaster's system was recursive. With the Master instructing a core group of ten "monitors," who in turn instructed ten younger students, the community could secure the education of 100 pupils for a fraction of the cost of a typical grammar or select school. The Lancastrian school had a floor plan dictated by its pedagogical theories (see Figure 2). The instructor, seated at one end of the room on his raised platform, observed the monitors, who instructed the other groups at stations around a single large room. This room also contained rows of benches for the students to sit at under the gaze of the monitors.²³ The resulting floor plan appeared relatively bare as a result, the entire aim being the highest quantity of bodies within the space, and the relative freedom to move between various stations. Thus Lancastrian schools are usually found to have large square rooms, usually one per floor. These spaces could easily be adapted for community use as well, adding to their popularity.

The Lancastrian system had the added effect of helping to prepare the way for the public's acceptance of public funding for common schools by lowering the cost of education per student. However, its defects became apparent as adults with increasing wealth and worldliness began to spend more leisure time at home with their children, and started to understand that children needed something more individualized. By 1830, it began to fall out of fashion, though

it remained the only system available to the poorest sections of New York and New York City for another decade. When New York State began the increased funding of common schools in the early 1850s after the rate-bill controversy, the Lancastrian model was all but dispensed with.

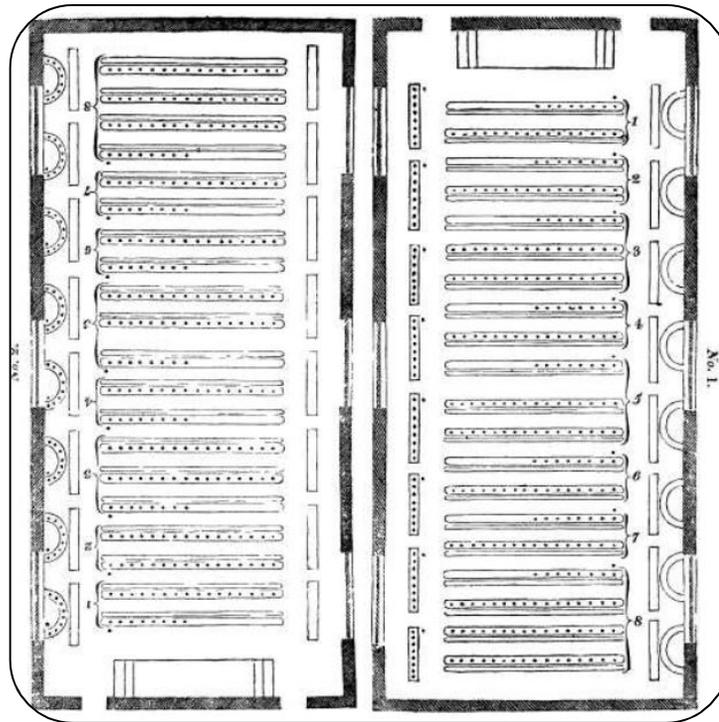


Fig. 2. Lancastrian school floor plan. Semi-circles around the perimeter are reading stations. Monitor benches are found at each end of the longer student benches. The instructor's table is found at the end of the room near the exits. *Joseph Lancaster, 1810.*

Parallel to the peak and decline of the Lancastrian model was that of the Academy, which grew out of the Latin Grammar School tradition. The Latin Grammar School began at age 7 or 8, at the end of the dame school, and began to prepare the boys for university by instructing them in Latin, Mathematics, and Greek. As the population moved into undeveloped areas, skills important to the emerging merchant-pioneer class entered the curriculum. Surveying,

commercial accounting, and English literature were taught alongside the classical course of study.

In many upstate New York communities, the first school with more than one room was an Academy,²⁴ a quasi-public institution run by a board of trustees, funded by collecting tuition for varying levels of instruction and state aid based on fluctuating formulas dictated by the state. While the word “academy” has been historically applied to nearly any conceivable kind of school, this period produced a specific type of school distinct from public or common schools. It was associated with the rapid expansion of the curriculum to include subjects beyond the pioneer-merchant necessities of the grammar schools. Between the years of 1826 and 1840, 100 new subjects, from law to physiology to trigonometry, were introduced by the Regents for instruction. The same period also saw 90 new schools of this type chartered by the Regents or the New York legislature, while only 26 were chartered in the thirty years following.²⁵ With the incorporation of more varied subjects came more educational materials such as wall maps, globes, and libraries. Frequently, but not always, academies were coeducational, and therefore separate facilities along gender lines were incorporated into the design. Usually a large, adaptable-use assembly hall was incorporated as well.

Several acts of the New York Legislature furthered the status of the high school. Dr. John Griscom, an American educator and chemist, traveled to Scotland to observe the “hie scule,” a public Latin grammar school in Edinburgh.^{vii} He was thoroughly impressed with the benefits of this public center for higher learning, and led the effort to organize the first two high schools in America. The Male High School and the Female High School of New York City opened in 1825 and 1826, respectively.²⁶ In 1853, the Union School Acts gave local school boards the power to

^{vii} Founded in 1531.

absorb academies and benefit from the Literature Fund, while accepting the oversight of the Regents. The Consolidated School Act of 1864 expanded the previous law, enabling school boards to tax their districts for the pay of teachers, and mandating the academic requirements of the Regents for graduation. After 1864, New York revised and retooled this law in great detail on a nearly annual basis.²⁷ The next twenty years saw the establishment of public (free) high schools outpacing academies, as the former increasingly outfunded and usually absorbed the latter. Although the state-wide taxation scheme had failed, the repeal of the Free School Act was accompanied by a substantial increase in state-aid for local districts and the introduction of a state property tax tied to school aid. In 1867 New York State voters agreed to the final abolition of the rate bill.²⁸

In the late nineteenth century, the process of unification and consolidation of New York's school system precipitated the growth of a canon of literature and advertisements relating to the building and equipping of schools of all levels. Frequently these publications came with floor plan and building design templates. In 1887, a revision of the laws included an explicit directive by the State Superintendent of Schools for the Regents to create guidance documents for building schools. It called for:

“...blank forms for builders' contracts, and with suggestions in relation to the preparation of the grounds and the arrangement of the building with reference to lighting, heating, ventilating, and the health and convenience of teachers and pupils, and then to publish the whole in convenient form for distribution to trustees and others having use therefor.”²⁹

As a new industry of state-supported school building standardization emerged, books and periodicals offering expertise and knowledge on all aspects of school construction began to grow. The *American School Board Journal* began publishing in 1891, offering articles on a wide

variety of subjects, from management and financing, to the construction of new buildings down to the best wardrobe fittings to use. This proliferation of literature reflected the new attitudes on the importance due to public education facilities, as evident in this passage from the April 1908 issue of *American School Board Journal*:

“There was a time, - and not so many years ago, - when the majority of our American cities and towns saw very little expert skill employed in the designing of buildings for school purposes. Indeed, even now, one often meets people who unblushingly proclaim that ‘most anyone’ can design a school building, since it is ‘nothing but a collection of plain, rectangular rooms, a few entrances, exits, stairs, etc.’ ...Unfortunately the existence of such sentiments... renders still possible the erection of so called school buildings which, to those WHO KNOW, plainly and loudly proclaim hideous defiance of all laws of art, hygiene, ventilation and in some cases even common sense.”³⁰

Written school construction standards further proliferated at the beginning of the twentieth century. The Unification Act of 1904 merged the powers of the Board of Regents, which held authority over all secondary level educational institutions of the state, and the State Superintendent of Schools, who was charged with monitoring all public schools was resolved in the. This State Superintendent of Schools became the Commissioner of Education and served as the executive officer of the Board. This legislation also increased state aid and marked a new building campaign for high schools across the state.³¹ New York began to push the concept of larger, regional buildings as the enrollment at public high schools led to the shuttering of local academies.

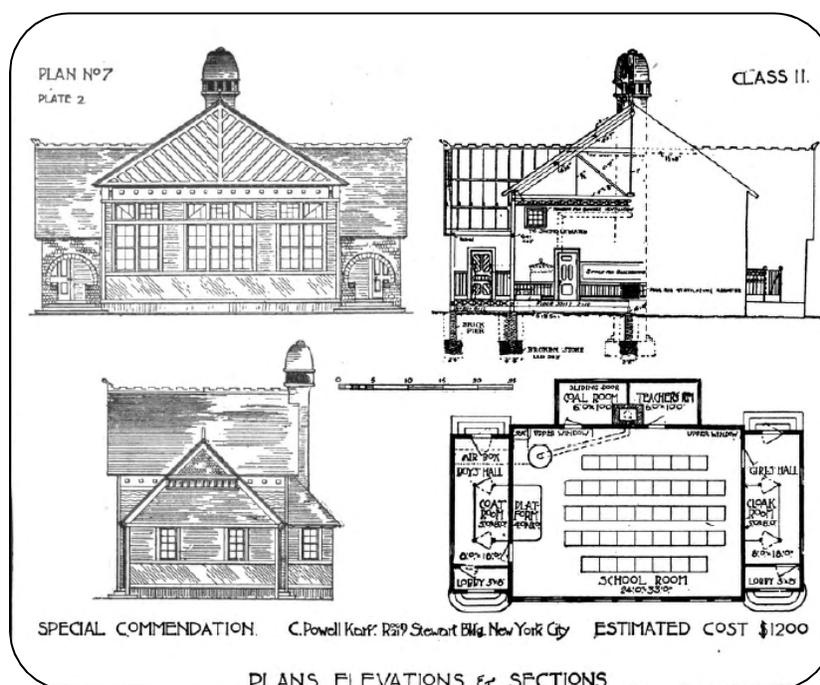


Fig. 3. Example of the standardized school designs that were increasingly encouraged by New York State around the turn of the twentieth century. “Plan No. 7” from *Designs for Schools* (1895).

During the later nineteenth and early twentieth centuries, the greatest share of public education was funded by local taxation. As the growing income inequality that has come to characterize the later nineteenth century led to the social reform movements of the Progressive Era^{viii}, public support for universal education benefitted. From 1870 to the turn of the century, local taxation in New York State rose on average 240%, while the state’s contribution rose 50%.³² After the Panic of 1893 had passed and the economy regained strength, state aid increased, so did the state’s desire to ensure the proper application of funds on a variety of levels. Building standardization advocacy grew out of complaints by the tax-paying public over the high cost of new buildings, the designs of which were in the hands of the contracted architect, usually

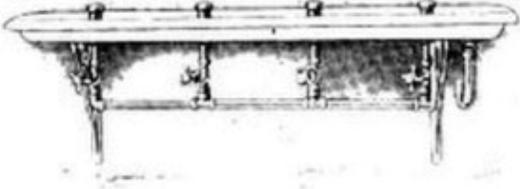
^{viii} Roughly 1890-1920.

chosen after a district's bond measure had been passed.³³ By the end of the 1910s New York State had begun to require that the technical requirements set forth by the official literature must be met. Failure to do so could result in the state government devaluing the bonds issued by the local district.³⁴ This measure was justified by the state as a way to ensure that local and state taxpayers' money was being spent wisely, and it incentivized the standardization of new buildings. The monumental Education Department building, designed by Henry Hornbostle at Albany was completed in 1912 - as if to memorialize the increasing power and prestige of the agency.^{ix}

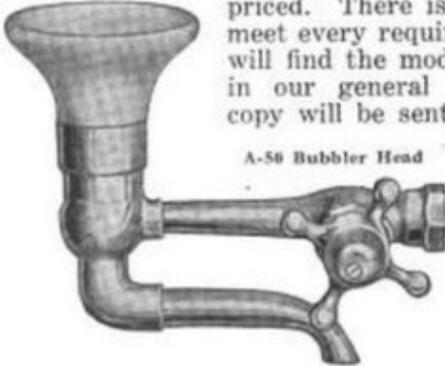
As the state began its sustained increase in aid distribution, the literature related to school construction evolved as did its influence over the marketplace for building materials. As the literature expanded, so did the detail with which the interior of the school building was treated. Works during this period offered plenty of advice as to the best materials to be used in the construction of a school. Quarried local stone rather than brick, and quartered oak rather than ash or pine were preferred in the ideal school building.³⁵ Furthermore, the literature began to serve as the marketplace for materials, systems, and design features, in which private firms created values and invented scarcity with new products. The search for new equipment patents on which to capitalize and the search for advertising revenue increasingly drove the content of the literature (see Figure 4). Consequently, the construction business began to hold quite an influence on education.

^{ix} Architect Henry Hornbostel.

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Fig. 4. Advertisement for school drinking fountains illustrating the market created by early twentieth century school building standardization in New York and other states (“a model design for every requirement”). *The American School Board Journal* (1922).

The turn of the twentieth century also witnessed the emergence of modern urban planning, which exerted a strong influence over school district development. This was the result of the newly elevated role that skilled architects played in the design and incorporation of these standards into school buildings. These architects brought new theories in design and planning to bare in the work they did for school districts. One of the most influential of these was known as

“zone planning.” Zone planning was an approach to organizing school districts meant to create savings by reducing the need to build new schools or buy more land. In the late 19th century many schools still housed multiple grades in the same buildings, and in those districts where the schools were separated, the division was between primary and secondary levels. Often the issue of constructing new schools according to the new standards posed financial problems for districts. Under zone planning, the introduction of the intermediate level offered some solutions. The savings achieved by zone planning were based on conclusions drawn from studying the curriculum and state requirements for certain grade levels, designing schools according to those needs, and then situating these buildings in the district centrally according to census figures. In order to achieve all of these goals, the schools were placed within “zones,” circles with radii based on comfortable walking distances.

Along with the planning reforms in education, the First World War established a need to ensure a healthy and robust population from which to man an industrial military also became a priority. Larger and more robust gymnasiums and cafeterias were added to school design, along with expansive outdoor sports facilities (see Figure 5).

The interwar years were a time of great change in New York’s educational system. State aid to all districts doubled, standards were elevated, and thousands of smaller districts consolidated. The role of the automobile in district planning was officially recognized as well. The Cole-Rice Law, passed by the New York Legislature in 1925, categorized transportation and building aid as funding streams distinct from overall state aid, and provided local districts with 50% and 25% respectively. Beginning in this period of increased funding for building, the location of a school was less dependent on proximity to the children it served. Instead, the ability of districts to fund bussing programs created a push to consolidate and move schools away from

the neighborhood anchors they once were. The transition from neighborhood schools to centralized campus had tremendous impact on the alteration and planning of communities in New York. This impact has been largely overshadowed by the one exerted by urban renewal some decades later.

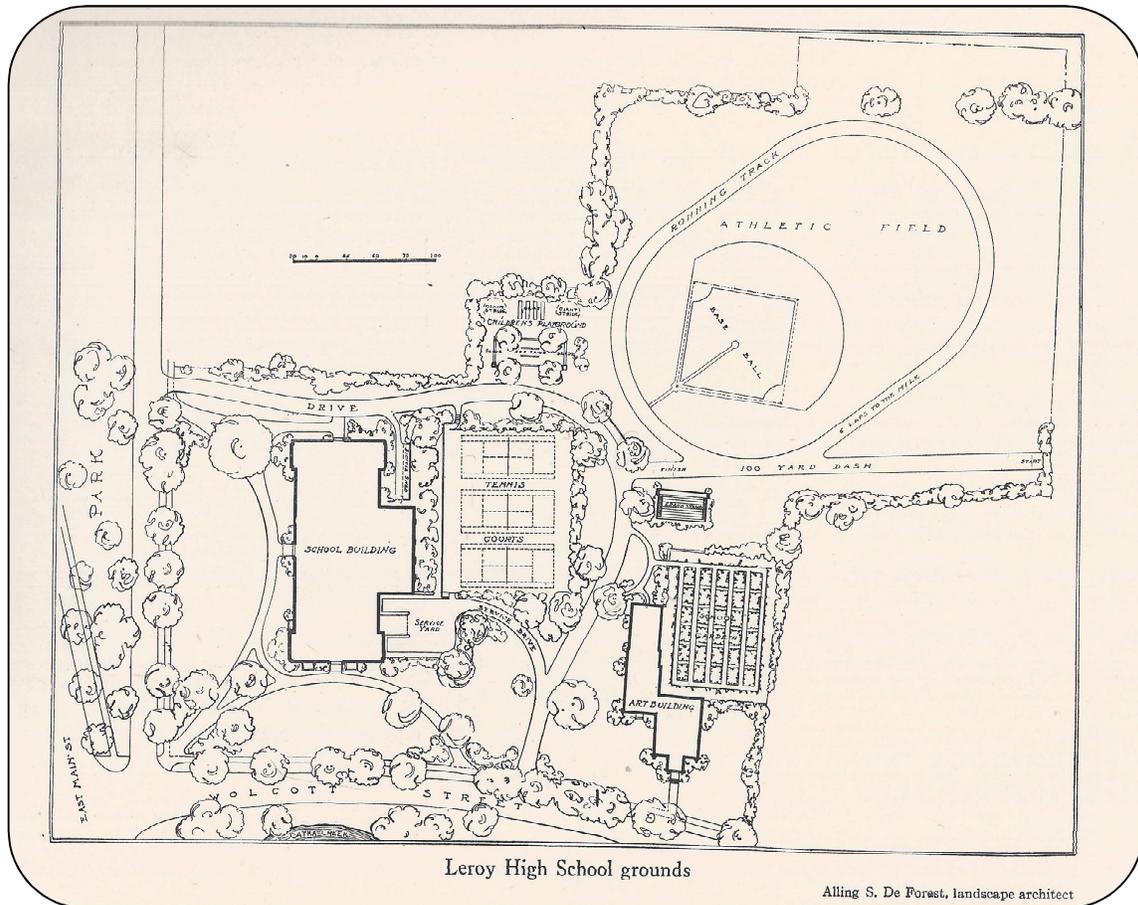


Fig. 5. Example of a plan that devoted large amounts of space to physical education and incorporated a driveway for the bussing in of rural students at Leroy, NY. *School Buildings and Grounds* by the New York State Ed. Dept. (1915).

The introduction of two large-scale programs at the federal and state level affected school architecture during the Great Depression.^x On the federal level, the creation of the Public Works Administration in 1933 assisted many communities who were otherwise struggling to provide education to their students. A 1939 summary of the PWA's work on schools reports that:

“In 1930 the capital outlay per pupil was \$14.44, in 1932 it had fallen to \$8.03, and in 1934 it had reached the low figure of \$2.24. This meant that the capital expenditure dropped from \$370,877,969 in 1930 to \$210,996,262 in 1932, and to \$59,276,447 in 1934... During the 4 years from 1934 to 1938 the P. W. A. made grants and loans for school building amounting to \$113,155,766 per year. These grants and loans, together with funds supplied by the applicants, made possible an expenditure of \$232,405,061 per year, or \$8.80^{xi} per year per pupil.”³⁶

Such a large investment in capital funding facilitated increased school building across the country. The PWA exerted an influence of the modernization of school buildings, not only in mechanical function and equipment, but stylistically as well, with the building of a great many Art Deco-style schools. New York State continued to use the bond devaluation as an incentive to follow design guidelines, as they had since the beginning of the century. PWA Region One's^{xii} schools were by and large “nearly all traditional,” and kept to the colonial revival exteriors, although there were exceptions (see Figure 6).³⁷ On the state level, the provisions of the Cole-Rice Act incentivized consolidation among districts during the Depression. The act's baseline aid packages and per pupil minimum expenditures were maintained.³⁸ With 25% state support for

^x 1929-1941.

^{xi} \$152.41 in 2016.

^{xii} PWA Region One consisted of several Northeastern states, including New York.

school building projects coupled with the increased capital expenditures granted by the federal government, the local share was reduced dramatically.



Fig. 6. Colonial revival school building illustrative of the prevailing style in Region One. From *School Architecture* by John Donovan (1921).

After the end of World War II, New York State introduced the BOCES^{xiii} system, allowing multiple adjacent districts to pool resources and form parallel “super-districts” that provided vocational training to area students at scale.³⁹ As the post-war era unfolded and the baby boom became apparent, a change in school design took place. Changes in the economic world once again created a demand for new skill sets, in turn leading to a reimagining of the school building. The United States placed increasing emphasis on industrial skill and management as the country emerged as the major economic force globally. This shift in focus in curriculum goals was combined with pressing demographic issues. In order to understand the new demographic situation emerging in the late 1940s, the 81st Congress authorized a nationwide School Facilities Survey, and administered by the Office of Education.^{xiv} As a consequence, new literature entered the canon on school planning and design to meet growing

^{xiii} Board of Cooperative Educational Services.

^{xiv} The Office of Education within the U.S. Department of Health, Education, and Welfare was the precursor to the U.S. Department of Education.

enrollments, changes in technology, and to prepare for the new demands of the post-war economy. The new school planning ethos shared some similarities with contemporary urban planning, but differed in the way it involved administrative, custodial, and instructional staff in the process. Teachers' and student's desires were documented in the Facilities Survey, along with photographic evidence of conditions of existing sites.



Fig. 7. Post war school site featuring lower height, lots of outdoor space, and location outside of the city. From *Special Publication No.2, "Good and Bad School Plants"* by U.S. Office of Education (1954).

An increase in transportation aid furthered the reach of districts and continued to push the creation of regional facilities. This led school designers to address many of the age-old construction issues of ventilation, light, and noise by creating expansive, centralized, single-story sites at the edge of town. The relatively low cost of this land made abandonment of the centrally located urban schools attractive. As a result of these planning efforts, mirrored at the state level, the largest shift in school design since the 1910s occurred. Schools built during this period took

on a “low and long” look, being typically one or two-story buildings of classroom wings attached to central administrative and assembly points (see Figure 7).

Just as New York’s education facilities were adapting to new realities after World War II, so was the state funding apparatus. In 1947, New York began to expand and complicate the formula used to determine state aid for construction. An index of material and labor costs was maintained by the State Industrial Commissioner, created to adjust the aid based on enrollment per district. This formula was revised in 1950, and again in 1955. The complexity of the formula reached new heights in 1962 when an effort was made by the Diefendorf Commission to settle on an accurate and fairly formulated state aid package for schools. The formula arrived at by the Diefendorf Commission was constructed to provide more aid to less wealthy districts overall. The Commission also provided state-sanctioned definitions of the various types of school districts then in operation, including the relatively new “Enlarged City School District.” The Enlarged City School District was defined as one which had expanded beyond the corporate boundaries of a city to provide adequate education to the emerging suburban communities.⁴⁰ Another result of the Diefendorf Commission was the separation of state aid to school districts into four main expenditure categories: operations, buildings, transportation, and “size correction.”^{xv} The United States Elementary and Secondary Education Act of 1965 released a large stream of funding for education, which included many building projects across the country.^{xvi} No sooner had the Diefendorf Commission’s reform measures been enacted than a subsequent group of legislators, the Fleischmann Commission of 1969-74, reviewed, criticized,

^{xv} Today known officially as district consolidation.

^{xvi} The following year saw the passage of the National Historic Preservation Act of 1966. Many of the schools funded by the 1965 Education Act are now passing into the 50-year-old eligibility guideline for listing on the National Register of Historic Places.

and sought to re-reform the previous commission's work. However, its proposal to place public school financing solely under state direction did not come to pass.

Informing and shaping the debates on school funding and building construction were two important topics: the Cold War and race issues. The Soviet Union's launch in 1957 of the Sputnik satellite created a new imperative in the minds of American educators to increase funding and rigor to mathematics, science, and physics training. New York mandated science requirements at all secondary schools the following year.⁴¹ In 1975 Apple, Inc. began donating its Apple 1 units to schools. By the early 1980s, IBM PC's were proliferating rapidly. This necessitated the new arrangement or addition of space to accommodate computer-aided instruction. In many cases, this meant that the library transitioned away from shelves of books to open rows of desktop-computer workstations.

Racial issues affected every aspect of public instruction. Some communities in New York State had integrated their districts after the Union School Act of 1853. The state did not interfere, however, with those communities that maintained a separate school system for black children. Legislation was passed integrating all public schools, but was struck down based on the "separate-but-equal" clause by state courts in 1900. New York finally passed an official anti-segregation law in 1938. The 1954 *Brown v. Topeka Board of Education* decision by the Supreme Court declared separate public schools for white and black students unconstitutional with finality. Since that time, de facto segregation of poor and minority populations has been a concern of educators, lawmakers, and citizens. As the black populations of New York's cities grew in the mid-twentieth century, white middle class movement to the suburbs created fiscal stresses on the tax revenue of the school districts. As a result, a trend emerged of poorly served minority schools, many with aging buildings in ill repair. In an attempt to mitigate de facto

segregation in 1960, the state commissioner urged centralized and more cost-effective buildings, and urged districts to ignore the historic neighborhood boundaries while planning.⁴² This move was also partly influenced by the new design standards and the financing opportunities that came with them. In the decades that followed, many attempts were made to support underperforming inner-city schools.

The current thinking about school construction has been affected by the advent of the internet and digital technology. Digitization is conceived as having “liberated” the classroom from fixed locations. Changing attitudes toward children’s mental development encourages more movement and exploration as opposed to rigidity and obedience in the classical sense. Although common group rooms that connect adjacent classrooms have been an idea since the mid-twentieth century, new technologies have enabled the designers to take the concept further. As students ideally perform work individually tailored to them on tablet applications, the teachers can move among them providing individual instruction as needed.

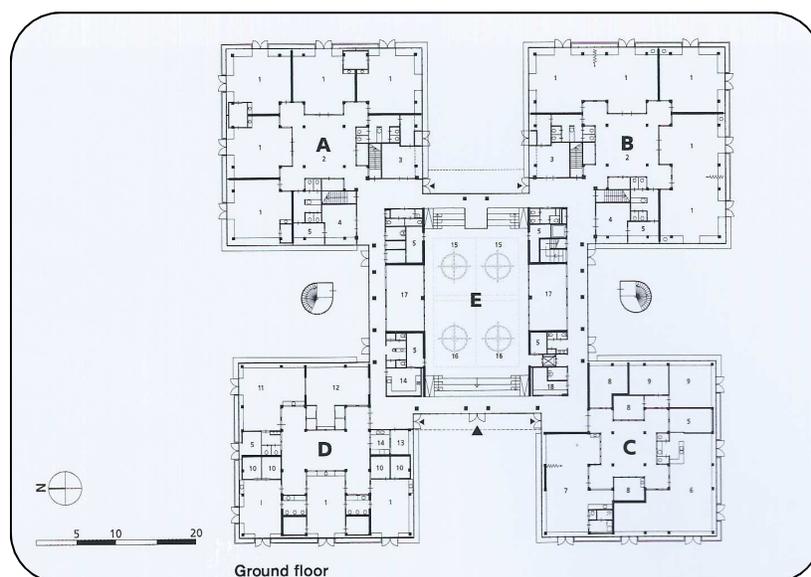


Fig. 8. Floor plan for the De Matrix School in Hardenberg, Holland, showing adjacent rooms and common areas, all in turn adjacent to a central common area. From *Construction and Design Manual: School Buildings*, ed. By Natasha Meuser (2014).

Today, New York State has over 700 school districts and faces the task of educating over 3 million children of varying backgrounds, income brackets, and levels of family involvement. The state offers hundreds of core and elective curriculum opportunities, and usually ranks in the top tier of public education systems in the United States. However, New York faces significant challenges in the twenty-first century. Declining enrollment and a weakening tax base, along with a growing disparity between wealthy and poor school districts, has proved challenging to the department's mission "to raise the knowledge, skill, and opportunity of all the people in New York."⁴³ Despite the effort of the Deifendorf Commission, state foundation aid remains unequally distributed according to the goals of the Commission and the department. Multiple revisions and even judgements against the department by the State Supreme Court have not produced any substantive change.

Building aid formulation, on the other hand, has remained relatively fixed except for periodic new requirements and the reconfiguration of debt service. This may be attributed to the fact while foundation aid only supplements the local district's budget, made mostly of local taxation, building aid pays an average of 70% of all associated capital costs. In some districts, such as Auburn, New York, this contribution can be as high as 90%. This situation may provide some comfort for the district's residents who are otherwise concerned with the annual school budget, but analysis of the distribution of building aid reveals that the large capital project funds do not spend state funds as efficiently as good maintenance. Over time, these projects can accrue additional construction costs and interest rates that counterbalance the short-term benefits. This situation took over 200 years to evolve and achieve its current level of complex ineffectuality, but could be mitigated by turning from a new building-incentive model to a school preservation-incentive model.

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- ⁴ Cubberly (1947), p. 13. See also Cubberly, (1920), p. 358.
- ⁵ Cubberly (1947), p. 18.
- ⁶ Fairlie, John. *Municipal Administration*. Macmillan Co. (London: 1901), p. 201.
- ⁷ Burrage, Severance. *School Sanitation and Decoration*. Norwood Press (Norwood, MA: 1899), p.6.
- ⁸ Storke, p. 59.
- ⁹ Cubberly (1947), p. 26.
- ¹⁰ Cubberly (1947), p.112 foot.
- ¹¹ Cubberly (1947), pp. 98-99.
- ¹² Folts, James. *History of the University of the State of New York and the State Education Department, 1784-1996*. New York State Education Department (Albany: 1996).
- ¹³ Hall, Henry. *The History of Auburn*. Dennis Borthers & Co. (Auburn, NY: 1869), p. 276.
- ¹⁴ Folts, James. "Education Department and University of the State of New York," *The Encyclopedia of the State of New York*, ed. Eisenstadt, Peter. Syracuse University Press (Syracuse, NY: 2005), p. 492.
- ¹⁵ Densmore, Christopher. "The Society of Friends in Western New York." Presentation delivered to the Orchard Park Historical Society, April 8, 1985.
- ¹⁶ Sandweiss, Martha. *Passing Strange: A Gilded Age Tale of Love and Deception Across the Color Line*. Penguin Press (New York: 2009), pp. 213.
- ¹⁷ Storke, p. 188.
- ¹⁸ Seward, William H. "State of the State Address, January 7, 1840," *Journal of the Senate of the State of New York*. E. Croswell (Albany: 1844), p. 8.
- ¹⁹ Ravitch, Diane. *The Great School Wars: A History of the New York City Public Schools*. Johns Hopkins University Press (Baltimore: 2000), p. 64.
- ²⁰ Folts, 1996.
- ²¹ Cubberly (1947), p. 199.
- ²² Storke, Eliot. *History of Cayuga County*. D. Mason & Co. (Syracuse: 1879), p. 188.
- ²³ Armstrong, p. 510.
- ²⁴ Cubberly, (1947), p. 112.
- ²⁵ Gifford, p. 21.
- ²⁶ Gifford, p. 23.
- ²⁷ Gifford, p. 60.
- ²⁸ Cubberly (1947), p. 200.
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- ³¹ Gifford, p. 65.
- ³² Fotls, 1996.
- ³³ Donovan, John. "State Bureaus for Regulating and Directing the Building of Schools," *The American School Board Journal, Vol. 64, January-June 1922*. The Bruce Publishing Company (Milwaukee, WI: 1922), pp. 50-51.
- ³⁴ Gilbert, Frank. *Law Pamphlet I*. The University of the State of New York (Albany, 1910).
- ³⁵ Burrage, pp. 18 & 84.

³⁶ Short, C.W. and Stanley-Brown, R., ed. *Public Buildings Architecture Under the Public Works Administration, 1933 to 1939*. Government Printing Office (Washington, DC: 1939), p. 18.

³⁷ Short and Stanley-Brown, p.21.

³⁸ Folts, 1996.

³⁹ Preservation Studios. *West High School*. (Auburn, NY: 2015), p. 6.

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⁴¹ Folts, 1996.

⁴² Folts, 1996.

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CHAPTER TWO

DEVELOPMENT OF THE AUBURN ENLARGED CITY SCHOOL DISTRICT

The city of Auburn was founded in 1793 by Colonel John Hardenburgh, a Revolutionary War veteran and land speculator who took possession of “Aurelius” Lots 46 and 47 of New York State’s New Military Tract.^{xvii} John’s brother Abraham was a State Highway Commissioner, and assisted his brother in the development of his lot by directing the Old Genesee Road through it. The combination of the manufacturing power of the Owasco River and the westward overland route helped the settlement grow into a small hamlet called Hardenbergh’s Corners. Cayuga County was formed from part of Onondaga County in 1799, and the village was renamed Auburn in 1805. The location of a state prison at Auburn in 1817 brought state funding and jobs, which created a vibrant economy. Large disbursements of state money paid into the community for the prison’s construction led to the establishment of the Bank of Auburn in May of 1817 with a capital of \$400,000, over \$6 million today.⁴⁴

The first civic effort to address the education of Auburn’s children began with the “Town Committee on Schools,” formed in April 1796 by John Hardenburgh, Ezekial Crane, Joseph Glover, and Elijah Price. As a result, the first school in Auburn was built on the west side of North Street in the vicinity of the land currently occupied by Holy Family Church and School.⁴⁵ A second school described as a log cabin was built in the same year on the south-east corner of Genesee and Division Streets in the hamlet then called Clarksville. These streets do not cross any longer, but what is today Columbus Street may have been Division before Columbian Rope was

^{xvii} The “New Military Tract” of Central New York was a government bounty of nearly 2 million acres set aside for the benefit of Revolutionary War veterans. It was surveyed in 1789.

established in the area.^{xviii} In 1801, a yellow, one-room schoolhouse of frame construction was built on the east side of South Street. It had a succession of teachers starting with Auburn's first, Benjamin Phelps, in 1806. North and South Street were graded and straightened in 1817 and the building was in the path of the new street layout. It was therefore moved to an unrecorded location and used as a storehouse. In the same year, Phelps opened a fourth school in a log cabin on the north side of Franklin Street, between Holley and Fulton Streets. He called students to school using a cow bell. This school only lasted two years and was subsequently used as a residence.⁴⁶

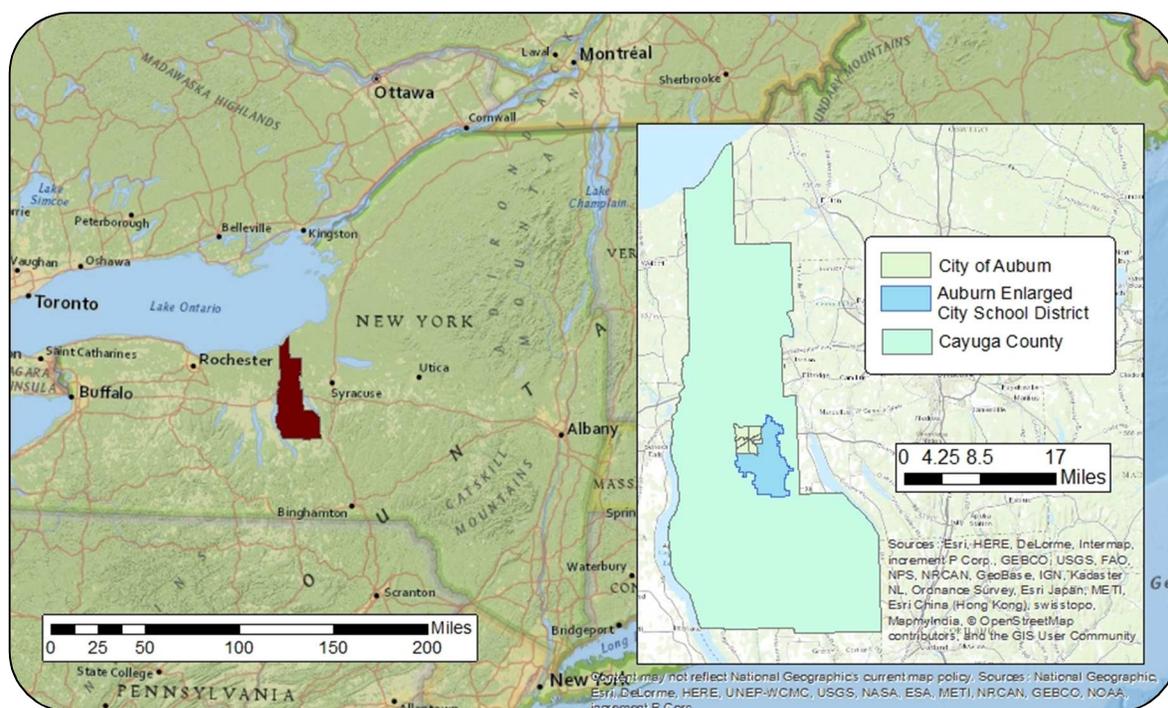


Fig. 9. Context map of Cayuga County, Auburn, and the Auburn Enlarged City School District. *Author's map.*

^{xviii} In Joel Monroe's *Historical Records of 120 years*, the location of this school is given as the corner of Garrow and West Genesee, yet no school existed here before 1879. Monroe most likely conflated the first Genesee Street school opposite James Street with the one built in 1879.

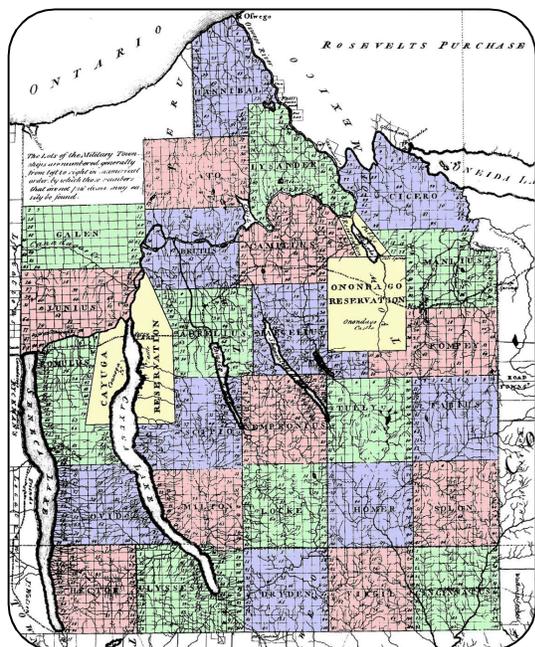


Fig. 10. Map of the Central New York Military Tract. *Simeon Dewitt, 1792.*

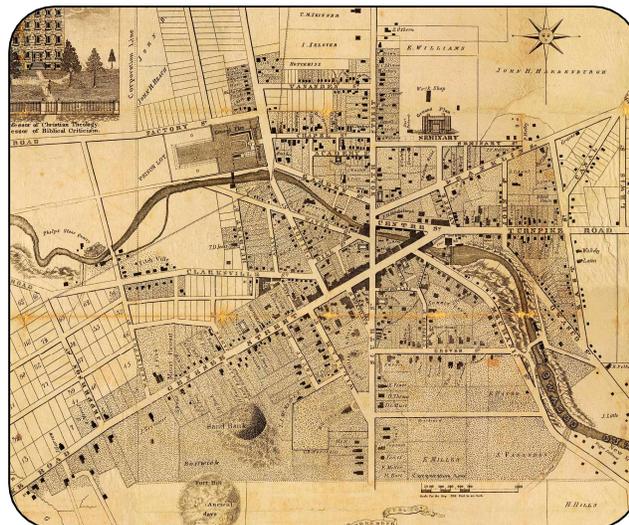


Fig. 11. Map of the Village of Auburn, showing the Owasco River and the Old Genesee Road. *John Hagaman, 1837.*

By the second decade of the 19th century, emigres from Massachusetts and Connecticut had settled across New York State. Many wealthy and highly educated families from that region made their homes in the towns and villages of Cayuga County, including Auburn.⁴⁷ With them came an understanding of a school system as a quasi-municipal entity with significant public support. On January 5, 1811, the Auburn School Association was formed by the prominent businessmen and leaders of the community for the purpose of erecting the first academy. This structure, built in 1812 by Jehiel Clark and Bradley Tuttle, was perhaps the first building constructed by a corporate body for the public good. Tuition was \$3 a year (\$4 with the addition of Latin), and the Academy accepted “boys” ages seven to 20.⁴⁸ A five-and-one-half-acre plot near the center of town was donated by Robert Dill, an early land holder in the city, and designated as “Academy Green.” This was built according to the Lancastrian model. Auburn’s

antecedent school buildings had been built according to the needs of their place and time on the pioneer landscape. None were designed with such a specific pedagogical philosophy.⁴⁹

The Academy was constructed of eight-inch-thick brick walls on a stone foundation.⁵⁰ It was three stories high, the first two floors consisting of two rooms separated by a ten-foot-wide hall way. In keeping with the Lancastrian model, these rooms were most likely set up with the instructor at the south end of the classroom on a raised platform. He would have faced multiple rows of students performing work at long benches. Given the building was to be 60 feet long, we could assume that the rooms were 25 feet wide apiece, minus the interior wall thickness. The ceilings were ten feet high. The third floor was a single room with an arched 11-foot ceiling. This large room would have been used for community events and presentations attended by the entire student body or faculty. The school featured a cupola which was designed to hold a 250-pound bell. The thicknesses of the walls were to be wider at the base (two and one half brick's length) than at the top (one and one-half bricks). Prior to widespread knowledge of physics in engineering, increasing wall thickness at a building's base was a simple and time-tested method for structural strength. In keeping with the pedagogical ethic of the time, there were "dark cells" in which children would be sent as punishment. The building was destroyed by fire only four years after being built, along with all of the known records of the school's daily operations.⁵¹

Lacking photographs of the original Academy, the earliest illustration, seen in Figure 16, cannot confirm the written description set forth by the Association's 1811 specifications for a building "sixty feet long and twenty-five feet wide."⁵² Furthermore, the written history *Historical Records of 120 Years* by Joel Monroe describes the building as "a wooden structure, 40 by 60 feet, two stories."⁵³ All other sources refer to Henry Hall's *History of Auburn*, published in 1869, in which the Academy is described as "a plain, old fashioned, three-story brick building,

sixty feet long by twenty wide, surmounted by an open belfry.”⁵⁴ In Hall’s opinion, it was “a queer old building, with queer methods of instruction.”⁵⁵ Representative drawings based on the original Association specifications can be seen in Figure 21.

After fire destroyed the first Auburn Academy, students attended classes held in several different locations, including at the nearby Auburn Theological Seminary and the second story of a building used as a dry goods store.⁵⁶ The second Academy building was built in 1827 according to “well defined plans embodying the original ideas, together with the advanced modes of education” (see Figures 12 & 13).⁵⁷ The “advanced modes” may have referred to a greater variety of equipment reflecting the nascent growth of the curriculum. A local advertisement announcing the December 3rd opening of the Academy in 1827 relates:

“Early measures will be taken to ensure instruction in chemistry and natural philosophy, with apparatus for lectures and experiments, in a room to be fitted up for the purpose.”⁵⁸

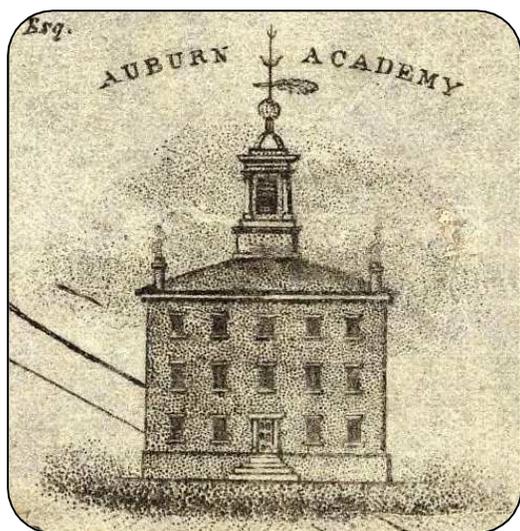


Fig. 12. Auburn Academy II. Engraving by John Hagan (1837).



Fig. 13. Academy circa 1900, looking north. Image courtesy of Cayuga Museum of History and Art.

Photographs show the second Academy building was closely related to its predecessor in terms of form, while some cornice and windows details were added and altered over time. The originally bucolic setting of the Academy on the central green donated by Robert Dill became urbanized over time as Auburn's industrial and commercial life grew.

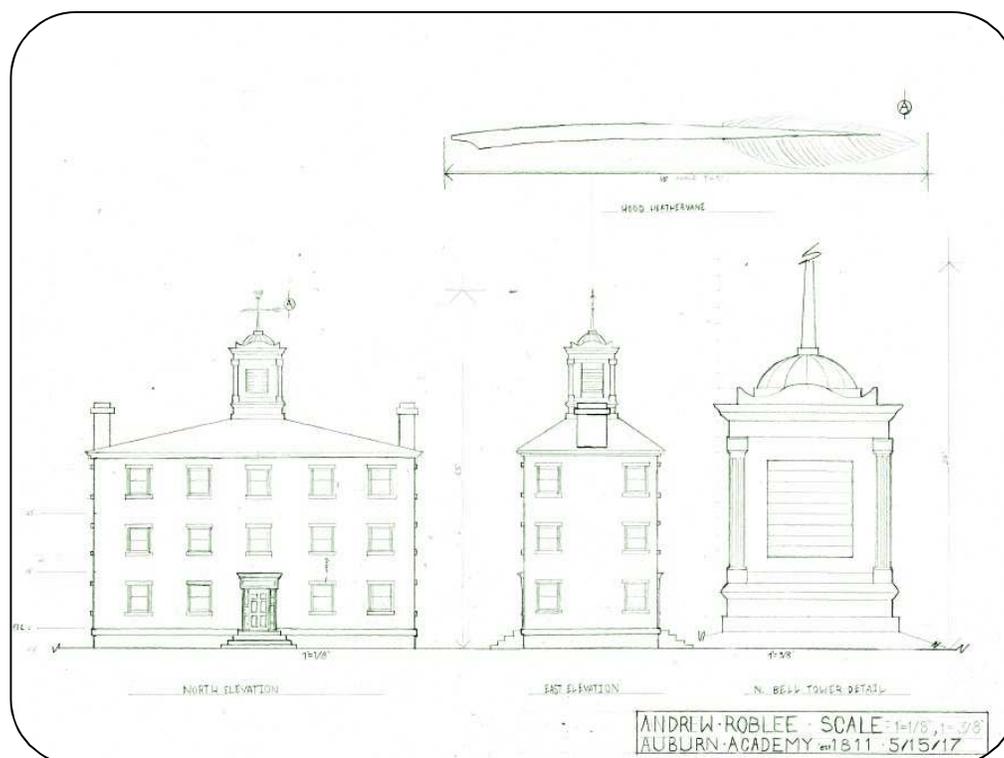


Figure 14. Renderings of the 1811 Auburn Academy based on written specifications. *Author's drawings* (2017).

The New York Education Law of 1812 put control of public education into the hands of the county, ending the town committee.⁵⁹ Under this new arrangement, the first “common school” built in Auburn was the Fulton Street school, erected in 1818 replacing an earlier log schoolhouse.⁶⁰ It was built of brick according to the Lancastrian model, and consisted of only one large room. For several years it was the only school furnished with an iron bell, and it became known as the “Bell School.” Its students were taught by a Quaker named Stephen Estes.⁶¹

A small brick school on North Street was erected in 1827, opposite the initial 1796 log schoolhouse.⁶² It was rebuilt in 1851.⁶³ Auburn's first public high school was located in this school for a single year, 1866, before moving into the Academy building.⁶⁴ There are no photographs of this school currently known, and it is not included in the Auburn maps in 1882.

In 1828 a small brick school building was erected on Cumpston Street, later known as School Street. It was later moved to Grover Street in 1836, where a three-story, T-shaped brick school building nearly identical to the second Fulton Street school was constructed. This was demolished in 1910, and the land was donated to the city and dubbed "Osborne Park." The original 1828 school on School Street was converted into a dwelling and still stands today.⁶⁵

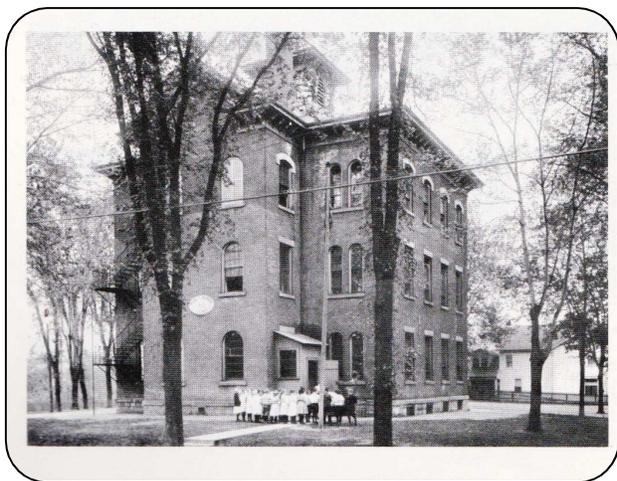


Fig. 15. Grover Street elementary school circa 1900. *Image courtesy of An Educational Journey* ed. by Margaret Harrington (1970).

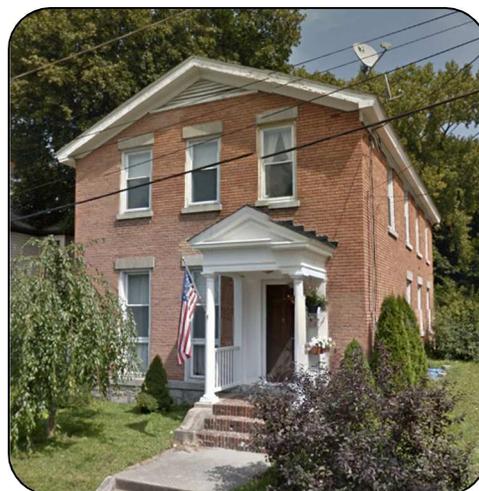


Fig. 16. Original 1828 schoolhouse (now a dwelling) on School Street. *Author's photograph.*

Another Lancastrian school building was erected on Genesee Street on the grounds of St. Peter's Episcopal Church in 1833, in what was then known as the "western district."⁶⁶ The class in District School #2, as it was soon known, was moved across the street into a district school constructed in 1842. This was a design similar to the Grover Street School, but with a staircase incorporated into the building's simple rectangular footprint rather than projecting out. District

School #2 became known as Genesee Street School after the renaming campaign in 1877, and it served the district until 1903 when it was razed to build the Case Memorial-Seymour Public Library.⁶⁷

In 1841, the County Superintendent of Public Schools, Eliot Storke, performed an in-depth study and analysis of the school structures throughout the county in partnership with the Town Supervisor of Auburn, Mr. Philo Perry. They found that only one of 226 school buildings had more than one room, and almost all were in poor shape. There was also a pervasive attendance problem. The wealthy refused to send their children to such poorly maintained schools, while the poor could not afford to pay tuition and often chose to avoid the shame of asking for exemptions. Hence, many parents kept their children home.

On April 10th, 1850, the city of Auburn passed an act regulating free schools in the city, creating its own tax system and effectively stepping outside of the rate-bill controversy going on at the state level.^{xix} The five districts each elected one trustee, who served along with the mayor and city council. In addition, a superintendent was hired by the council, serving the Board of Education for the City of Auburn. After the Union School Act of 1853 provided new levels of funding and support for free schools, attendance at the tuition-based Academy began to fall, and its future became uncertain.⁶⁸ In 1866, the Auburn School District was formed as an independent corporation. The office of "City Superintendent of Common Schools," was abolished in 1866, and the Board empowered to appoint their own secretary. The Auburn Academy, a number of her trustees, and its property were merged to the Board of Education after a bitter and contentious debate.⁶⁹ Subsequently, the High School was conducted in that building.⁷⁰ A new wing was added to the building in 1873 for female students.⁷¹

^{xix} Described in Chapter 1, page 32.

Auburn was not particularly progressive compared with similar communities in the state during the early national period. In the context of the mid-nineteenth century, however, Auburn is often associated with limited progressive initiatives and the reform ideas associated with the “burned-over district.”^{xx} This is in part due to the New England heritage of many of the town’s leading families and the influence of prominent Quakers in the early days of the community.

The public effort to provide education to the African American citizens of Auburn began shortly after the erection of the Auburn Academy. In 1818, a group of concerned clergymen established a Sunday school for Auburn’s black citizens of all ages, paid for by the private fund of its founders. It was held in the small, timber-framed home of one Albert Hagerman, a freed slave of one of Auburn’s largest early land owners, William Bostwick, despite a very vocal public disapproval. The impetus for this establishment can be credited to Dr. Richard Steel, who had moved from Troy to Auburn the previous year with experience in running a school for colored boys.⁷² There was little improvement in the service of educating Auburn’s black children until 1846, when a wood schoolhouse was erected to serve Auburn’s African American population. The school operated for only a few years until the greater Auburn School District was integrated with the passage of the original April 10th, 1850 ordinance.⁷³ Within 40 years the subject of African American education changed from public ridicule of a quite limited effort, to a fully integrated school system, at least in the spirit of the law.

Education for girls and young women was also limited until well into the middle of the nineteenth century. In the early days of life in Cayuga County, education for young women was seen as sufficient once basic literacy was established.⁷⁴ All efforts in education for women were

^{xx} Referring to the religious revival movements of western and central New York during the early 19th century. Also known as the Second Great Awakening, it was linked to the growth of abolition, women’s rights, and utopian societies.

conducted in small, private schools during the first few decades of the nineteenth century. None lasted for more than a few years. In 1837, the privately-run Auburn Female Seminary at Genesee and Washington Streets was established, provided the largest facility dedicated to female education, although the curriculum remained primarily concerned with creating the ideal upper-class wife; the arts, music, and the French language. In 1849 the school burned down, which created a resurgence in smaller, private schools in homes and public spaces.⁷⁵ These types of spaces were more or less adequate given the limited curriculum available to young women.

The original Fulton Street one-room schoolhouse was replaced in 1863 by a three-story structure designed by architect J. W. VanderBosch.⁷⁶ The second Fulton Street school featured the central projection which gave the design a T-shape. This was done in order to add more space for rooms by moving the stairway outside of the center of the building (see Figures 17 & 18). This plan was copied by several Auburn schools in the middle of the 19th century.



Fig. 17. Undated photo of second Fulton Street School, after 1863. *Courtesy Cayuga Museum of History and Art.*



Fig. 18. Undated photo, c. 1880. *Courtesy Cayuga Museum of History and Art.*

In 1871, the New York State legislature passed a law "to amend and consolidate the several acts relating to the public schools of the city of Auburn," increasing the powers and responsibilities of the Board of Education of Auburn.⁷⁷ This included increasing the number of commissioners to nine, the hiring of a clerk, secretary, and superintendent "to determine annually the amount necessary to defray the ordinary expenses of the schools."⁷⁸ With the exception of the addition of a business-manager position, the administrative structure of the Board has been unchanged since this act. In 1874, the New York State Legislature passed a compulsory education law, which Auburn did not pursue. It was deemed impractical for Auburn to police truancy at that time. Furthermore, Auburn's policy of sending tardy children home and charging them with half a day's absence had the effect of encouraging nearly perfect attendance.

The growth of industrial facilities to the west of Auburn, including the construction of the E. D. Clapp Manufacturing plant, which produced a variety of farm equipment products, led to the expansion of the city in that direction.⁷⁹ A school at Garrow and Genesee, appropriately named the Garrow Street School, was built in 1879 to serve the growing west-end neighborhood (Fig. 20). An addition to the rear in 1906 sufficed until 1950 when the school was razed and a new one designed by Beardsley & Beardsley. It still serves the west-end children of Auburn.⁸⁰

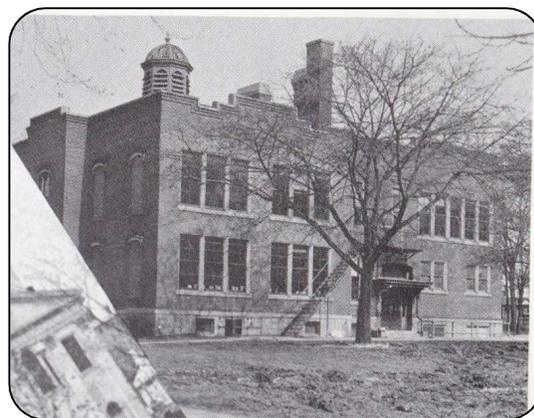


Fig. 19. “Old” Genesee Street School, 1842-1903.

Fig. 20. “New” Genesee Street School. Built 1879 as Garrow Street School, renamed in 1877, and razed in 1950.

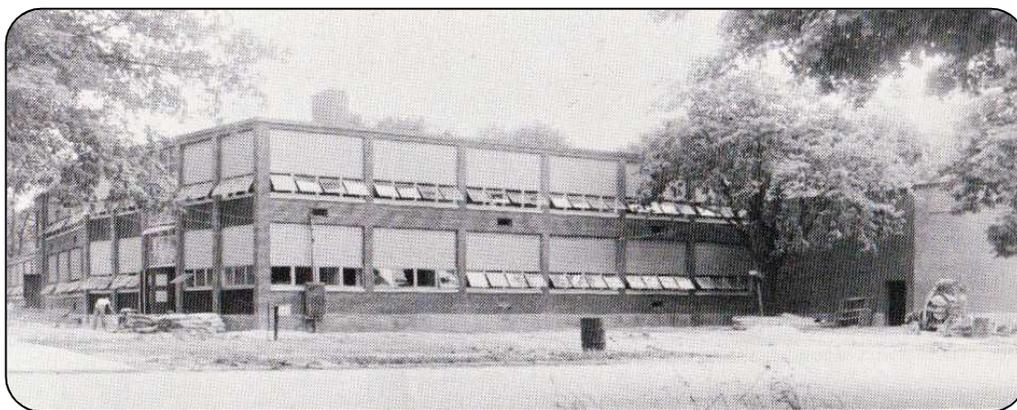


Fig. 21. “New” Genesee Street School, built 1950. Currently serves the south-western section of Auburn. Images from Figures 19-21 courtesy of *An Educational Journey* ed. by Margaret Harrington (1970).

When the Academic High School was completed in 1888 Auburn’s population had grown by nearly 20,000 since the erection of the second Academy in 1827.⁸¹ It had a first-year enrollment of 358, and within 15 years this had grown to 456.⁸² The design of this large education building reflects the popularity of the Romanesque style movement in architecture and heavily borrows upon the work of Henry Hobson Richardson. The building had three stories plus a full basement housing science laboratories. The top floor was an open assembly space, called the “chapel,” with vaulted plaster ceilings supported by exposed timber trusses. The exterior features were quintessential Richardsonian: rounded arches of large rusticated stone, asymmetrical window grouping, high gables, and thick masonry chimneys (Figure 22). The total cost of the building was \$80,000, roughly equivalent to \$2,167,433 in today’s terms.⁸³ An elaborate opening ceremony included speeches by three eminent citizens of Auburn. Superintendent Benjamin B. Snow, President of the Board of Education Thomas Mott Osborne, and guest speaker Andrew Dickson White, President of Cornell University, all made speeches

extolling the high virtue of education and the rich history of Auburn as a place of moral and philosophical excellence.⁸⁴ In 1903 a fire destroying much of the neighborhood burned the wood roof and damaged the third floor chapel, but it was rebuilt shortly after.⁸⁵ An addition, designed by Samuel Hillger was made in 1911, replacing the earlier female wing of the Academy, emulating the style of the Academic High School.⁸⁶ The original Academy was incorporated as a part of the 1888 Academic High School until both were razed in 1933.



Fig. 22. Academic High School with 1910 addition to the left. *Image courtesy of the Seymour Public Library.*

Around the turn of the 20th century a few architects were responsible for the design of all of Auburn's school buildings. Samuel Hillger, born in Brownville, Texas, was a graduate of the Cornell School of Architecture in 1882. After working in Minneapolis, MN and Rochester, NY he was involved with the firm of William H. Miller where he acted as the construction supervisor on many of the firm's buildings. Hillger moved to Auburn and established an office in 1898. In 1929, he joined with Wallace Beardsley to form the partnership of Hillger and Beardsley, today

known as Beardsley Design. After Hillger's death in 1935, Beardsley continued the practice. Beginning with the Auburn Senior High School in 1931, this firm has designed all of the existing school buildings in the AECSD.

Julius A. Schweinfurth designed two subsequently demolished schools for the Auburn district. Julius Adolphe Schweinfurth (1859-1931) was born in Auburn to German immigrants. After graduating from Auburn High School in 1872,^{xxi} he began working for the architectural firm of Peabody and Stearns in 1879, eventually becoming their chief designer. Meanwhile, he accepted independent commissions, until he opened a private practice in 1895.⁸⁷ His brother Charles was also an acclaimed architect, and they executed a few projects as partners. Several of Charles' and Julius' works are listed on the National Register of Historic Places. The schools Hillger, Beardsley, and Schweinfurth designed followed the architectural trends of their time. The Romanesque elements of the James Street School (1895), the Colonial Revival-style temple porticos of the Auburn Senior High School (1931), and the "low and long" modern layout of Casey Park Elementary (1964) all speak to the eras in which they were conceived.

James Street Elementary School was designed in 1895 by Schweinfurth and situated at the corner of James and Orchard Streets (Figure 23). The building was designed at an oblique angle. Stone quoins at the exterior corners contrasted against the brick façade, which was marked by a variety of elaborate techniques. Rounded arches sprung from two-story pilasters across the façade, creating strong vertical lines. The building's heating and ventilation systems, installed by Edward Joy of Syracuse, New York, were state of the art and kept all fourteen rooms, each having 12-foot-high ceilings, sufficiently warm. Room temperatures were set at 70 degrees and

^{xxi} At this period, the Academy building.

were maintained even with an outside temperature of 7 below zero Fahrenheit.⁸⁸ The cost of construction was \$40,000, equivalent to roughly \$1,169,807 today.⁸⁹



Fig. 23. James Street Elementary school shortly after completion, 1895. *Image courtesy of Bill Hecht's collection.*

An elementary school on Seymour Street was built in 1852 to serve the children of the north-west side of town.⁹⁰ The school was completely rebuilt in 1890 according to a design by Julius Schweinfurth. It resembled the wider symmetrical design of Garrow Street School, evocative of the period and presaged later local school designs such as the James Street School. A 1917 addition extended the building.⁹¹

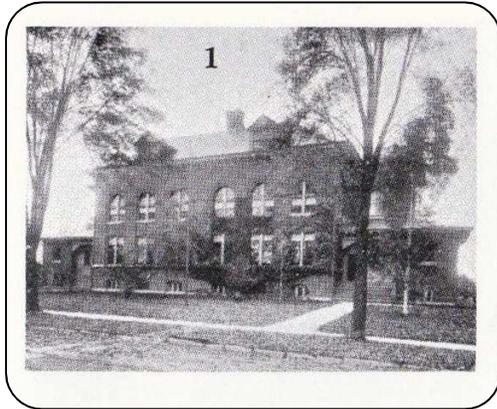


Fig. 24. The 1890 Seymour Street School. Courtesy of *An Educational Journey* ed. by Margaret Harrington (1970).

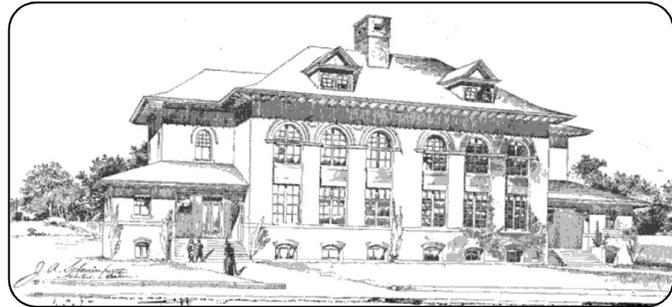


Fig. 25. Julius Schweinfurth's original rendering of Seymour Street Elementary (1890). Image from *The School Journal*, March 1896.

The second Fulton Street School building was replaced by a third in 1900. This edition of the Fulton Street school, designed by Samuel Hillger, shared some key features of other school buildings in Auburn. The building retained its distinctive bell tower, but also exhibited some of the incidental details found in contemporary Romanesque buildings; rounded-arch doorways, curved façade elements and rusticated, polychromatic stonework.



Fig. 26. Hillger's third Fulton Street school in 1907. Image courtesy of Cayuga Museum of History and Art.

From the late 19th to the mid-20th century there were a half-dozen smaller schools also functioning in Auburn. These structures were built to serve smaller populations in various neighborhoods. Their construction reflected a simpler and more functional design, with the exteriors often evocative of a small school house. Some of these smaller schools were established in the earliest period of Auburn's education history.⁹² Others struggled to maintain operation, like the Cornell Street school, which opened in 1885 and periodically closed due to poor facilities.⁹³ Most of these schools served the period between 1880 and the mid 20th century, when the Auburn school district expanded into the townships to its south and consolidated its facilities.



Fig. 27. Franklin Street Primary's form is illustrative of the smaller neighborhood schools. It opened 1878, closed 1941.⁹⁴ *Image courtesy of An Educational Journey ed. by Margaret Harrington (1970).*



Fig. 28. Evans Street School (opened 1884,⁹⁵ closed 1942 and occupied by the US Navy, razed in 1977).⁹⁶ *Image courtesy of An Educational Journey ed. by Margaret Harrington (1970).*

In 1911, two identical school buildings were constructed on opposite sides of Auburn, Lincoln Elementary school in the north side, and Seward Elementary in the south. Both were designed by Samuel Hillger.⁹⁷ Seward was slightly larger, having twelve classrooms to Lincoln's ten. They were finished in red brick and Indiana limestone, with slate roofs. Overall these two structures were plain, symmetrical, and rather understated. However, they did feature some of

the “collegiate gothic”^{xxii} elements seen in the addition to the academic high school, including bays of five grouped windows, rounded parapets, and especially the terra-cotta entrances. The interiors were finished with stained chestnut wainscoting. Lincoln school was closed in 1965 after the opening of Casey Park and Owasco Elementary schools. This building remained for some time however, serving a variety of community functions before being torn down in 1988. Seward School was closed in 1977 and razed in the same year.⁹⁸ Hillger’s twin elementary schools came during a period of reorganization of Auburn’s internal school districts. This year also saw the addition of the Central Grammar School to the Academic High School, while North Street and Grover Street Schools were razed and their students redistributed to the newly built facilities. The Parent-Teacher Associations of North and Grover Street schools petitioned the Board of Education to name their replacement schools Lincoln and Seward, respectively.⁹⁹



Fig. 29. Postcard showing Seward school c. 1912. *Image courtesy of Seymour Public Library.*

^{xxii} “Collegiate gothic” was a popular historicist reference to the earlier Gothic Revival style, used in high school and college designs around the turn of the twentieth century.

1930 marked the industrial and demographic high-water mark for Auburn, and the beginning of the city's peak years for growth in these areas.¹⁰⁰ Auburn was spared the worst aspects of the ensuing Great Depression due to the strength of the industrial production sector, but was not totally immune from the effects. As the PWA started funding projects in New York during the mid-1930s, Auburn's school board accepted federal funding for consolidation and reorganization. This resulted in the construction of the oldest building currently being used as an active school in AECSD is the Auburn Junior High School. Designed in 1931 the Hillger and Beardsley firm, it was first known as the Auburn Senior High School, serving 1,200 children enrolled in grades 10-12.¹⁰¹ The Academic High School was used as a Junior High School, for grade 7 to 9. The building construction preceded the newer, more modern designs popularized throughout Region One (the northeast) by the PWA's bond guideline incentives, and thus was considered a more "traditional" style.^{xxiii} This "traditional" style refers to a type of Colonial Revival popular through the first half of the 20th century for school and institutional buildings.



Fig. 30. Auburn Junior High School today. *Author's photograph.*

^{xxiii} See Chapter Two, pp. 28-29.

The school has a long symmetrical facade with entrances in classical temple-shaped porticos with gabled roofs and Roman Doric columns at the ends of the central block, with symmetrical classroom wings on either end. Between the porticos are a group of four two-story windows for the large interior space of the Emerson auditorium. The hipped roof features three dormers and a center cupola, popular features in this particular style of public architecture. The interior maintains much of the original design aside from the minimum upgrades to technology and infrastructure imposed by the Commissioner of Education and general wear and tear. Terrazzo flooring, glazed brick, and barrel-vaulted ceilings characterize the main hallways. The main lobby retains the historic chandeliers fixtures and large circular patterns in the terrazzo floor. The Emerson Auditorium retains the original seating and chandeliers, and still-functional floor mounted-ventilators. A sports stadium was built in 1936 to the north of the building. The New York City firm of Gavin Madden designed the concrete bleachers built into the slope of the land behind the school. According to the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), the building and the stadium “retain a high degree of architectural integrity.”¹⁰² By the 1940s, the Auburn City School district had constructed a trio of high schools, each delivering their own specialized secondary education training. The opening of Central High School and West High School necessitated a name change at Auburn Senior High School to East High School.¹⁰³ East High School was the “academic” high school, as opposed to the industrial- and business-oriented West and Central High Schools, respectively.

A classroom wing was added to the original building in 1977, converting the original L-shape into a square enclosing a courtyard area. In 2000, a small, adaptable multi-use wing was built adjacent to the gymnasium to provide additional physical education space. When the

regional Auburn High School was built in 1971, East High became East Middle School. Finally, with the closing of West Middle School in 2012, the building was renamed Auburn Junior High School, ironically taking on the role it originally gave to the Academic High School 80 years earlier.

Constructed during the same year as its “sister” school West, Central High School featured the same Art Deco-derived stylization of its exterior. It served as the business school for the Auburn district, and as such had none of the scientific or industrial spaces that West had. As with West High, 45% of \$415,500^{xxiv} cost was funded by the PWA.¹⁰⁴ It was built on the spot of the recently demolished Academy and Academic High School, and was connected to the 1911 addition to the previous buildings. Constructed of red brick and cinder block, the exterior featured square friezes that suggested it was a center of commercial learning. The former main entrance has a two-story glass block window over the three entryway doors. Terrazzo floors are punctuated by a section of colored slate off the main lobby.

West Middle School is the only property formerly or currently owned by the AECSD listed on the National Register of Historic Places. Built in 1938 and known as West High School, it is historically significant as the first PWA building in Auburn.^{xxv} With its central clock tower, Art Nouveau typeface numbers, flattened pyramidal roof, and limestone frieze work, Beardsley’s design is decidedly Art Deco. Aside from the architectural heritage of the building, its use as a National Defense School during World War II adds a second layer of significance to the structure. National Defense Schools were initiated in 1940 by the Roosevelt administration to

^{xxiv} \$7,196,178.99 in 2017.

^{xxv} West was also the first school in Auburn designed by the Beardsley firm after Samuel Hillger’s death in 1935, and is drastically different from the Senior High School building erected just 4 years before.

provide training to men in wartime industry. These types of schools offered technical training in aspects of aviation, machine operation, fabrication, and amphibious vehicle repair. Auburn's West High School was one of the largest such defense schools in New York State.¹⁰⁵

A major blow to the economic life of Auburn came in 1950 when, citing years of labor unrest, the International Harvester plant closed and moved its operations to Tennessee. This loss reverberated through the community. Residents began moving out to the nearby townships - the highest number to Fleming and Owasco, which are respectively situated along the east and west shores of Owasco Lake. Suddenly economic development became of paramount importance to the city, and groups such as the Auburn Chamber of Commerce began publishing editorials calling for the formation of a community board to answer the question, "Why is it that some communities seem to progress while others stand still or slip backwards?"¹⁰⁶ Shortly after this, a group known as the Auburn Area Citizen's Committee (AACC) was formed to answer the question. Among the reports produced by the group was a survey of the district that cited unsatisfactory conditions of school buildings, and inequality of standards across the district.¹⁰⁷

The AACC report was the first in a series of influential mid-century plans produced by the community, Cornell University, and Cayuga County. These reports all commented on the future of Auburn's educational facilities with remarkable accuracy, and resulted in a district planning and expansion program that was to span nearly 20 years, culminating in the construction of the Auburn High School. For example, the 1957 Cornell Department of City and Regional Planning report remarked that the "period 1958 to 1970 may then be spent in replacement of obsolete facilities and a more convenient distribution of school buildings," and that the movement of population to the south would necessitate the building of an high school outside of the city, which was "more feasible in the long run."¹⁰⁸ True to the plan, the period

stated in this passage saw the closing of old neighborhood schools in favor of newly constructed ones, culminating with Auburn High School in 1970.

During this post-war period Auburn's school system underwent a series of reorganizations. In 1953 a local ordinance was passed by the City of Auburn to allow the district to expand educational services into the nearby communities and hire its own tax collector.¹⁰⁹ A measure in 1957 created the Auburn Enlarged City School District, so named because the district had enlarged beyond the corporate boundaries of the city. The ordinance also issued a bond for the construction of a new elementary school outside of the city in Owasco and took over the responsibilities of rural bussing.¹¹⁰ As the district became more involved in transportation, the concept of walkability and neighborhood schools lost importance in planning. The buildings constructed during this period reflected the design ideas espoused by the national School Facilities Survey of the early 1950s, as illustrated by the "low-and-long" design of Casey Park and Owasco Elementary Schools.

James Street school was closed in 1953 during the aforementioned period of reorganization and consolidation of Auburn's school district and was converted into the first campus of the Auburn Community College.¹¹¹ In 1959 the voters of the Auburn school district approved a \$1.6 million bond issue to build a new community college campus on Franklin Street, largely under the pretense that the college would offer less expensive higher education to the area students, and would become a major employer. This event is remarkable in that it is the first time in New York State that a school district sponsored the building of a State University of New York building.¹¹² James Street School served a variety of community functions. Known as the Cayuga County Annex, the building became a public meeting place, municipal storage, and a

voting station. It was demolished in 1974 and the parcel used by the United States Post Office to serve as a parking lot.

Seymour Elementary was closed in 1964 along with Lincoln and Division Street Elementary Schools. The students served by these neighborhood schools were reassigned to Casey Park and Owasco. Here was a clear example of the local impact of the “size correction” funding stream set forth by the Diefendorf Commission, as the district exchanged three historic buildings (two of them designed by architects of some acclaim) for two new ones.

In 1969 the Cayuga County Planning Department published a ten-volume Master Plan, which included a section on schools. The enrollment in Auburn’s school district had grown by 1,500 students since the 1957 Cornell report, and future enrollment was projected to continue to grow with the decline in parochial enrollment and the growing population of the suburban areas of Fleming and Owasco.¹¹³ This plan, funded by the United State Department of Housing and Urban Development and New York State’s Urban Planning Assistance program, also recommended the building of the present arterial to “separate through and local traffic.”¹¹⁴ The planners did not perceive that the region was at the end of its 1930-1960 population and industrial peak. Regardless, plans to bisect the city with an arterial highway should have given them pause in light of the well-known effects of urban renewal seen across the country by that point. Had they been more circumspect, they might have considered the impact of their renewal and highway plans. Nevertheless, the arterial highway of New York State routes 5 & 20 was built bisecting Garden street, mere feet from Central High, and a new high school on Lake Avenue was built.

Fulton Street school was closed in 1970 when its students were moved to Genesee and Thornton Avenue Schools.¹¹⁵ It served as the storage facility for the Auburn School District’s

maintenance department, and was used by the Auburn Children’s Theater for several years. The structure was demolished in July 1988. A cornerstone with the dates of the three generations of the Fulton Street school was saved and incorporated in into the new building currently occupying the spot at 13 North Fulton Street (see Figures 31 & 32).¹¹⁶



Fig. 31 & 32. South and eastern views of the cornerstone from the Fulton Street schools. Currently incorporated into 13 North Fulton Street. *Author’s photographs.*

The current elementary schools operating in the district were all built in the 20 years following World War Two. They reflect a transition to the functional “low and long” modern school plan set forth by the federal publications of the 1950s. The elementary schools currently serving the district include:



Fig. 33. Herman Avenue Elementary, built in 1948. Currently the only district elementary school considered eligible for historic designation by NYOPRHP. *Image courtesy of Google Earth.*



Fig. 34. Genesee Elementary, built in 1950. *Image courtesy of Google Earth.*



Fig. 35. William H. Seward Elementary, built in 1955 as a parochial middle school. The building was purchased in 1972 with funds made available by the Commissioner.¹¹⁷ It was converted to an elementary facility and opened in 1977.¹¹⁸ *Image courtesy of Google Earth.*



Fig. 36. Casey Park Elementary, built in 1964. *Image courtesy of Google Earth.*



Fig. 37. Owasco Elementary, built in 1964. *Image courtesy of Google Earth.*



Fig. 38. Thornton Avenue School, built in 1963, was closed 4 years later. The school was renamed the Auburn Enlarged City School District Harriet Tubman Administration Building in 2003. *Authors photograph.*

Central High School operated until 1970, when an arterial highway was constructed just outside of its main entrance. The school was mothballed for 6 years after its closing, and was sold to the Auburn Industrial Development Agency.¹¹⁹ For the next decade it served as a partially rented space for artists, small businesses, and even an Alcoholics Anonymous clubhouse. During the 1990s it was largely abandoned. In 1999, Central Building, LLC acquired the property and began renovating the structure the following year.¹²⁰ Consulting architects Sam Cichello and Charles Sharp designed the common interior spaces to highlight historic features.¹²¹ The front entrance, which had faced the rear parking lot of a Holiday Inn for years, was abandoned and the

entrance moved to the corridor that formerly connected Central to the Academic High School addition. The development corporation decided to forego the designation as an historic property, this gave it greater flexibility with certain treatments.

Despite the freedom from designation protections, as natives of Auburn, the developers were sensitive to the school's history. Interesting rehabilitation techniques were applied to preserve the most important character-defining features. Over the years the various glass-block windows had been damaged. With some windows being removed and in-filled, the leftover intact blocks were used to rebuild the main entrance's glass block façade. Windows were replaced with modern, "hurricane" windows with false mullions that recreated the original 12 over 12 panes. Lockers were removed, allowing the interior floor layout to be altered to a greater extent. Given the superstructure of steel and concrete, the developer was able to add a third level to the building and introduce 17,000 more square feet of floor space.¹²²



Fig. 39. Central High School main entrance c. 1940. *Image courtesy of An Educational Journey ed. by Margaret Harrington (1970).*



Fig. 40. Central High side entrance today. *Author's photograph.*

Central High School's renovation did not use historic tax credits, but the amount of floor space and central location made the building attractive to its locally based purchasing group, Central Building, LLC. The building was purchased at \$0.42 per square foot for \$140,000. The

addition of the third floor and the basic remediation work cost \$4,000,000. With a total of 77,000 square feet of rental space available to medical and dental practices, the LLC was able to recuperate the initial investment in about 10 years.^{xxvi}

The path leading to the single regional high-school model was long and controversial. The projections on population movement and growth portrayed in the pages of the Cornell plan and the advent of the BOCES system, which eliminated the need for a technical high school, provided the rationale for the last reorganization of the district prior to the closing of West Middle in 2011. Regardless of the organizational needs of the time, the public was not sold on the idea immediately and had trouble coming together for the first time to support education of all the city's children in one place. Three times bonds issues were defeated by a public vote in 1966.¹²³ The inclusion of an Olympic size swimming pool was a sticking point for the community. The local newspaper recommended forming a "Committee of 1,000" to sort out all the disparate wants and needs of the school district constituents.¹²⁴

The high school was finally built in 1970-1971 by the Beardsley Architecture firm. The cost was \$4,905,000.^{xxvii} With federal planning guidelines from the 1950s still in force, a low and wide floor plan was constructed, with large windows and plenty of recreational space facilitated by a 52-acre site selected in Fleming, just outside the city limits of Auburn. The high school proved to be a costly addition to the district however, as the district budget grew nearly 12% the year the high school opened, from \$7.71 million to \$9.38 million. The city of Auburn annexed the property of Auburn High School from Fleming in 1981.

^{xxvi} \$12-18 per square foot in rent @ 60-80% occupancy.

^{xxvii} \$30,800,972.98 in 2016.



Fig. 41. Auburn High School main entrance. *Image courtesy of Google Earth (2016).*

Along with ballooning school budgets, local population loss intensified after the construction of Auburn High School. During the 1980s and 1990s the rate of enrollment decreases peaked along with the overall loss of population in the city. As the local contribution increased to support more staff and more complex facilities, the shrinking tax base was stressed. Consequently, the Board of Education went through a contentious period spanning nearly 25 years. The rise of political advocacy groups such as Citizens Against Soaring Taxes (COST) who elected members to the Board of Education in order to reduce expenditures coincided with lively debates about school closings, property divestment, and staff reductions. As population loss has slowed and enrollment remains relatively stable, political action at the board level has decreased, and school board seats have not been contested in 4 out of the past 5 years.

West High School was closed in 2011 due to large cuts in state education funding and declining enrollment.¹²⁵ It maintains a high level of integrity inside and out, including original classroom layouts and cabinetry. A five-year capital project was completed as part of the \$1,507,548 in building aid to the district that year.¹²⁶ The National Register nomination process

was initiated by Two Plus Four Companies of Syracuse, NY, a development, construction, and property management firm that purchased the school in January of 2017 for \$1,060,000.¹²⁷ The building was costing the school district nearly \$95,000 a year to maintain closed, leaving hundreds of thousands of dollars in building aid used in the previous five-year project to languish. Two Plus Four is converting the building into a moderate income housing development with the Unity House of Auburn as an anchor tenant.^{xxviii} This places the building back on the tax rolls of the city and continues the precedent set by its sister school, Central High.



Fig. 42. West High School today. *Author's photograph.*

^{xxviii} Unity House is a non-profit agency that offers services to those diagnosed with mental illness or developmental disabilities.



Fig. 43. Terrazzo map of Cayuga County located in the main lobby. *Author's photograph.*



Fig. 44. Original cabinetry in a science classroom. The lab tables were replaced with the last five-year project. *Author's photograph.*



Fig. 45. Lockers in the principal public spaces and corridors are among the interior features required to be preserved in historic school rehabilitation. *Author's photograph.*

The Auburn Enlarged City School District has grown from a collection of small, crude log schoolhouses into a complex quasi-autonomous extension of the modern state of New York. Shortly after the founding of the settlement in 1793 the city leaders joined together to create educational opportunities for the children of the city. The influx of New England philosophies on education took the lead and left an indelible mark on the built environment of the city. As the city population and availability of state funding grew, Auburn's school buildings increased in

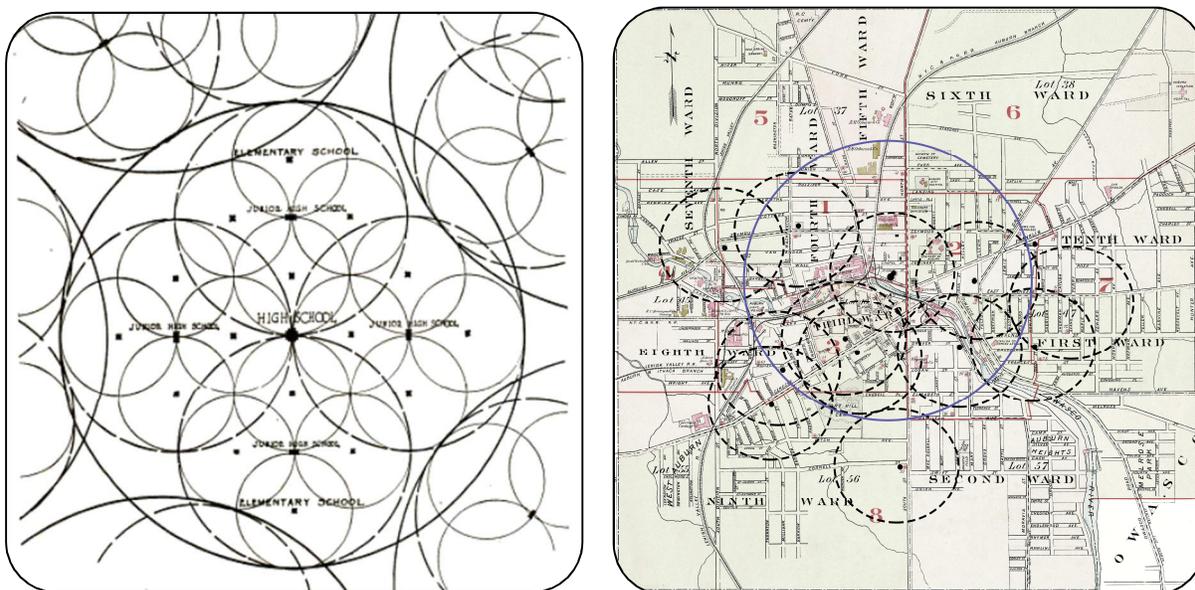
number and kept pace with contemporary school architecture. Auburn was one of the first school boards to form and racially integrate in New York State and by the mid 20th century it offered a diversified curriculum of skill training to the enrolled population and sponsored the local community college.

The last three decades of the twentieth century saw the highest rates of population loss from the city. Census data shows that in the last five years the rate of decline has gone down.¹²⁸ In 2016, Auburn's population was approximately 27,370. Data from the American Community Survey reflects some national trends at the level of census tracts. While Auburn has been in population decline for decades, the county has only recently begun to shrink. The loss has been gradual, less than 1,000 people in the last 15 years. According to the US Census, four Cayuga county tracts actually gained in population since 2000, although the county suffered a net loss overall.

The school district's range of courses was narrowed with the creation of the Cayuga-Onondaga BOCES system. The enlargement of the district simultaneously increased enrollment and created a system of bus transportation that catalyzed the closing of the walkable neighborhood schools. A period of urban renewal that culminated with the introduction of an arterial highway through the city center destroyed the favorable location always enjoyed by the "Academy Green." A new high school building built on the outskirts of town marked the end of a centrally based school system. As the 21st century opened, the AECSD was under mounting financial stress due to a shrinking enrollment and tax base, a burdensome transportation system, a variety of debt service owed on bonds for renovation work done at schools, some of which may have not been necessary had proper maintenance funding been earmarked by the state. The district remains a powerful force in the community as the county's fourth largest employer,

behind the hospital and two state prisons.^{xxix} It is the second-largest employer in the city of Auburn itself.

In Auburn, as in most communities, local school districts arose according to geography, with schools centered in the midst of fledgling neighborhoods. In the mid-nineteenth century all of the public schools consolidated into a single district, and the decision was made to rename all of the district schools by street.¹²⁹ During the period between 1850 to 1900, Auburn's school district growth tended to align with zone planning ideals of the time (see Figure 46).^{xxx} In the second and third quarters of the twentieth century, the consolidation of schools and district bussing encouraged the abandonment of this scheme. Figures 47 through 49 illustrate the changing arrangement of schools in the city of Auburn over the course of a century. Elementary schools and half-mile walking zones are shown in black dotted lines, Auburn Academic High school with a one mile walking zone is shown with a blue solid line.



^{xxix} Auburn Correctional Facility and Cayuga Correctional Facility, located in Auburn and Moravia, respectively.

^{xxx} Described in Chapter 1, pages 27 and 28.

Fig 46. Zone planning of the early 20th century. From John Donovan's *School Architecture* (1921).

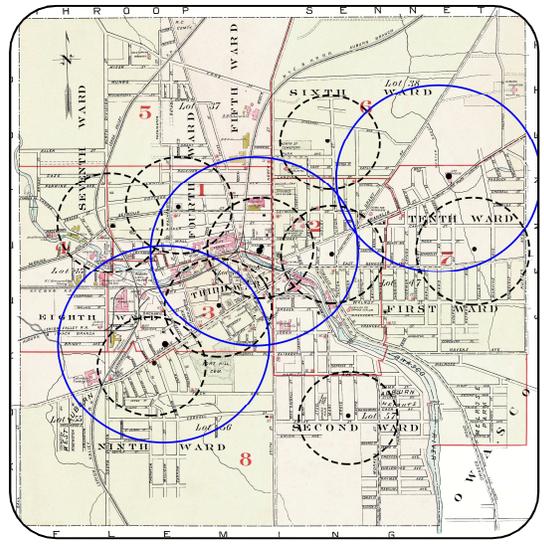


Fig. 47. Auburn school locations in 1900. *Author's map.*

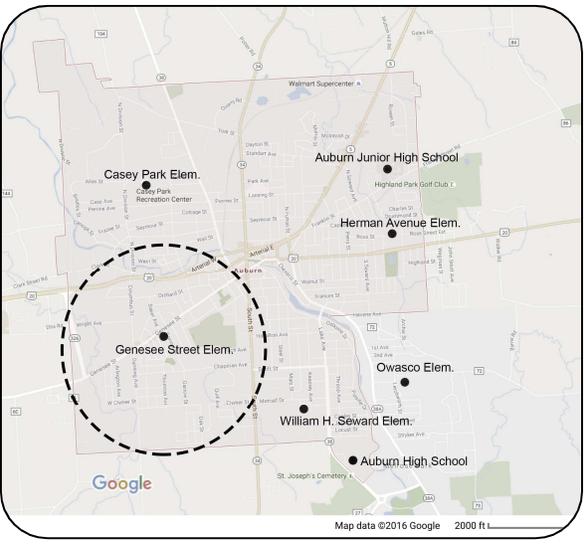


Fig. 48. Auburn school locations in 1950. *Author's Map.*

Fig. 49. 2017. Auburn school locations in 2017. *Author's Map.*

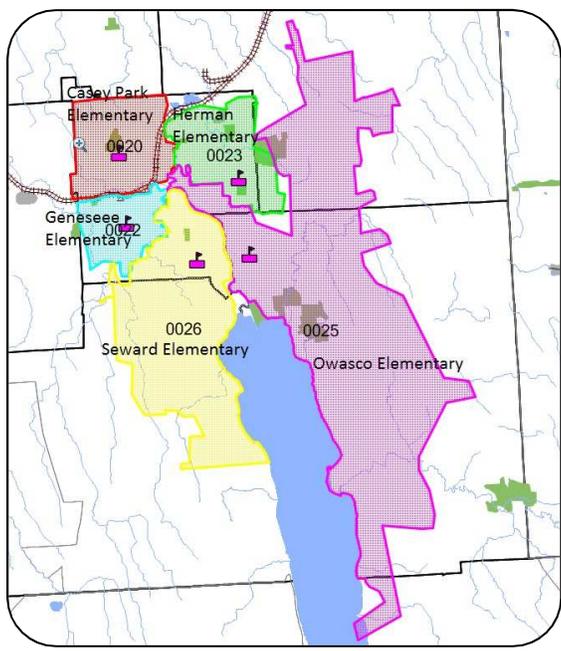


Figure 50. Current elementary sub-district boundaries. Irregular shape reflects only tax-paying parcels. *Map courtesy of AECSD (2017).*

While an official policy of racial integration was passed in its earliest period, de facto segregation along neighborhood lines has remained among the elementary schools. The elementary sub-districts (Fig. 50) are drawn in rough alignment with census districts in such a way that analysis of the racial and economic makeup of each school is relatively clear. In Figures 51 and 52, we can see the school locations within census tract that fall inside AECSD's boundaries. Data illustrates how socio-economic and racial groups are distributed among the district's schools. Overall, the maps show that the students who identify as non-white and who live in single-parent households align with the economic indicators of poverty. AECSD seems to have inadvertently arrived at a point of geographically-based segregation. In both figures, the large red circle in the top right quadrant is Auburn Junior High School, directly below it is Herman Elementary School. AJHS serves the entire district, rather than the local sub-district, which explains the large difference in racial and economic data. The southernmost red circle on the maps is Auburn High School. The data for this building is offset by the relatively high rate of drop-outs among the socio-economic and racial minority groups and a drop-off in reporting of data.

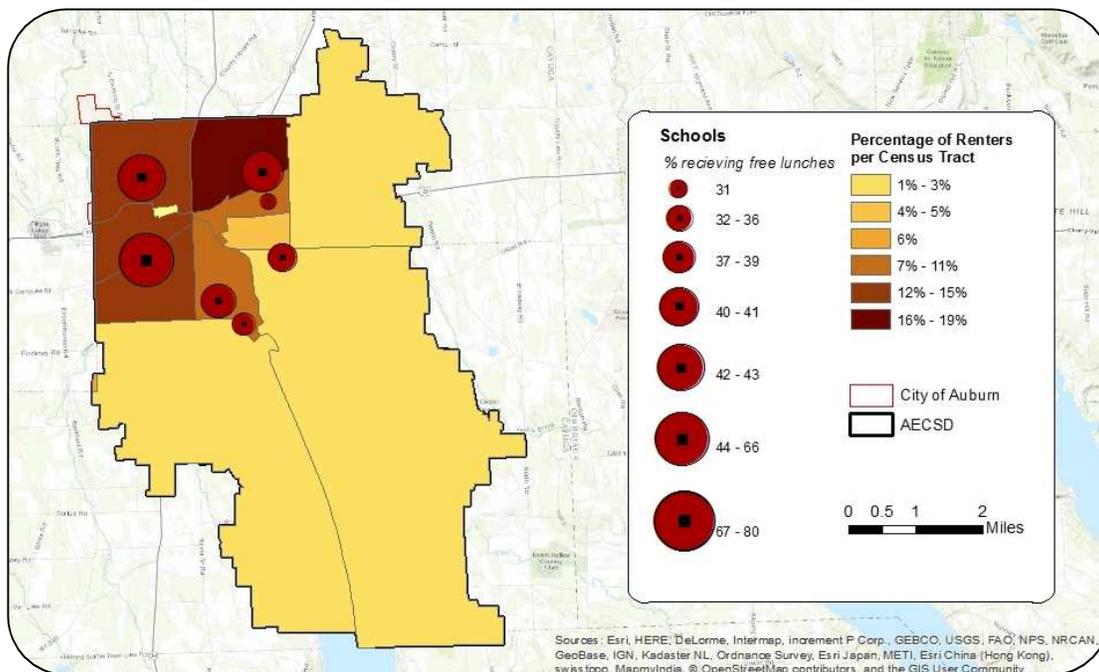


Figure 51. Economic indicators by census tract inside of AESCD. *Author's map.*

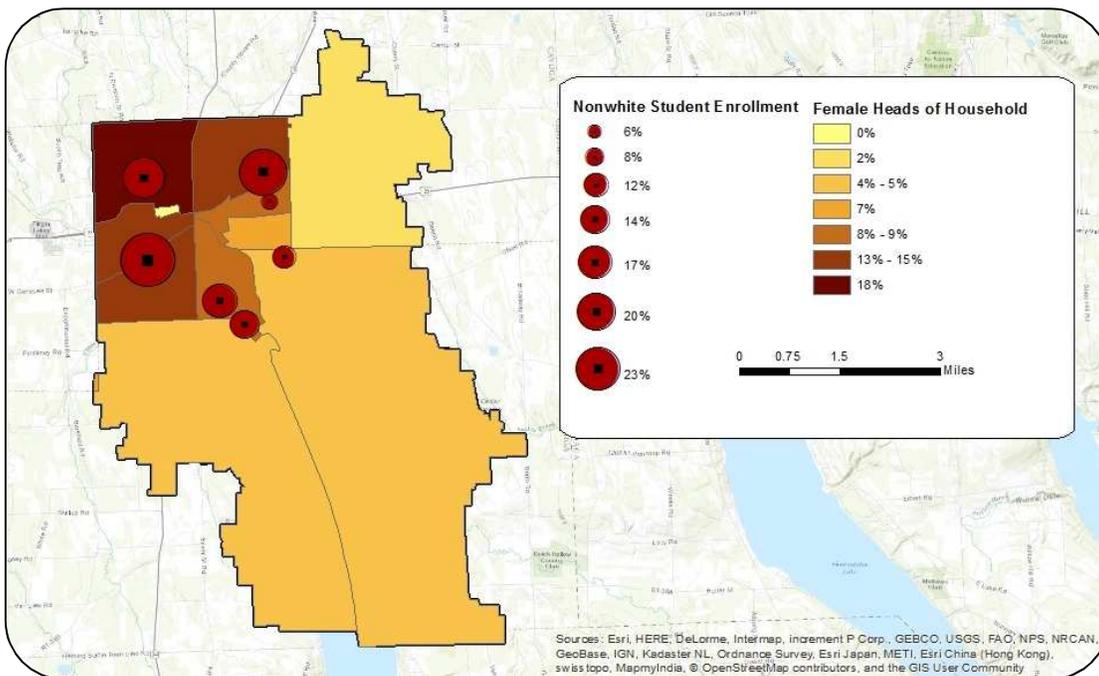


Figure 52. Economic indicators by census tract inside of AESCD, Map 2. *Author's map.*

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CHAPTER THREE
CURRENT OBSTACLES FOR
PUBLIC SCHOOL PRESERVATION

In this chapter, several aggregate reports illustrating the lack of quantitative information supporting the abandonment of an older building and new construction will be reviewed, the costs associated with maintenance and technology upgrades will be surveyed, followed by a discussion of some of the legal obstacles for the preservation of schools in New York. The following analysis of data illustrates that it cannot be empirically proven that the age of a school is the cause of poor outcomes any more than it is that a new school is the cause of good outcomes. Several studies indicate that the quality of school facilities has a measurable impact on academic outcomes, irrespective of building age. Furthermore, some studies have shown that the link between school architecture and student achievement diverges at the point when preference for technology and equipment-driven design is given preference over pedagogy. It appears, unsurprisingly, that the final factor in student achievement is the teacher. In many reports it is explicitly stated that several factors effect learning outcomes and therefore the data should be viewed cautiously and carefully. In light of the inextricable combination of factors governing educational outcomes, it is important not to assign a *positive* or *negative* value on the age of a school building. The age of a school building cannot be shown to have any sort of negative effect on education regardless of the presence of accompanying factors associated with poor performance. A school properly cared for and preserved can serve today's students just as well as a new building.

There are factors that generally accompany an older school building that can weigh data towards poor outcomes. Older schools tend to be found in lower-income or economically stagnant areas. These schools invest less in their facilities and instructors, and consequently have poor results, whereas the areas with enough capital to construct a new building are more likely to also furnish the capital to pay higher teacher salaries and provide other important social structures for children, in turn producing better academic achievement. The connection between building age and a low-income district is, of course, not universal. In some cases, districts have invested heavily in the maintenance and upkeep of their culturally significant schools, while maintaining high standards of achievement, while in other areas new schools have been built in poor areas without producing any measured achievement in student performance. It is thus *quality* of the economic and social environment that can best be shown to have an effect on learning.

In the New York State government literature on school facilities, the phrase “life expectancy” or “lifespan” is used in relation to renovation projects and the use of construction funds. The definition of “lifespan” of a school according to New York State has varied over the years, driven as it was by the availability of state funds for new projects and products. In a 1975 issue of the *School Facilities and Planning News*, published by the State Education Department, the average life span of a school building is a mere 30 years old. This number is arrived at by the building’s “ability to bond,” and therefore “its usefulness.” It goes on to say however, that this is not necessarily a hard and fast rule, as “the age of a building, of itself, does not determine its ability to house an educational program.”¹³⁰ In a 1989 edition of the *School Executive’s Bulletin*, the average age of a school building outside of New York City is given as 33 years old, while no life expectancy is provided. This number arose from a study conducted by the firm of Wank

Adams Slavin Associates (WASA)^{xxxii} in support of NYSED’s Capitol Asset Preservation Program (CAPP), a measure mandating five-year building conditions surveys. The CAPP was meant to “assess the need for routine maintenance, repairs, minor alterations and operational improvements in order to safeguard and promote the health, safety, and welfare of the pupils and staff.”¹³¹ In a 1996 audit by the State Comptroller, the average age of a school building was 38 years, while it was estimated that districts should replace schools every 80 to 100 years, implying that this is the effective lifespan.¹³² The reasons for the wide differences across the descriptions of building age are not clear, but could be attributed to the financial worries of the state. In the 1996 comptroller’s audit, for example, concern is expressed that building aid had doubled since the 1988-89 school year, while there were over 200 fewer projects.¹³³ Clearly, the types of projects and the nature of labor and construction had an effect on these figures. They are nevertheless followed up by discussion about the possibility that older buildings are to blame for higher building aid requests, but this is never proven. Currently, NYSED defines life span in terms of “blended maximum useful life,” which is tied to the amortization schedule of the bond, which is 30 years for a new project, and 20 for additions, reconstruction, and alterations.¹³⁴ Implicit in this financing structure is the notion that once the bond is repaid, with interest of course, the so-called life span of the project is over.

Each school district in the state of New York is required to produce an annual “School Comprehensive Education Plan (SCEP).” The SCEP reporting system was initiated in 2007 as part of the Elementary and Secondary Education Act, a federal law requiring states to set aside 7% of their Title I funds to help low-performing schools improve. The funds dispersed relative to

^{xxxii} WASA, an architecture and engineering company, was the successor firm to Reed and Stern, founded in 1889 and credited with the design of Grand Central Terminal. WASA filed for bankruptcy in 2015, due to multiple lawsuits against the firm.

this measure must be supported by “evidence-based” interventions. Consequently, the SCEP is used by the district to track progress in under-performing schools and report to the US Department of Education. In so doing, the SCEP provides a variety of aspects of building information with a view to improve student achievement under the pretense that districts can allocate attention and resources more accurately. The plans provide mostly socio-economic information, but each document begins with a “report card,” or quick reference page of information at the beginning.

In Auburn, the ages of the schools do not have a relationship with student achievement detailed on the SCEP “report cards.” The elementary district lines do not follow the census tract boundaries, but there is enough overlap to provide some examples of the lack of a relationship between school age and localized poverty, as seen in the chart below.

| School Building | Building Age in years | % students eligible for free lunch | % non-white students (incl. multiracial) | NYS Math Assessment Score | NYS ELA Assessment Score | Most recent 5 year project cost (with interest) |
|---------------------------|-----------------------|------------------------------------|--|---------------------------|--------------------------|---|
| Casey Park | 54 | 66 | 24 | 25 | 12 | \$1,251,123 |
| Genesee Street | 67 | 80 | 34 | 23 | 7 | \$1,659,459 |
| Owasco | 59 | 39 | 12 | 42 | 20 | \$1,401,298 |
| Herman Avenue | 69 | 31 | 12 | 32 | 12 | \$747,223 |
| William H. Seward | 61 | 41 | 20 | 30 | 29 | \$3,271,818 |
| Auburn Junior High School | 85 | 43 | 20 | 33 | 21 | \$3,741,068 |

| | | | | | | |
|-------------------------------|----|----|----|----|----|-------------|
| Auburn High School | 47 | 36 | 17 | 54 | 74 | \$6,880,887 |
| Thornton Ave. Admin. building | 54 | - | - | - | - | \$372,605 |
| Holland Stadium | 81 | - | - | - | - | \$189,519 |

Fig. 53. Chart of building age relative to socio-economic factors and capital outlay for five-year projects. Based on School Comprehensive Education Plans found on websites and reported state aid disbursements for each building (2017).

This data shows that Auburn's schools clearly defy the assumption that newer is better. The relationship between the economic strength of the various census tracts and student achievement is much more influential. When expressed in visual terms in a line graph, the relationship between building age, socio-economics, and student achievement are illustrated even more clearly.

In the bar graph "Building Age relative to the cost of five-year projects", (Figure 54) shown above, the amount of state and local funding on school facilities is marked along the Y axis and building age is marked along the X axis. The buildings get more recent as one reads from left to right. What the chart illustrates is a lack of correlation between the age of a building and the amount of capital expended on each. In fact, the chart would seem to indicate that, overall, the more recently built schools tend to require more capital outlay, as evidenced in the 12% budget increase the year following the building of Auburn High School.^{xxxii} There are several additional factors to take into account, however. The small amount of independent variables (7) on the Y axis does not provide other pertinent information. For example, Auburn

^{xxxii} See p. 86.

Junior High and High School have larger enrollments and staff. This is reflected in the higher amounts of capital funding attributed to each. If capital project funding is related to enrollment size in Auburn, it is logical that the high school requires twice the amount of money for its capital project since it has double the enrollment of the junior high. This seems to be the case here.

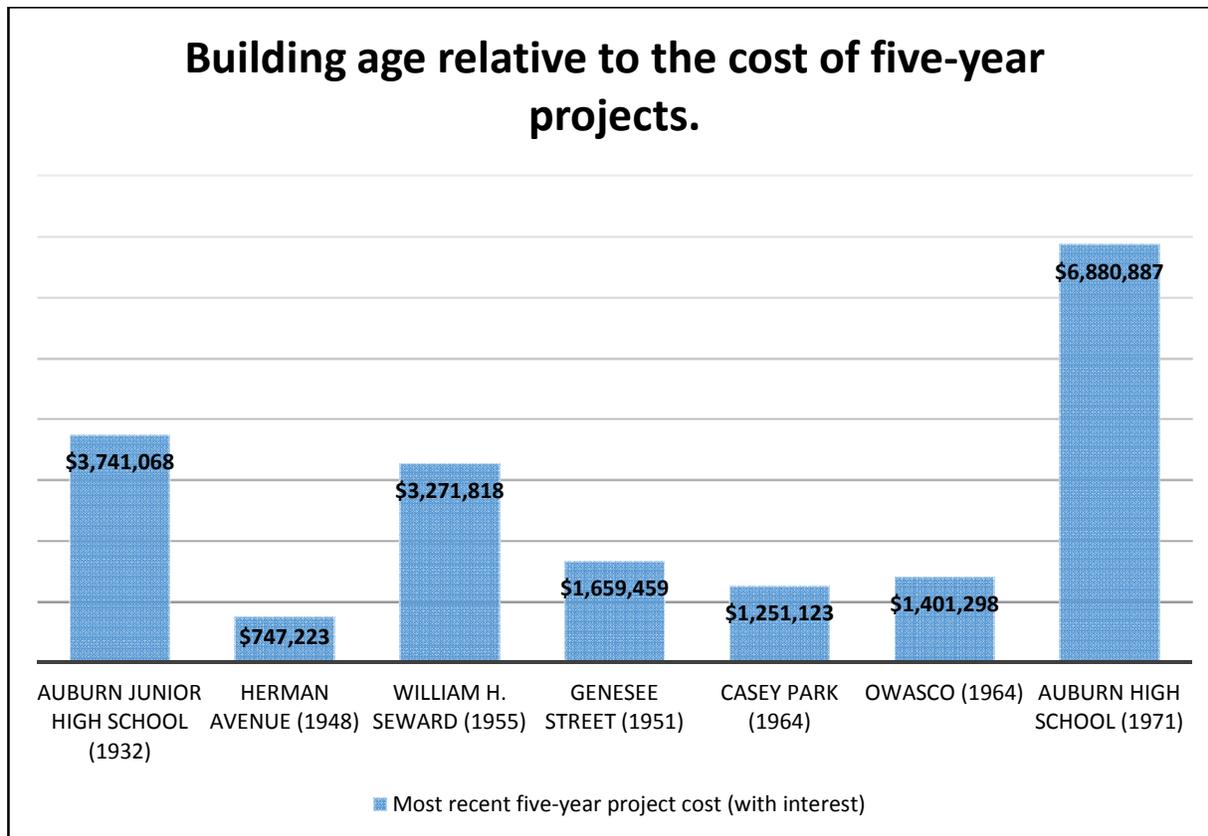


Fig. 54. Chart of building age relative to the cost of five-year projects. Based on School Comprehensive Education Plans reported state aid disbursements for each building (2017).

It may be helpful to the investigation to remove the junior high and high schools from the analysis and look at the five elementary schools. This group of buildings have similar enrollments and staff, but vary in age, design, and socio-economic settings.

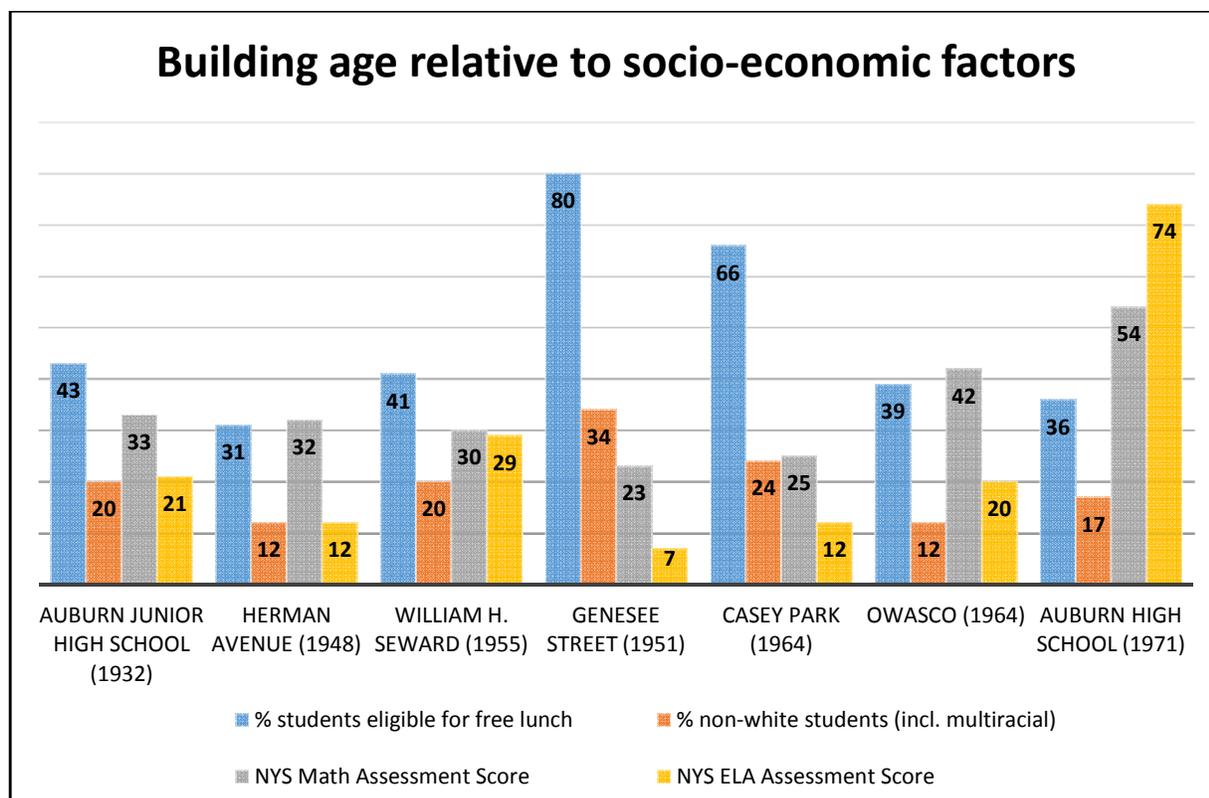


Fig. 55. Chart of building age relative to socio-economic factors. Based on School Comprehensive Education Plans found on websites (2017).

As with the previous chart (Figure 54), the chart of building age relative to socio-economic factors (Figure 55) illustrates another lack of correlation. This chart shows us a mixed bag when it comes to student achievement, measured by the percentage of students who passed the New York State Math and English Language Arts (ELA) Assessment tests taken between grades three and eight in 2015. Clearly there is no correlation to the age of a building and student achievement or socio-economic status. There are some evident correlations between socio-economics and student achievement, and there is a galaxy of activism and research regarding that particular issue. The conclusion relevant to this thesis is that building age has no demonstrative relationship to the cost of capital projects, socio-economics, or student achievement.

Data collected in other areas of the United States further reinforces this understanding. In Tennessee a period of litigation during the 1990s resulted in the dramatic reformulation of the

capital outlay for public schools. By the turn of the 21st century, officials in Tennessee were still faced with the figure of \$1.5 billion to properly upgrade all of its existing school facilities.¹³⁵ In 2003 the Tennessee Advisory Commission on Intergovernmental Relations produced a study of aggregated data to underscore the importance of the built environment on education outcomes, in order to provide guidance to the Tennessee state government in its allocation of resources. The study consolidated and simplified previous studies. It points out that decades of data show the most influential factors in student's ability to succeed were those outside of the control of educators: income, race, education, and/or occupation of the parent or guardian. It posits that because such social factors are beyond the control of the school, it is worth studying how best to spend money on facilities.

The Tennessee study reviewed 238 studies and 21 professional papers conducted in the 1970s and 80s regarding the effect of on school facilities on student achievement. It found that as age decreased, scores increased.¹³⁶ This may seem to prove the opposite point of this thesis. Yet there are several other parallel and contradictory conclusions which add depth. In the end, the study also found that as the condition of a facility improved, so did student scores. The difference between condition and age must be accounted for in order to truly understand if building age is a factor in student achievement, and subsequently, if historic schools are worth maintaining as schools. To their credit, the study authors do take time to point out the flaws in their method by citing examples of contradictory findings and by discussing the difficult job of defining the elusive relationship between building condition and age relative to student achievement. In several large-scale studies, researchers found that building design and condition did not have effects on learning outcomes, while in others it was shown to be paramount.

A monumental, nation-wide study by the Educational Testing Service in Princeton, New Jersey in 1997 found that there was no link between student outcomes and capital spending itself. The study concluded that “equalizing resources without earmarking them for investments most conducive to increased achievements might result in more money being spent, but without producing the desired results, and policymakers should apply resources to inputs that do raise achievement,” such as teacher-student ratios and district administration, which were shown to raise test scores.¹³⁷ A study conducted in Milwaukee, Wisconsin showed the opposite, that building expenditures are the most influential factor on student achievement.¹³⁸ By reviewing the specific effects on teaching imposed on educators by the built environment, the Wisconsin researchers were able to arrive at conditional factors that were physical but not related to age. The study’s final conclusion was that new and renovated facilities were the best investment for the state in terms of exerting what control it could over education outcomes. Improving teacher salaries was not discussed.

In 2014, the United State Department of Education released a report entitled *Condition of America’s Public School Facilities: 2012–13*. This contained the latest set of data available on the subject. While it includes the year of construction in its data sets, it goes a step further and qualifies that data with the year of the last major renovation. The school age is thereby “weighted” in light of improvements. The data is based on a survey sent to 1,800 schools in all 50 states and Washington, D.C. The response rate was near 90%. According to this report, the average “true” age, that is the age of initial construction of the main educational building, was 44 years. The average “functional age,” that is the age based on the year of the last major renovation, was 19.¹³⁹ The total amount necessary to bring all existing schools into good condition was \$197 billion. America’s oldest schools by average, both in true and functional age,

are located in the northeast. For this region, the average number of years since the initial construction of the main building is 54 years while functional age is 22 years. This number spans across all enrollment levels, from urban to rural.

Districts with less than six percent minorities have buildings that are, on average, 50 years old, while those with over 50% minority enrollment are five years younger. This segment also has the buildings with the highest functional age at 20 years. Nationwide, race does not seem to correlate to older buildings. Districts with a higher percentage of students receiving free and reduced lunch, a typical measuring tool for local poverty, have the oldest school buildings of this segment, at 48 years on average, with a functional age of 20. While poverty seems to align more closely than race when it comes to average building age, in both cases the highest and lowest percentages of each segment are only separated by a range of a few years in building age.¹⁴⁰

These studies show us the difficulty of tracking how school building age relates to student achievement, due to the variety of associated factors. While in some cases socio-economic factors may display a strong correlation to building age, nationwide and regionally it doesn't seem to be the case. In the case of small city school districts such as Auburn, New York, the correlation does not hold up. The correlation between building age and student performance is also not strong or consistent enough to be considered a causation. It would be a difficult task to determine whether the lack of student success in any district is due to a poor school facility, lack of family support or stability, proper nutrition, or any number of variables. The problem lies with their frequent, but not consistent, correlation to one another. As a result of this, building age is often conflated with building condition, and an assumption forms that blurs the boundaries between the two concepts. To those without the proper experience and insight, many poor quality

buildings are old, and therefore they conclude that all old buildings are poor. Leaving aside matters of personal taste and the consideration of “oldness” as a poor condition in itself, there is no logical basis supported by any existing data that can prove student achievement is related to a school’s age.

Furthermore, the opposite may be true. Education theory has lately focused on the advantages that individualized instruction gives students. Districts boast of small class sizes as a testament to the quality of the education provided in their buildings. Yet, parallel to this, two generations of district consolidation and school building expansion funded by the state and encouraged by the school construction industry has created a profusion of campus-style structures incapable of delivering the individualized instruction possible in the historic neighborhood schools. The national data shows that the oldest buildings exist in the districts with the smallest enrollments, those of under 300 students. In fact, according to the data, one might assume safely that the larger the number of students enrolled, the younger the building is likely to be.¹⁴¹

The cost of maintenance is an important factor in understanding the function and status of school facilities, and is particularly germane to the care of historic schools. In 2009, Johanna Duncan-Poitier, the serving Senior Deputy Commissioner of Education P-16 for the NYSED, issued a memorandum outlining the need for “Green Design, High Performance School Buildings” which provides some insight into the state-level thinking. Duncan-Poitiers clearly writes with the implication that only newly built schools can be “green, high performance” facilities, but in doing so makes a few key points that are pertinent to the preservation of historic school buildings. In this memo, Duncan-Poitiers linked so-called high performance facilities to lower maintenance and operating costs, decreased energy usage, less impact on the environment,

and greater productivity and achievement.¹⁴² She even contends that such facilities will reduce absenteeism. While Duncan-Poiters does not claim in her memo how reduced absenteeism can be achieved with such buildings, a 2005 study entitled “The Impact of School Building Conditions on Student Absenteeism in Upstate New York” reviewed 2751 schools serving over 1.6 million students and found that absenteeism was associated with schools with a number of “mold, moisture, ventilation, and vermin problems.”¹⁴³ Building age was not explicitly referenced in the report, but quality and maintenance were.

The “high-performing green schools” are defined by Duncan-Poitiers as having three main attributes: they are designed to create a healthy, comfortable learning and working environment; they are less costly to operate than a “conventional school” over the life of the building; and they are constructed to conserve important resources such as energy and water.¹⁴⁴ These three concepts relate to existing structures and underscore the popular expression among preservationists is that “The Greenest Building Is... One That Is Already Built.” For example, “thermally massive” materials used in historic school construction have a greater tendency to regulate temperatures naturally, making the buildings cooler in the summer and warmer in the winter with little assistance from energy consumptive HVAC units.¹⁴⁵ Off-gassing of modern construction materials must be raised to question the “healthier” concept of a newer building. In terms of resource-sensitivity, the construction of a new property can create four times the material stream than a rehabilitation.^{xxxiii} Preservationists are also trained to quantify the amount of “embodied energy” in the various materials contained in historic structures to argue for the

^{xxxiii} Material stream is the flow of raw and demolished materials, a measure of environmental impact.

economic value in their preservation. Duncan-Poitiers brings this all home when she remarks that every \$1 spent in regular maintenance can be shown to reduce major capital costs by \$4.¹⁴⁶

| Mandated by NYCRR §155 | Average cost ^{xxxiv} | Supported by state building aide |
|---|-------------------------------|----------------------------------|
| Five-year capital facilities plan/Building Condition Survey | \$26,272,274 | Yes (up to 98% in AECSD) |
| Annual fire inspections | \$4,300 | No |
| Long term facilities master plan | \$20,000 | No |
| Monitoring system | \$35,000 (highest allowance) | No |
| Environmental testing | \$1250 | No |
| Unfunded mandates total | \$60,050 | No |
| Capital cost to local tax payer | \$525,446 | No |

Fig. 56. Mandated project costs in Auburn Enlarged City School District, Auburn, NY. Based on information provided by AECSD business office (2017).

The manner in which unfunded mandates effect each school district varies. The amount of state reimbursement received on capital projects can reach as high as 98% for districts identified as having “high needs,” usually defined as having a high percentage of children from families living below the poverty line.¹⁴⁷ Auburn Enlarged City School District was identified as a high needs district in 2013, and thus qualified for this level of building aid. In March of 2017, New York State was designing a budget that reduced the aid package for all upstate school districts to “2003 need/resource capacities,” and will be funded according to the economics of that year.¹⁴⁸ Auburn will still qualify for 90% funding in building aid if this state of affairs remains in place by the end of its current five-year project.

According to Duncan-Poitiers, the Minor Maintenance and Repair line in the education budget was rolled into the Flexible Aid category in 2007.¹⁴⁹ This move effectively eliminated the

^{xxxiv} Average cost for a small-city school districts in cities with populations between 10,000 and 50,000 inhabitants. Figures provided by AECSD.

funding for basic maintenance without eliminating it in name, as cash-strapped districts took advantage of the “extra money” to support other uses. The 1987 CAPP measure originally prescribed quinquennial building surveys to assess the need for maintenance and small repairs to “determine how state funds may be used in the most effective manner” relative to facilities. This process has become a cyclical system which no longer addresses small-scale maintenance issues, but only major potential capital projects. Consequently, maintenance which could prolong the life of a school building is often deferred in districts where budgets are tight in light of the potential for state-supported major upgrades and construction.

There are a variety of legal and policy-driven obstacles that inhibit the preservation of historic public schools. Some states have enacted policies that preclude the maintenance of older and potentially historic buildings. These are known in Ohio as the “two-thirds rule”, and in Minnesota as the “60 percent rule,” although other states have similar policies. These refer to the provision that if the cost of renovating a school exceeds two-thirds of the cost of building a new school, then a new school must be built.¹⁵⁰ This type of legislation reflects the pervasive “newer is better” assumption and is deeply flawed. Even a passing familiarity of the construction industry shows the precarious nature of estimating the cost of a new school building, and by extension the uselessness of an arbitrary figure of 60% of the cost. Ohio has recently passed an amendment that allowed school districts to seek a waiver in the case of historic buildings.¹⁵¹

With incentives to complete qualified building projects such as the 60% rule and the availability of nearly complete state funding, a cycle of continuous alterations to school facilities endures. For better or worse, an entire industry of school construction firms has arisen in response to this unending and perpetual funding scheme. In New York State, the state education department provides a “Reorganization Incentive” addition to building aid to encourage districts

to consolidate into “more effective and efficient units.”¹⁵² As consolidation typically comes with the increasing of class sizes, the state government has effectively put a premium on reducing teacher-student ratios to the tune of \$32.6 million.¹⁵³ Another expense that districts are reimbursed for from the state is transportation, which the costs state government \$1.6 billion. Fuel and maintenance costs were the original justification for closing neighborhood schools, and consolidation was viewed as a cost savings at scale.

In some ways, the American classroom has not changed in 100 years. In Figure 57, the illustration from the detailed and informative 1921 book *School Architecture* by John Donovan shows how little the delivery has been altered. The desks all face toward the teacher. Images are projected onto a retractable screen to aid the teacher in her lesson. Aside from exchanging chalk for dry-erase markers, the difference in today’s model is in the amount of electrical power and broadband connectivity available within the historic building.

Few schools in New York lack the hollow chases and crawlspaces needed for pulling electrical wire. The sheer cost per foot of data cables necessary to wire every classroom of a school has made wireless technology preferable. The issue with this solution is the materials with which many early to mid-twentieth century schools are constructed. The material used to form the interior surfaces of a building will impact how transmissions of microwave frequencies are received. Wood, drywall, and glass create little signal absorption. Brick and masonry create a median level of interference, while thick concrete can cause significant signal weakness. Floors constructed of concrete on steel will create nearly impenetrable shields. Regardless of what construction materials are used in a building, it is the other electronic equipment in use that exerts the strongest effect on wireless signal strength. Luckily there are methods commonly employed to circumvent these issues.¹⁵⁴

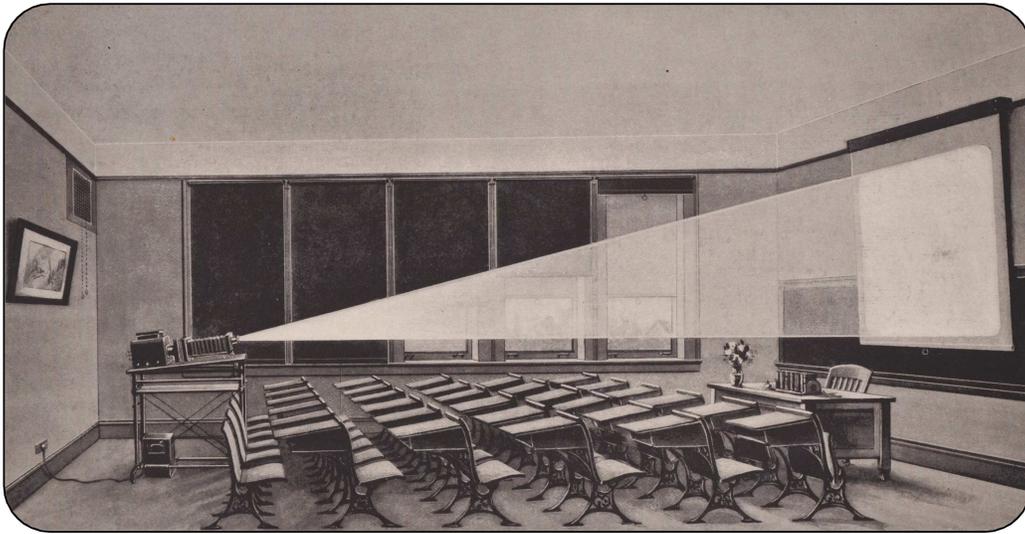


Fig. 57. Ideal classroom of 1921. Image from *School Architecture* by John Donovan (1921).



Fig. 58. A contemporary classroom. Image courtesy of the Jurupa, CA School District (2017).

Fenway Park was able to establish a functional Wi-Fi network by conducting a site survey to find the most effective connectivity points.¹⁵⁵ This type of survey is crucial to ensuring that strong data signals find their way across old building with thick masonry walls. By establishing clear lines of transmission that avoid thick interior walls and interference by preexisting electronics. In fact, it is often the thick masonry walls that can protect the wireless

signal from interference from other electronics. IT professionals should be relatively well informed as to industry standardized attenuation of frequencies by building materials. The current owner of the Central High School building in Auburn reports no connectivity issues with only a few signal-boosting routers in place.

In certain realms of school construction there are unavoidable and necessary updates that must be completed according to the building codes enforced by the Commissioner of Education. Heating apparatus is often replaced by more energy efficient systems. Radiant heating units that may have supplied heat to a smaller area are abandoned as newer units deliver more heat to a wider area. Lighting systems are continually updated as well, with more energy-efficient ballasts and bulbs emerging on the market every year. These upgrades are important, and can provide significant savings when the projects are completed on larger scales, such as building or district-wide.

Handicap accessibility was mandated in schools with the passage of the Americans with Disabilities Act of 1990. According to this law, any public use building constructed before 1993 required “reasonable modifications” to accommodate the physically disabled. This required that all counters, walkways, bathrooms, and doors had to be made free of physical barriers to the differently abled.¹⁵⁶ As a consequence, nearly all of the historic doors in Auburn’s public schools were replaced, and the original bathroom fixtures were replaced and restroom layouts modified to comply with the law. Ramps were added to entrances and elevators installed.

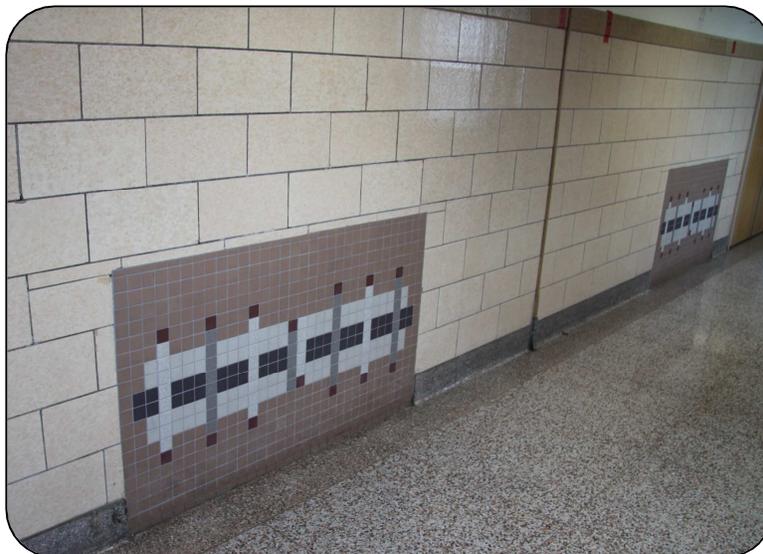


Fig. 59. Example of an in-fill made after a 1930s style radiator was removed from the wall at West Middle School in Auburn, NY. *Author's photograph.*

In order to better understand the interplay of local and state economics it is necessary to provide an overview of the state protocols that school districts have to move through in order to receive capital funding, or building aid. Before the Cole-Rice Act of 1925, state aid didn't have a separate building aid category. As we have seen in Chapter Three, state aid has fluctuated over the decades according to contemporary politics, the state's financial security, and the local district's needs. Changes in technology, culture, and state building standards and safety codes all had an impact on the amount of money spent on schools, and the rise of the perception that new schools are better. In 1869, the first year for which records are available, the district budget was \$31,856.12. District taxes collected totaled \$25,000, and state aid was \$6,977.02, or around 20% of the school's income.¹⁵⁷ During the late 19th and early 20th centuries, state aid ratios fluctuated between 20% and 30%.^{xxxv} State aid in 1877 was \$11,823.81, while the local sources amounted

^{xxxv} 28% in 1887, 37% in 1902, according the Annual Board Reports of Auburn for those respective years.

to \$20,863.03, which amounted to \$190.78 in today's terms.^{xxxvi} The capital outlay per pupil for that year was roughly \$4.26, or \$97.45 today. Those levels dropped significantly through the Great Depression, but were stabilized to some degree by federal intervention in favor of construction. As technology advanced and time went on, the funding mechanism for school building projects grew in scope and complexity. By the turn of the 21st century, state aid was above 45%, and building aid itself above 90%. This is to say nothing of the bonded interest or the increasingly complicated calculation formulas involved in arriving at such aid.

Building aid is essentially state reimbursement for bonded debt incurred by the local district on approved capital projects, rather than a directly paid, state-to-contractor funding stream. The state agency that issues bonds for school construction projects, the Dormitory Authority of the State of New York (DASNY), charges interest on these bonds, which the school district must repay. While this debt service is part of the overall building aid reimbursement scheme, it is illustrative of the large and unwieldy system by which New York State pays itself back with interest from the tax paying public.

Since 2002, New York partially reimbursed districts in building aid on *assumed* debt service expenditures based on *assumed* amortization schedules, not actuality. Consequently, planning and preparation play a crucial role, ideally, in securing and justifying government reimbursement. Plans and designs for capital work must align with the local school district's Long-Term Facilities Plan, a planning document mandated by New York State. In practice, many school districts do not have such a document despite its being mandated by law. AECSD did not have one, nor was the district aware of its legal obligation to possess one until 2015. Nationally, only 60% of districts had such a plan, whether state-mandated or not.¹⁵⁸ Nevertheless, building

^{xxxvi} Mostly taxation, but donations were also added to this figure (Storke, 190).

aid is distributed to New York's schools to support large capital projects without the supporting plans in place.

Setting aside the long-term planning issue, the first step in the project is the completion of an Environmental Assessment Form (EAF) pursuant to the New York State Environmental Quality Review Act.^{xxxvii} This measure is designed to identify and mitigate any environmental impacts that a state-funded project might have. Among the potential types of impacts studies by an EAF are those affecting cultural and historical assets. School buildings on or eligible for listing on the State or National Register of Historic Places are still, in theory, under the review of the SHPO as it relates to the spending of government funds for projects affecting eligible or listed properties.^{xxxviii} According to §155.5 of the regulations of the Commissioner of Education, it is the New York State Education Department that acts as the lead agency for the administration of the SEQRA requirements.¹⁵⁹ Until quite recently a Letter of Resolution between the State Historic Preservation Officer and the Secretary of Education helped to expedite the review process and perhaps negotiate the apparent overlap of duties as well. In this Letter, a list of types of construction work determined by the signatories “to have little or no potential to impact the character of historic resources and... therefore exempt from review by OPRHP.”¹⁶⁰ The list itself is quite extensive, providing the State Education Department with exemptions from reviewing dozens of items. Some of the exemptions come with legitimate conditions, particularly those pertaining to windows and masonry. Windows that were installed less than 50 years ago can be replaced with windows that “either match the configuration and proportions of historic windows, the current configuration, or have one-over-one sash.” Up to 50% of the building's masonry can

^{xxxvii} §6 NYCRR 617.

^{xxxviii} §14.09 New York State Parks, Recreation, and Historic Preservation Law.

be repaired and repointed before SHPO review is necessary.¹⁶¹ Health and human safety measures, like asbestos removal, are also exempt. In terms of reducing project time and by extension costs, this agreement makes fiduciary sense, although it also further frustrates the means to preserve the details of historic school buildings of many districts.

After the SEQR has been completed, the project budget must be voted on by the district. After the budget is approved by the voters, the building design plans are sent to the Facilities Planning Unit of the State Education Department for approval. The Facilities Planning Unit then assigns the pupil capacity of the building post-project. Cost estimates are then determined by multiplying a pupil construction cost allowance figure, adjusted for regional cost differences, by the assigned capacity of the building post-project.

Alongside the internal framework of the funding process, there are also legal precedents that discourage preservation. According to 19 NYCRR 441.2(d) the State Education Department is charged with the “administration and enforcement of the New York State Fire Prevention and Building Code with respect to buildings, premises and equipment in the custody of or activities related thereto undertaken by school districts and boards of cooperative educational services.”¹⁶² Additionally, local school boards do not have to file building permits with the municipality in which they are located. In 1996, Governor George Pataki proposed that local building inspectors be empowered to take over SED’s Facilities Planning Unit oversight of school construction projects. This would have unburdened the state from field supervision, but more importantly would have given local municipalities oversight of building projects. This may have opened the door to municipal oversight of historic school buildings as well. The proposal was deemed by the legislature to not be cost effective for districts and was never realized.¹⁶³

The conflict between local control and state oversight reaches an impasse in the case of high-needs districts such as Auburn, where the state provides a majority of capital funding. The right of the state government to override any municipal control over school buildings was challenged and upheld in the ruling of *The Ithaca City School District v The City of Ithaca* in 2011.^{xxxix} The ruling by the appellate court found that school districts that own historic structures are only subject to state historic preservation agencies, and the local municipality has no jurisdiction over them. The oversight the state holds over New York local schools essentially makes each district an extension of the state itself. The school is state property, and so cannot be zoned by the local municipality even when the municipality has devolved police power from the state by virtue of its position as a Certified Local Government. The local school board does not, however, require any kind of oversight regarding the closing of a school building. Despite this relative freedom, the state's management of the use of funds leaves board members, and their constituents, wishing for more agency. When asked what the most effective level of control in education was, one respondent replied, "local, without question."^{xl} Education law provides the authorization for and recommendation of, but not the requirement to, form committees to investigate the "educational impact" of the closing of a school.^{xli} Among the various items these committees should review are:

"the type, age, and physical condition of the building, outstanding indebtedness, maintenance and energy costs, recent or planned improvements for the building, and the building's special features."¹⁶⁴

^{xxxix} 82 Appellate Division, Third Department, 1316 (2011).

^{xl} E-mail response from an AECSD board member.

^{xli} §402-a

That the greatest challenge facing historic school buildings is public perception is a key element of this thesis. One particularly important dimension to that is in terms of real estate and marketability. Quality of the public school system is a chief factor for families when deciding where to purchase a home. Consequently, pages are dedicated to the grading of school districts in real estate websites. According to a recent Trulia.com survey, 35% of parents with children under 18 rank school district highest on their home buying checklist.¹⁶⁵ Markets in better school districts are stronger and more stable. As a result of the common assumption that newer schools are better, schools are often judged on their age by the real estate professional. There are exceptions in the case of particularly prestigious schools that have historic buildings, something we might call the “Oxford Effect,” where a school’s historic building adds to its desirability and perception as high performing, usually based on a variety of factors.

As we have seen, there are a litany of existing regulatory, economic, and public perception issues that de-incentivize the maintenance of public school buildings and encourage the cycle of deterioration followed by large scale construction. The elimination of the mandated maintenance and upkeep line item by the State Education Department has led to deferred maintenance, preservation by another name, and an increased need for state building aid. The power of the education and construction lobbies, intersecting at the point of education construction firms, has an interest to maintain the system of perpetual state-funded construction in New York. The State’s fluctuating view on the average “life-span” of a school building is at best, uninformed, and at worst, solely concerned with controlling building-aid disbursements. In addition to, and perhaps supporting the perception that newer is better, is the aggregate data that cannot show a direct correlation between school age and student achievement but can only show a correlation of a variety of factors without consistency.

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- ¹⁴⁶ Dunca-Poitiers, p. 23.
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- ¹⁴⁸ Education Unit, New York State Division of the Budget. *Description of the 2017-18 New York State Executive Budget Recommendations for Elementary and Secondary Education*. (Albany, NY: 2017), p. 1.
- ¹⁴⁹ Duncan-Poiters, Johanna. *2010-11 Regents State Aid Proposal: Support for UPK; and Benefits of High Performance School Buildings*. New York State Education Department State Aid Subcommittee memorandum. (Albany: 2009), p. 16.
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CHAPTER FOUR

PUBLIC SCHOOL PRESERVATION SOLUTIONS

The preservation of public schools must provide benefits for all of the relevant constituencies. In the previous chapters we have seen how the development of education philosophy has affected curriculum, and how this in turn influenced the development of the school environment. We have reviewed the development of current building-aid policy and calculation methods, and how that has affected small-city districts such as Auburn, along with the legal and cultural obstacles to historic school preservation. This chapter will attempt to describe the possible benefits related to school preservation, including the possibility of cost savings, the reallocation of much-needed resources in a financially distressed district like Auburn, and the other established benefits of preservation. It will address the legislative steps necessary to encourage school preservation, and make recommendations that a local district can follow to protect its historic schools.

The question of where savings can be generated, and from what kind of preservation tools, might be answered by looking at the residential and commercial real estate market's experience and examining it for possible congruence to the public school system, and then looking to precedents set in this specific preservation area. Preservation projects undertaken by public facilities such as courthouses and city halls typically rely on specific public funding, supplemented by private donations from a variety of sources. While technically public buildings, New York's public schools are separated by lines of procedure and perception as noted in the previous chapters. The state's oversight of facilities and exemptions from SHPO review create a

separate environment from other public buildings, and within our culture an historic courthouse is cherished while the old school is bemoaned.

There is a wide array of financial incentives for historic preservation, most of them involving some type of tax relief. The most well-known program in the United States is the Historic Rehabilitation Tax Credit, a detailed program that, in its broadest sense, allows for the sale of tax credits to investor syndicates to help finance rehabilitation projects. This program has been a success since its creation in 1978 and subsequent modifications, producing over 2 million jobs and \$33 billion in taxes at all levels of government.¹⁶⁶ A number of related tax credit programs follow similar procedural lines, but none are applicable to a tax-exempt entity like the Auburn Enlarged City School District. There are opportunities to model some of these programs onto the economic rules of a small city public school district provided that New York State addresses the regulatory issues that create incentives for deferred maintenance, and is willing to work with such districts who are willing to commit to preservation.

The proper outlay of maintenance costs should reduce NYSED's costs over time. The studies cited by Senior Deputy Commissioner Duncan-Poitiers point out that a single dollar spent in regular maintenance can save as much as \$4 in major capital projects.¹⁶⁷ Auburn's state building aid for the 2017-2018 school year is proposed at \$3,500,911.¹⁶⁸ This is equivalent to an investment of \$875,227.75 in small maintenance and repairs, according to the 4:1 savings model.^{xlii} Therefore, it is reasonable to assume that the state stands to save money in capital outlay if school districts take upon themselves to pursue more robust maintenance.

^{xlii} This is only an illustrative exercise and uses available numbers broadly, without consideration of capital needs outside of those precipitated by deferred maintenance.

In the realm of private industry, facilities budgets allocate 2 to 3% of the replacement value on yearly maintenance, typically leading to a 33-year useful life rotation.¹⁶⁹ Funding a portion of district's maintenance needs in this manner would reduce the future State share of construction projects. It is therefore justified for the state to offer an additional 2% of the replacement value in restricted building aide to districts with preservation ordinances, to be used toward the maintenance of character-defining features under the justification that it will result in a reduction in state building aid. Replacement value is not strictly formulaic, and in the case of an historic school, much more nuanced. The most accurate picture can be arrived at using industry analysis, such as the *Education Construction Report* published by American School & University, which gives the median cost per square foot of new school construction at \$211.¹⁷⁰ According to the figures used by the *Report*, the replacement value of AJHS is \$19,969,462,^{xliii} nearly 5 times the currently assessed market value of the building. A 2% maintenance budget similar to that used in private industry would be valued at \$399,389.24. Revisiting the Senior Deputy Commissioner's 4:1 savings ratio, this investment has the potential to save the state over \$1.5 million in building aid for major projects.^{xliv} Funds could be drawn from the expanding gambling operations in New York State, already a source of nearly 14% of the state education budget. The nature of building aid as a reimbursement of debt service might be explored as well. Currently, the statewide interest rate on approved projects outside of the "Big Five" is 2%.¹⁷¹ A reduction in interest rates paid on projects at designated historic schools might incentivize protective measures. This has the advantage of not needing budget appropriations at the legislative level.

^{xliii} Replacement cost= [Current enrollment (600) X required sq. ft./student national avg. (158)] X \$211.

^{xliv} \$1,597,556.96

According to the ruling in *Ithaca v Ithaca* public schools are the property of the local school district but are under the control of the State Education Department, yet there are pieces of education law that run contrary to *Ithaca v Ithaca*, however. The most significant of these can be found in §2503.6 of New York's Education Law, which states that the Board of Education:

Shall have the care, custody, control, safekeeping and maintenance of all school property or other property used for educational, social or recreational work of the district, and shall prescribe rules and regulations for the preservation of such property.¹⁷²

Devolving powers onto the board to regulate property creates the opportunity for a school district to establish historic designations or specifically prescriptive practices. Notwithstanding the contradiction between a state supreme court ruling and a piece of state legislation, this is perhaps the first step toward local ownership of what has been found by the court to be state property. Overturning *Ithaca v Ithaca* would be desirable, but it is not necessary. The original case centered on the Ithaca school district's ability to demolish an historic structure on its property. In December 2008, the district applied to the Ithaca Landmarks Preservation Committee (hereafter ILPC), the local historic resource board for permission to demolish the building. The ILPC's denied the request, and the school district subsequently filed a suit seeking a declaration that the ILPC lacked jurisdiction in the matter and to overturn the ILPC's judgement. The state supreme court ruled in favor of the district, to which the ILPC appealed.

The court's opinion specifies its reasoning in the following passage:

We have held that a local government's authority to regulate landmarks 'does not include the power to regulate the activity of a [s]tate agency which might affect historical or cultural property under the control and jurisdiction of the [s]tate agency' (Matter of Ebert v New York State Off. of Parks, Recreation & Historic Preserv., 119 AD2d 62, 65-66 [1986], lv denied 68 NY2d 612 [1986] [State University Fund not required to comply with local historical preservation ordinance before demolishing existing structure; state level review sufficient]). Thus, the question here distills to

whether a public school district, like petitioner herein, is akin to a state agency in this context and is, therefore, encompassed within the same precepts. While we have not previously addressed this precise question, the very nature of school districts, together with related precedent, convinces us that such question should be answered in the affirmative.¹⁷³

This opinion lays bare the state government's concept of public ownership in its assertion of control over a local school building and its disposition as historic. Regardless, the ruling makes no mention of the school district's own internal property regulations, nor does it void §2503 of the Education Law. It only exempts the local district from municipal zoning controls.

Precedents outside of New York State provide some idea of how the issue is being addressed to varying degrees of success. In Massachusetts education law, the costs of renovation versus demolition and new construction are not explicitly contemplated, but the Department of Education does require that applicants fully consider all available options for satisfying their facility needs, including acquisition, rehabilitation, or usage modification of an existing building that could be made available for school use.^{xlv} In 2002, Historic Massachusetts published a newsletter detailing the preservation of active public schools, devoting a section to debunking the "fictions" the public tends to believe regarding school preservation.^{xlvi} In Vermont, the State Historic Preservation Act requires the Agency of Education, as a state agency, to consult with the Vermont Division for Historic Preservation (hereafter VDHP) when engaged in projects involving historic resources when state funding is being used, just as New York does. In certain cases, VDHP has secured protective covenants for public schools that have been closed and later sold, and participates in the regulatory process during the sale. According to a state permitting regulation known as Act 250, VDHP is a statutory party to any projects that are triggered by the

^{xlv} Massachusetts General Law c. 70b (9a, b)

^{xlvi} Historic Massachusetts is the statewide historic preservation organization. Currently known as Preservation Massachusetts.

Act's thresholds, and engages in a review. The "School Construction Aid Program" was funded by the Vermont State Legislature, and was equivalent to New York State's building aid program. It has been suspended. Without the use of state funds in the construction process, the typical school construction process relies on locally issued bonds, and therefore does not trigger the regulatory review process.^{xlvii} Although there is no state-level review for historic schools related to publically funded building projects, the Vermont Agency of Education issued a policy on Historic Preservation, part of an overall construction guide for school districts, issued in 2008.

The relevant sections are shown here with italics added to highlight pertinent passages:

1. School districts be *encouraged to use the existing infrastructure* to meet the needs of Vermont's students and therefore *funding for renovations, including major repairs, and additions to existing school buildings shall be given preference over new school development* taking into consideration the educational needs of students and that the costs of rehabilitation do not unreasonably exceed the costs of such new development.
2. With specific respect to historic school buildings listed on or eligible for the State or National Register of Historic places, school districts shall make *all reasonable efforts to preserve and protect such buildings* and, *wherever possible, rehabilitate or add to such buildings* to permit continued use as a school building.
3. Where an historic school building has been determined to be unsuitable for continued use as a school, the State Board encourages *school districts to develop an adaptive reuse plan that incorporates a historic preservation easement or covenant on the property* in conjunction with any plans for a new school building in order to avoid the abandonment or demolition of the historic building.
4. In furtherance of the above, the Department of Education shall work closely with the Division for Historic Preservation on general rules and policies as well as on individual school construction projects to ensure the Department's responsibilities pursuant to 22 V.S.A. §743 (4) ("assure that ...plans, programs, codes and regulations contribute to the preservation and enhancement of sites, structures and objects of historical, architectural, archeological or cultural significance") are properly carried out.¹⁷⁴

^{xlvii} Email correspondence with Robert McCullough of the University of Vermont's Historic Preservation Program, and Devin A. Colman, State Architectural Historian at the Vermont Division for Historic Preservation.

New York State has no equivalent policy, and as has been shown, favors a model of publically funded new construction and major renovation.

Colorado's statewide non-profit preservation organization, Colorado Preservation, Inc., worked with education advocacy groups to pass the Public Schools Facilities Act in 2007.^{xlvi} This act created an advisory board to monitor capital construction for a variety of purposes, with historic preservation being one of them. It required that one seat on the board be filled by preservation architect and stipulated that a school's historic status must be considered in funding decisions. Colorado Preservation, Inc. also received a grant from the SHPO and the Donnell-Kay Foundation^{xlix} to develop a database of all Colorado Public Schools for use of the Colorado Department of Education and History Colorado^l. This act was supplanted by a more robust building aid package in 2008, the Building Excellent Schools Today (BEST) Act, which favors new construction and major renovation more than the previous measure, but maintains the requirement that projects be reviewed by the board established in the Public School Facilities Act of 2007. Colorado also uses 22.4% of taxes from sanctioned gambling facilities to fund "historic preservation and restoration of historic sites and municipalities across the state."¹⁷⁵ This grant program has funded a number of school projects for public schools, private schools and former schools.

As A New York district's capital projects must follow its long term facilities plan, and must be approved by the state facilities planning unit, it follows that planning should be done at the local level. Facilities planning should be given more emphasis with in school districts, to

^{xlvi} Colorado State Senate Bill 07-041.

^{xlix} The Donnell-Kay Foundation aims to improve public education in Colorado through research, policy, creative dialogue, and critical thinking.

^lHistory Colorado is a non-profit organization that serves as the historic preservation agency of the State of Colorado under the Department of Higher Education

insure that school districts have completed the necessary facilities master planning documents and to provide the framework for a professional-level internal planning department. Assistant superintendent of planning would be a highly useful position in the district, the functions of the building and grounds superintendent and the preservation of facilities would fall under her oversight, but would also be augmented by the analysis and incorporation of data. The state facilities planning unit should increase its vigilance over the local district's requirement of having a long term facilities master plan, or else should alter the method by which projects are approved. Lack of planning leads to mistakes in execution, and ultimately the tax payers and their children suffer from its effects in the built environment.

The Letter of Resolution between the state education department and SHPO should be revisited, and a preservation-sensitive approach to school capital projects must be developed that maintains efficiency for the school district. Long range facilities planning documents with enrollment projections, already mandated by the state and required for building aid, must be clear in their justification of major capital projects over small-scale maintenance. In addition, the requirement of these planning documents for aid must be better enforced by the state. This can be accomplished by an extension of the powers granted to the city preservation board to issue certificates of appropriateness, similar to that proposed by Governor Pataki in the 1990s.^{li} If the local historic review board can review the proposed changes of designated properties and inside the various historic districts of a Certified Local Government of behalf of the state, it should therefore be appropriate as a stand-in for the state in this particular matter as well. The review board would simply take on the additional responsibility of issuing verification to NYSED as to

^{li} Page 104 of this work.

the existence of state-mandated planning documents and offering comment on the sections which justify the major additions.

In 2002 the Board of Education of Denver, Colorado passed a measure equivalent to a city preservation ordinance that provides a certain measure of protection for the district's historic school buildings. The measure does not prevent any form of demolition, but by its very existence sends a clear message that it values the quality of its architecturally and historically significant schools. Denver is one of only a few school districts in the nation to create a district-wide process to designate architecturally or historically significant schools and establish preservation-oriented standards in maintenance and repair. With the establishment of a National Park at the Harriet Tubman House, several Historic Landmarks, and the branding of Auburn, New York as "history's hometown," it is worth consideration for the AECSD Board of Education should consider enacting a similar measure. A model ordinance is included as an appendix to this thesis for the board's consideration.

Overall, the complex formula made 55 years ago remains more or less in place, with annual detailed adjustments. Today the entire system remains confounding to all except a small group of professional politicians and skilled business officers, many of whom are well aware of the inefficiency and wastefulness of the state's current formula. They understand the formulas, but they can't change them, only the state legislature can effectively do that. Yet every year New York's state-level representatives claim to have little power. State Senator John DeFrancisco, the Republican Majority Leader, stated in a Syracuse.com article on school aid in 2015 that one would "have to be a PhD in math and have served in political office for 30 years" to understand the formula, and has been publically calling for a simplification of the formula for many years. While Defrancisco was referring more specifically to foundation aid, the same rule holds for

building aid. The intense focus on the flaws in foundation aid have created a blind spot to those in building aid. Because it is portrayed as a good way for needy districts to produce something of value for their students, it remains uncontroversial. This work has hopefully shown that the large quantities of money borrowed by local districts at interest and reimbursed by the state for major capital projects are not, in the long run, as economically sound as the preservation of existing structures.

In order to effect change to the issues discussed in this work, a strong advocacy effort must be created and sustained. Visits to Parent Teacher groups (both PTOs and PTAs) must be the starting point for any effective movement. Educating parents is key, as they are the most visible stakeholders in public education. The message of this thesis can empower them to make better informed decisions when it comes time to vote on capital projects, or what actually makes a “good school.” They may then go out and act as their own advocates, speaking at board of education meetings, writing or calling their state representatives, and talking to other parents during drop-off and pick-up times at school. Illustrating in stark terms the money lost to sometimes pointless and wasteful construction projects can energize the tax-paying public at large. Once the parents and local board members are engaged, the various preservation groups like the Preservation League of New York (PLNY) and the Preservation Association of Central New York (PACNY) can be of service to amplify the message through larger public information sessions, mailing campaigns, or podcasts. With enough voices all speaking the same message, lawmakers will hopefully be more inclined to work harder to improve the state of school financing.

¹⁶⁶ Tomlan, Michael. *Historic Preservation*. Springer (Heidelberg: 2015), p. 177.

¹⁶⁷ Duncan-Poitiers, Johanna. *2010-11 Regents State Aid Proposal: Support for UPK; and Benefits of High Performance School Buildings*. New York State Education Department State Aid Subcommittee memorandum. (Albany: 2009), p. 23.

¹⁶⁸ New York State Division of the Budget. *2017-18 Executive Budget Proposal: 2016-17 and 2017-18 State Aids*. (Albany, NY: 2016), p. 13.

¹⁶⁹ Duncan-Poitiers, p. 24.

¹⁷⁰ American School & University. *34th Annual Official Education Construction Report*. (2008), p. 34.

¹⁷¹ “Interest rates for Assumed Amortizations.” New York State Education Department.

Webpage. Accessed July 17, 2017. https://stateaid.nysed.gov/build/html_docs/intrates.htm

¹⁷² New York Education Law § 2503. Powers and duties of Board of Education.

¹⁷³ *Ithaca City School District, Respondent, v City of Ithaca*. 2011 NY Slip Op 01551, 82 AD3d 1316 (2011).

¹⁷⁴ “State Board Policy on Historic Preservation Adopted August 19, 1997.” *Vermont School Construction Planning Guide*. Vermont Department of Education (Montpelier, VT: 2008), p. 46.

¹⁷⁵ History Colorado. *Grant Application Guide*. Published online by the State Historic Fund.

Accessed April 6, 2017.

http://www.historycolorado.org/sites/default/files/files/OAHP/crforms_edumat/pdfs/1412a.pdf,

p. 4.

CONCLUSION

The annual budget process and the manner of distribution of both foundation and building aid makes the management of small-city school districts across New York, such as Auburn, difficult. Lacking the notoriety of the Big Five districts^{lii} and the resources of wealthier districts, small-city schools become more dependent upon capital-aid programs that are designed for new construction and major facilities upgrades. In the best circumstances, the funding structure in New York can introduce vital new systems and infrastructure to needy districts. In the worst, and more often than not, it encourages an institutional “demolition by neglect.” The incentivizing of this process by the state building-aid formula threatens the historic built environment of New York’s schools. Given the financial struggles of the school system, it seems illogical to make money available for new facilities while there is little to pay for actual teaching.

A number of state and local mission statements would appear to support the preservation of the state’s public schools. New York State Education Department’s mission is “to raise the knowledge, skill, and opportunity of all the people in New York.”¹⁷⁶ In Auburn, the mission of the Board of Education is to “develop citizens that are capable of meeting the challenges of their future by providing equitable, fiscally sound educational opportunities necessary to develop confident life-long learners.”¹⁷⁷ The New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) published its *2015-2020 Goals, Objectives, and Strategies* to guide the planning of statewide preservation of historic properties, including three that would support a review of the preservation of public schools, including:

^{lii} See p. 2.

“Goal 1, Objective 1. Keep New York at the forefront of national preservation programs and policies, such as innovative National Register listings and expanded use of the federal historic rehabilitation tax incentives.”¹⁷⁸;

“Goal 2, Objective 2. Use legislative and policy tools as well as education and outreach to protect and enhance historic and cultural resources, particularly local landmark legislation.”¹⁷⁹;
and

“Goal 3, Objective 1. Foster an appreciation of history and historic preservation among younger audiences.”¹⁸⁰

Historic schools have long existed outside of the legal and economic milieus of both public and private buildings. While they are tax-exempt, they are viewed by the judicial branch as state agencies, and as such they are also not subject to the local municipality. At the same time, state law clearly states that the buildings of a school district are the property of the local board of education and that this corporate body alone has the power to regulate the disposition of its property. A cultural acceptance of the premise that an old school building is not effective by virtue of its age supports the financing of rebuilding and allows the question of the government’s contradictory view of a local district’s legal status to remain unanswered. In the absence of legal clarity, let the Auburn school board speak for itself and take advantage of what the law allows by creating its own tools for preservation.

This work has put forth several solutions as examples; additional 2% of the replacement value in restricted building aide for the maintenance of character-defining features in districts with preservation ordinances; a reduction in interest rates for projects at designated historic schools; overturning *Ithaca v. Ithaca*; creating an administrative planning position within the school district; review the Letter of Resolution between NYSED and NYSOPRHP; better

enforcement of the long-term planning document requirement for building aid; extending the role of local planning boards to comment on school construction projects; and the adoption of an historic preservation ordinance by the local school board, empowering it to recognize and protect its culturally significant active schools.

Above all, more robust maintenance funding will preserve the historic elements that bind communities through the built environment, a role which the suburban school building plays like nearly no other community building. It will be up to Auburn's Board of Education to choose the district's direction. A more informed attitude about historic schools will result in a higher level of care by the district and ownership by the people that use them every day. Preservation-oriented preventative care of our historic schools will result in less need for the constant cycle of upgrades, renovation, and new construction. Above all it must be the parents of the children attending these historic buildings to learn and speak about this topic. If sufficient pressure is brought to bear on state lawmakers and legislation is enacted to incentivize policies that encourage this, it can lead to more money for the human teacher and better outcomes for the children of New York State's smaller districts.

¹⁷⁶ "About the New York State Education Department." New York State Education Department. Webpage. Accessed April 17, 2017. <http://www.nysed.gov/about>.

¹⁷⁷ "Mission Statement." Board of Education of Auburn, NY. District website. Accessed April 5, 2017. <http://district.auburn.cnyric.org/board/>.

¹⁷⁸ Harvey, Rose, ed. *New York State Preservation Plan 2015-2020*. New York State Parks, Recreation, and Historic Preservation (Albany, NY: 2015), p. 18.

¹⁷⁹ Harvey, Rose, p. 20.

¹⁸⁰ Harvey, Rose, p. 21.

APPENDIX

Model legislation

“Auburn Enlarged City School District, Auburn, New York, Historic Preservation Policy

Whereas Auburn Junior High School (hereafter “AJHS”) at 191 Franklin Street was designed in 1931 by Samuel Hillger and Wallace Beardsley, two master architects who built many structures of historic significance in Auburn and elsewhere, and

Whereas, AJHS has been determined eligible by the New York State Office of Parks, Recreation, and Historic Preservation (hereafter “NYSOPRHP”) for nomination to the New York State and National Register of Historic Places under criterion A, as it is “associated with events that have made a significant contribution to the broad patterns of our history,” and C, as it “embod[ies] the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.”

Whereas, the Auburn Board of Education [hereafter “Board”] desires to facilitate the long-term preservation of the District's most architecturally and/or historically significant schools through the retention of the historic exterior materials and features as much as practicable.

Whereas, the Board has an ongoing responsibility to meet educational requirements within available resources and holds a fiduciary responsibility to the Auburn Enlarged City School District.

Whereas, the Board seeks the flexibility for future generations to construct new facilities and to modify existing facilities to meet educational requirements,

Whereas, the voluntary incorporation of each building's history, preservation technology and science provides the opportunity to expand curriculum using the available resources at hand,

Whereas the Board seeks to instill a civic pride and sense of place in the students,

Whereas the Board seeks to assist NYSOPRHP in the preservation of New York's historic resources, including school facilities,

Whereas, the Board wishes to establish protective measures over its own historically significant buildings,

Whereas, the Board acknowledges that proper historic preservation measures have been proven to increase the life of any building and reduce capital outlay costs over time,

Whereas, the Board acknowledges that the sale of West High School was partially incentivized by the financing available due to the historic nature of the building, and wishes to have such an added value to any property that may be potentially sold in the future,

Whereas, the Board believes that new technology can be incorporated into historic buildings and learning can be delivered within this context,

Whereas, the Auburn Board of Education may establish an historic preservation ordinance for the Auburn Junior High School Building according to the rights granted to it under §2503.6 of New York Education Law which states that the district “Shall have the care, custody, control, safekeeping and maintenance of all school property or other property used for educational, social or recreational work of the district, and shall prescribe rules and regulations for the preservation of such property.”

The Board agrees to the following:

1. Establishes protective regulations designed with guidance from the *Preservation Briefs* published by the United States Department of the Interior over any proposed alteration of
 - a. the exterior of the AJHS building,
 - b. Holland Stadium,
 - c. Emerson Auditorium, or
 - d. the historic entrance lobby.
2. Any construction work involving the protected areas must be reviewed by at least one (1) member of the City of Auburn’s Historic Resource Review Board during the project planning phase, but will not be bound to any recommendations made.

3. Should regulations on funding related to the preservation of designated historic schools be made law in New York State, the Board will make them applicable to its designated properties.
4. The Board will nominate the building for listing on the State and National Historic Registers of Historic Places, and accept its listing.
5. The Board and District Administration shall recognize instructors at Board meetings who wish to incorporate the aspects of preservation into the curriculum via chemistry, technology, geology, history, physics, or any applicable course.
6. The Board and District Administration shall direct custodial staff to the proper preservation practices in their work, and will not use chemicals, abrasives, or other cleaning methods known to deteriorate the historic building materials protected by this ordinance.”

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