

Bridgport Public Schools

Facility Master Plan Final Report



May 2003

Approved by
Board Of Education
May, 2003

Prepared by:
DeJong & Associates, Inc

DEJONG



I. EXECUTIVE SUMMARY

This Facility Master Plan is the first comprehensive overview and long-term plan for the Bridgeport Public Schools facilities in decades. It reviews existing facilities conditions, establishes educational and demographic needs, and recommends a plan of action to create school buildings that will remain viable for the next 30 to 50 years.

The intent is to provide the students of Bridgeport with equitable, appropriate, flexible, safe and secure learning places in buildings that are owned by the City of Bridgeport. The Board of Education wishes to discontinue the practice of leasing facilities as soon as practicable. Recommendations were developed by the consultant after working for months with a Steering Committee of citizen volunteers, and from two city-wide Community Dialogues in which residents expressed their community and educational values, and evaluated several long-term facilities options.

Bridgeport has thirty-six general education school buildings, as well as several special purpose schools. They range in age from twelve to one hundred and twenty years old. Many are small, and on very small sites. Some have been recently renovated and are in a good state of repair. A few have not had substantial upgrades for fifty to sixty years.

Wherever possible, use of viable existing facilities to minimize costs and disruption has been maximized. It should also be noted that some of the existing facilities that may not continue as general schools may be converted by the Board of Education for special school use, administrative use, or for school department support.

This Facility Master Plan has been developed to incorporate the Board policy of system-wide Pre-K to 8 schools and high schools. Recommendations include:

- School size: Pre-K to 8: 500 to 1,000 students; high school: 900 to 1,200 students
- School site size and functions
- Neighborhood schools to the greatest extent possible, where students could walk to school
- Expansion of the magnet school concept for both Pre-K to 8 and high school
- Additions to 10 Pre-K to 8 schools
- New construction on new sites for 11 Pre-K to 8 schools and two high schools
- New construction on an existing site for one high school
- Renovations to all schools which have not had recent improvements

The projected cost, in 2003 dollars, for the Facility Master Plan to be carried out over the next several decades is \$260 to \$280M for Pre-K to 8 for the west side of the city, \$220 to \$240M for Pre-K to 8 for the east side, and \$220 to \$240M for high schools.

A substantial portion of this amount, up to 75%, would be borne by the State of Connecticut under current legislation. Historically, the State has funded facilities projects on an 80%/20% match. However, after land acquisition, local initiative dollars [funds needed for spaces and programs not provided by the State], and other ineligible costs are included in the overall budget, the actual percentage covered by the State is lowered to approximately 75 percent. There is discussion at the State level to reduce the percentage of the State share.

Tax impact on a typical property valued at \$150,000 is projected to be approximately \$75 per year for each \$100M of schools built. This amount may change for several reasons, including retirement of existing bonds.



An implementation strategy, including timing and establishment of roles and responsibilities for both internal staff and consultants, needs to be developed if this Facility Master Plan is to be successful. The first steps of a viable strategy are outlined in this report.

II. FACILITY MASTER PLAN

A. INTRODUCTION

The Bridgeport School Board is committed to ensuring that all students receive a quality education within safe and secure learning environments. The development of this Facility Master Plan is intended to provide a macro view of educational facilities that will provide Bridgeport Public School students with equitable, appropriate, flexible, safe and secure environments.

The Facility Master Plan provides the School Board with a “road map” for future facility needs. The goal is to provide a demographic and building condition analysis that will prepare the Board for future facility needs decisions. The Facility Master Plan builds on previous studies and efforts undertaken by the Board or other consultants such as the demographic study prepared by H.C. Planning Consultants Inc. [November 12, 2000].

The Facility Master Plan identifies new schools, additions, replacements, and renovation projects to be carried out in phases the length of which is still to be determined.

The Facility Master Plan addresses changing enrollment, appropriate school functions, and magnet concepts, as well as factors associated and related to the District’s policies and current construction projects.

School facility planning is an ongoing process. Several projects are currently active, others will hopefully start soon. As these first projects are completed and new needs are identified, the plan itself will need to be updated.

Funding scenarios associated with the proposed new construction and renovations are yet to be developed. The current State of Connecticut funding formula is recognized in this Facility Master Plan.

DeJong and Associates, Inc. specializes in providing direct service to educational organizations and positioning individuals and organizations to help shape their futures. This firm has orchestrated over 130 Facility Master Plans and developed recommendations for urban, suburban, and rural communities. Urban planning initiatives include: Anchorage School District; Phoenix Elementary and Phoenix Union High School Districts; Broward County Public Schools [Ft. Lauderdale, Florida]; Detroit Public Schools; Charleston County Schools [South Carolina]; Clark County School District [Las Vegas]; Akron Public Schools, Columbus Public Schools, Dayton Public Schools, and Toledo Public Schools [all contracted by the Ohio School Facilities Commission Urban Program]; and the District of Columbia Public Schools.



B. FACILITY MASTER PLANNING PROCESS

The outline below describes the major activities that were conducted in the planning process to develop the Facility Master Plan. In addition to these major activities the following pages describe the process that was utilized for data collection, analysis and development of the Facility Master Plan.



Activity 1: Database Development

Profiles of the Bridgeport Public Schools and the surrounding community were compiled as data sources for the project.

Activity 2: Community Dialogue #1

The first Community Dialogue was held on November 20, 2002. Input was gathered from the community and staff regarding the programs and services offered by the Bridgeport Public Schools.

Activity 3: Facility Options Developed

Based on the database of information and the results of the first Community Dialogue, options were developed and presented at Community Dialogue #2.

Activity 4: Community Dialogue #2

The second Community Dialogue was held on January 28, 2003. Facility options and their related costs were presented and input was gathered from the community and staff regarding the preferred facility options.

Activity 5: Recommendations

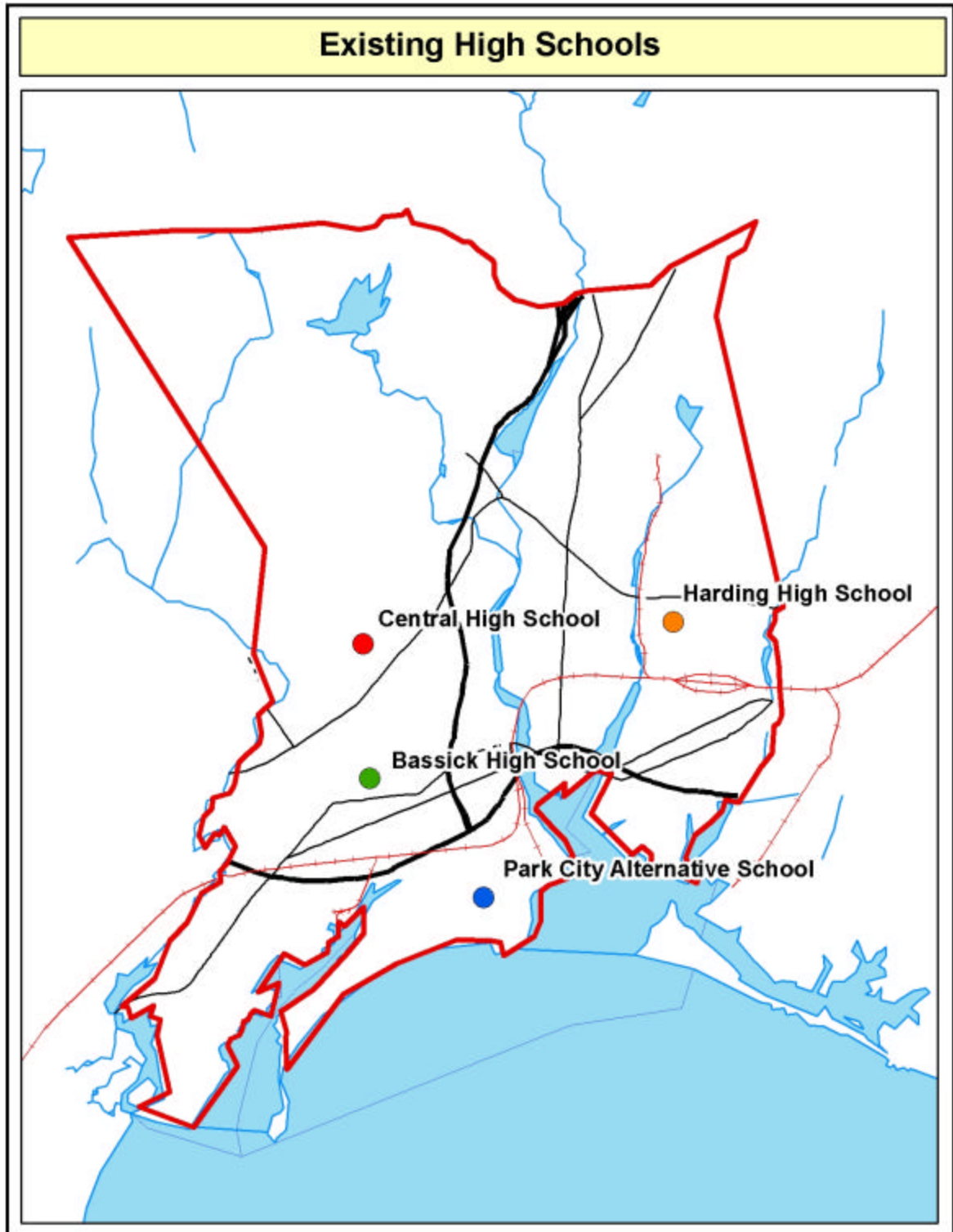
Based on the input gathered at both of the Community Dialogues, the data collected, and the work of the consultant, a plan with recommendations was developed and forwarded to the Board of Education.

Activity 6: Board of Education Presentation

The Facility Master Plan presented to the Board of Education on May 2003.

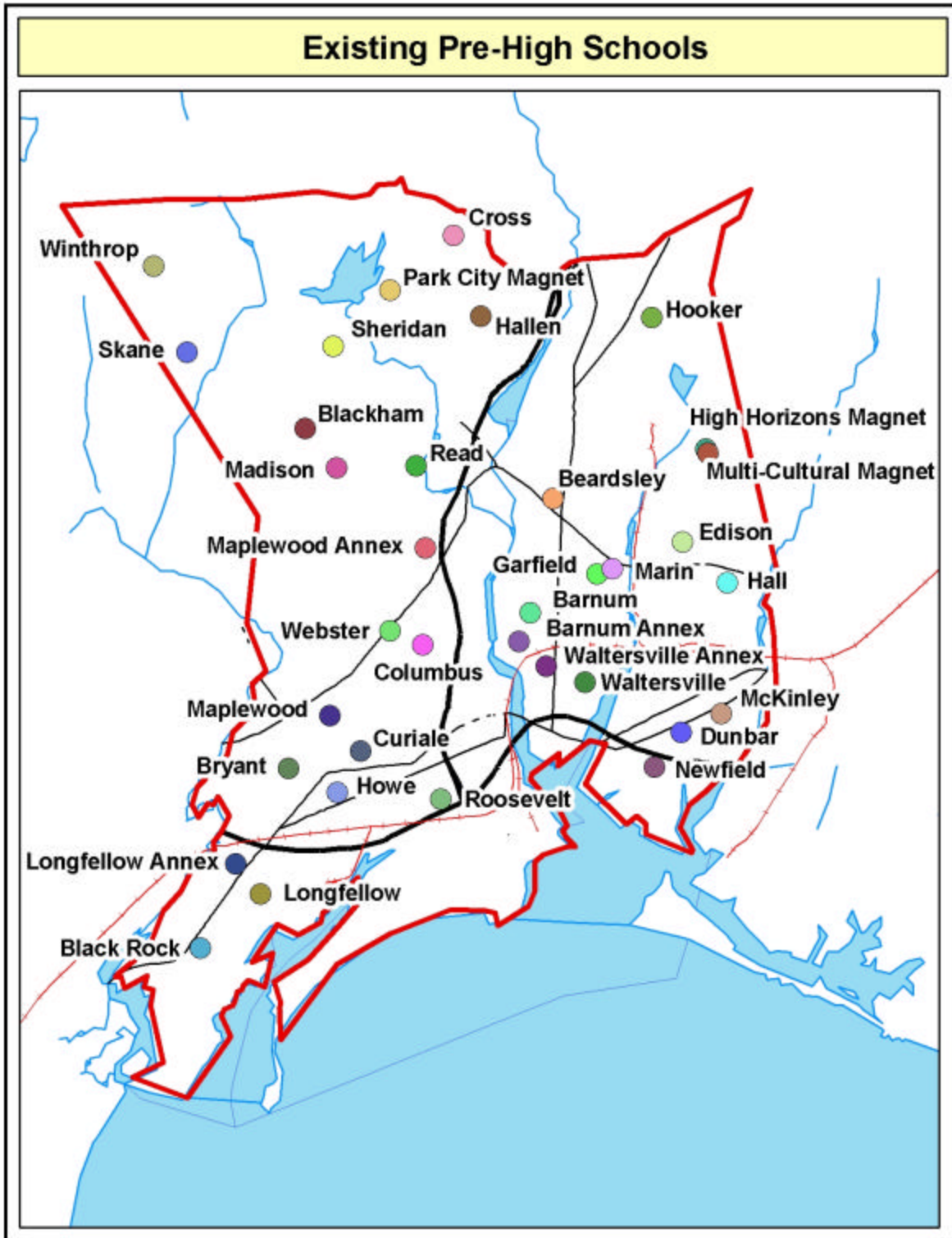


Existing High Schools





Existing Pre-High Schools

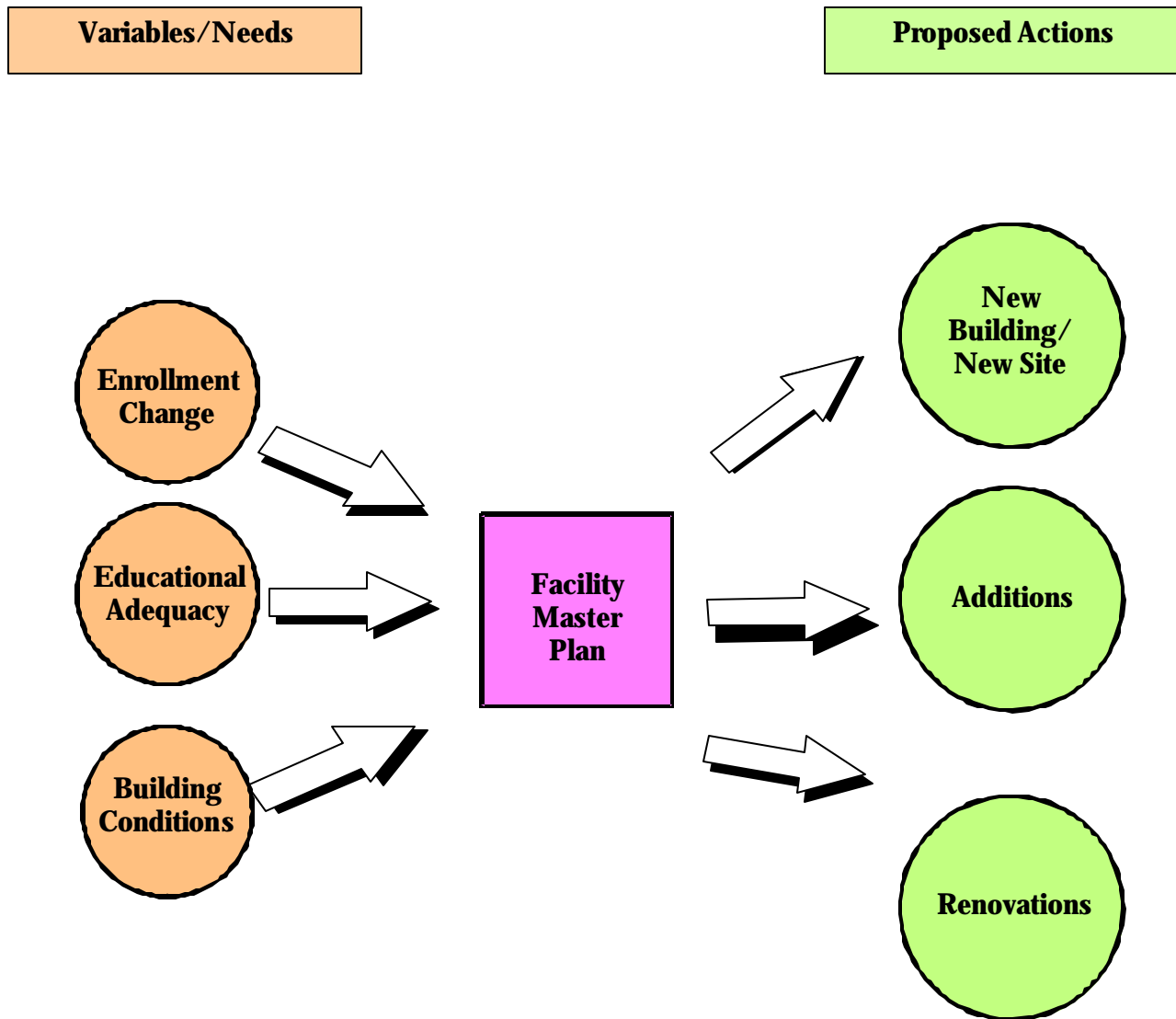




C. FACILITY MASTER PLAN OVERVIEW

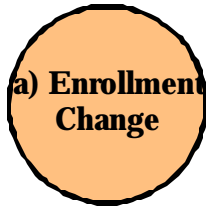
The Bridgeport Public School District is a complex organization in which there are many school facility needs.

There are three main variables or needs driving the development of the Facility Master Plan. They are enrollment change, educational adequacy, and building conditions. The facility implications of these variables result in the need for new schools, additions, renovations, and replacements.





1. Variables/Needs



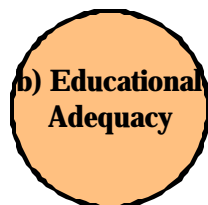
Enrollments in Bridgeport are undergoing slow but steady change. The current year overall enrollment of 22,750 students is the highest enrollment in the last ten years. The 1993-94 total enrollment was approximately 20,400, and 2010-11 enrollment is projected to be 22,100 students, including 900 pre-kindergarten students.

The 2010-11 projected enrollment of 22,100 students is the target number for the Facility Master Plan. This may need to be adjusted in anticipation of returning students from private schools as new facilities are constructed throughout the city.

In recent years there has been a noticeable imbalance between student housing locations and seats available in schools. Recent closures of housing units in the southern portions of the city have resulted in families moving northward. Many students living on the east side of the Pequonnock River and Routes 8/25 attend schools on the west side partly due to a shortage of classroom space on the east. Bridgeport's court-ordered desegregation plan also affects this disproportion of student locations versus building capacities.

Approximately 3,500 students residing in Bridgeport attend parochial and private schools. By 2010 the number is expected to be 3,150, or 13% of students residing in Bridgeport. This percentage matches the average number of students in private and parochial schools across the country. While an argument could be made that new facilities might attract new students, it is difficult to predict an amount or to believe the percentage would vary considerably from the national average. The Facility Master Plan is based on the same percentage projected in the enrollment report, 13 percent. Lastly, the effect, if any, of a more relaxed policy on school vouchers cannot be estimated at this time.

One enrollment that is expected to change, and that has been incorporated in the Facility Master Plan is the pre-kindergarten enrollment. This ½ day program has had 400 to 600 students enrolled per year for the past decade. The program is currently limited by available space. The program is voluntary. While new facilities will allow more participation, it is not expected that all pre-kindergarten students will attend. The Facility Master Plan assumed that approximately ½ of eligible students, or 900 students, would attend in 2010.



Educational adequacy of school facilities is the ability of the buildings to support educational programs. This includes consideration of the appropriate number of students for efficient operation and the proper sized learning community.

School facilities in Bridgeport vary widely. The existing elementary and middle school sites range in size from .7 acres [Webster] to 16.2 [Park City Magnet]. The high school sites range from Bassick, at 7.2 acres, to Central, at 37.4 acres.

Original construction dates cover just over 100 years, from 1884 [Webster] to 1992 [Marin]. Of the 36 school buildings owned by the City, six were originally built before the Twentieth Century, and an additional fifteen were built before World War II. This represents almost 60% of the district's inventory. While there are many appealing features of schools that age, including high ceilings and large windows, there are also many inadequacies: insufficient support spaces, little or no technology, poor handicapped access. Spaces for music, art, physical education, special education, and even administrative offices are notably lacking at many schools in the City.

Some schools received major upgrades within the last three to five years, but others have not seen improvements for forty to sixty years. The date of last substantial improvement is a rough measure of educational adequacy. The disparity in educational adequacy across the city is significant.



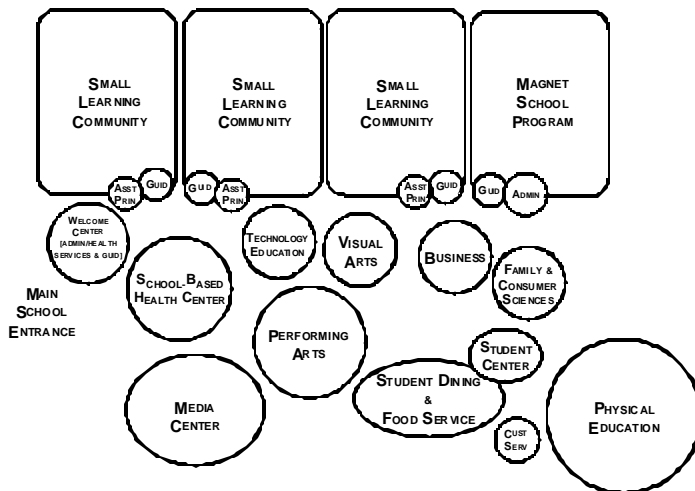
Many schools are educationally inadequate simply because they are overcrowded. Central High School has 2,300 students but it should hold 1,300. Marin has over 1,000 students but its capacity is closer to 750. When schools are overused to this extent, the quality of educational offerings is reduced.

The educational adequacy of many existing school buildings is additionally challenged by the Board policy of Pre-K to 8 schools. A Pre-K to 8 school contains ten grade levels. The minimum student enrollment of such a school is likely to be larger than a school with fewer grade levels. The goals of operational efficiency and the creation of learning communities, make it reasonable to have two or three classrooms per grade. This results in a school building with a minimum population of 500 students. Ideally, the enrollment would be 750, as this number better supports the desired range of program offerings. Many schools in Bridgeport, particularly those built before World War II, can only hold much smaller populations. Significant additions are necessary to bring adequacy within the Pre-K to 8 format, a model selected by the Board due to its elimination of the multiple transfer phenomenon that currently exists.

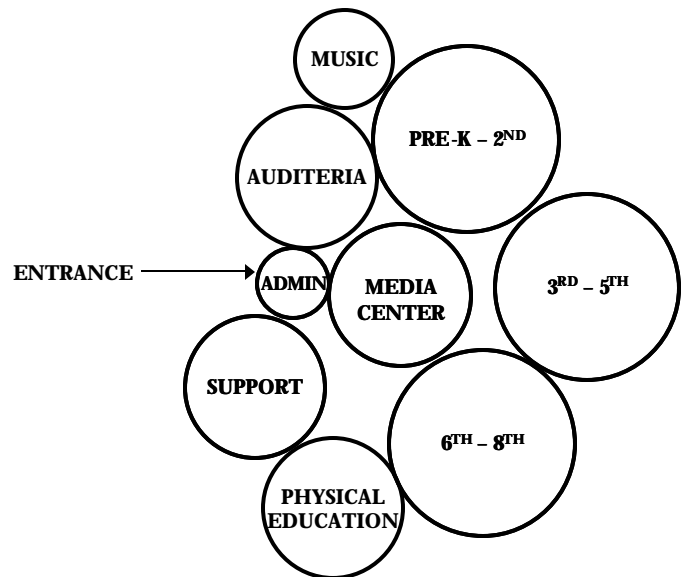
Educational adequacy in Bridgeport has been fully defined through a parallel process of Educational Specifications development led by the educational planners. Separate specifications were defined for Pre-K to 8 schools and high schools through workshops involving teachers, administrators, students, and parents. The outcomes of that process have been incorporated in this Facility Master Plan even though the Board has not yet approved them.

The schools conceived in the Educational Specifications process incorporate the most current and sensitive thinking about urban schools. Concepts were developed for both Pre-K to 8 and high schools that will reorganize groups of students into small learning communities within each building. For Pre -K to 8 schools, this was determined by age and maturity of students, resulting in a Pre-K to 2 cluster, a 3 to 5 cluster, and a 6 to 8 cluster. For the high schools, the smaller learning communities were established as clusters of 300 to 400 students. Each cluster is to be relatively self-contained. Magnet schools could be established as one of the clusters.

High School Diagram



Pre-K to 8 Diagram



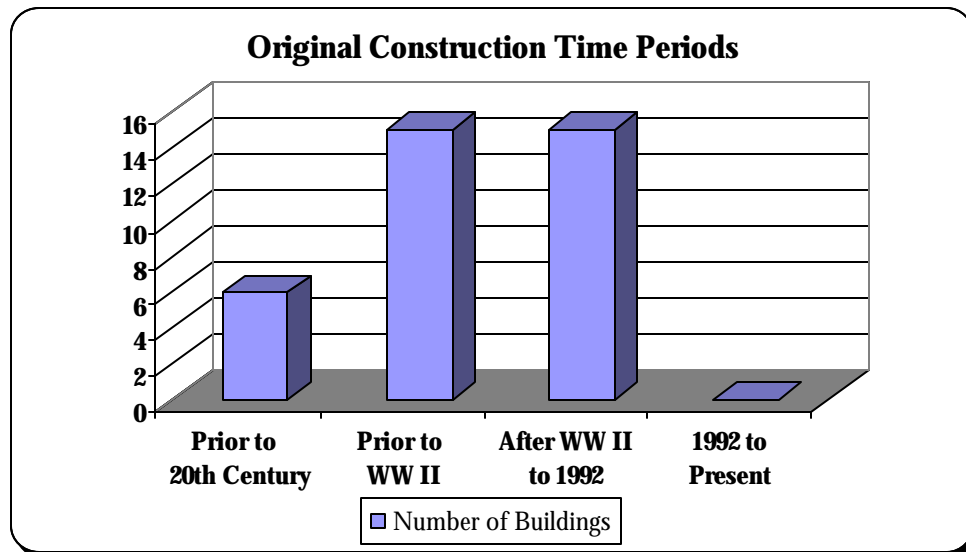


c) Building Conditions

Building conditions of Bridgeport schools varies widely. As was noted earlier, the initial construction dates span 100 years. Substantial renovations have been completed in many facilities, but five or six decades have passed since improvements have been made in others. Only four schools have been built since 1980.

While all school buildings in Bridgeport are reported to have adequate fire safety and structural support, many have some extent of mechanical, electrical, enclosure, handicapped access, weatherproofing, or finishes deficiencies. In some cases deficiencies are minor; in others they are significant.

In a separate project consultants to the City assessed the conditions of all school buildings in 1999-2000, and developed reports for each. Those reports contributed to the recommendations developed in this study.



The challenge of the Facility Master Plan is balancing the needs of enrollment change, educational adequacy and renovations. The challenge within the renovation program is balancing renovations, replacements, and addressing life-cycle costs.

A building which is 40 years old today will be 50 years old ten years from now. Based on its age, conditions and costs to improve the building, it may be more cost effective in the long-term to replace a building than to continuously renovate the facility. At the same time, certain schools are historic buildings. The renovation as a school or the new use of the structure needs to be sensitive to its historical characteristics.

Even buildings constructed in the past ten years may have improvement needs over the next ten years.



2. Proposed Actions

This Facility Master Plan considered the conditions of individual school buildings and sites as a component in determining proposed actions. The process included:

- Each school building was visited
- Building assessments developed in 1999-2000 were reviewed
- Existing site sizes were analyzed for educational adequacy
- Existing building sizes were reviewed to determine student capacity
- Buildings were categorized based on extent of renovation needed to bring conditions to a modern standard
- Costs of renovation were projected based the relative cost of renovation compared with new construction.
- Student housing locations were identified, and student populations were prorated to identify relative student locations in 2010.
- Recommendations for renovations, additions, or new buildings/new sites were made incorporating the items noted above.

This Facility Master Plan identifies specific action for each school within the system. Possible actions are as follows:

- New Building/New Site:** Existing building and/or site conditions are so challenging that it is more cost effective and/or more effective in educational program delivery to replace the present building with a new one on a new site. Costs carried were based on recent urban Connecticut school costs, plus an allowance per acre for land acquisition and building demolition, based on average Bridgeport densities.
- Additions:** In many cases it will be necessary to construct an addition to an existing building to meet educational program delivery needs. Sometimes an addition is necessary even though school enrollments are proposed to be reduced because the existing building does not meet all program requirements. Costs carried for additions were based on current urban Connecticut costs for new school construction. Land acquisition is sometimes required.
- Renovations:** While several school buildings have been renovated in recent years, many more need to be brought up to a good state of repair and code compliance, as well as an appropriate level of educational program support. Each building was assigned a degree of renovation, as follows:
 - General Maintenance: For buildings recently renovated, no costs carried.
 - Minor Renovation: Building generally in good condition, but needing selective renovation. Thirty percent of the cost of new construction was carried in the Facility Master Plan process.
 - Moderate Renovation: Building in fair condition, needing general renovation. Fifty percent of the cost of new construction carried in the Facility Master Plan process.
 - Major Renovation: Building in poor condition, needing substantial renovation. Seventy-five percent of the cost of new construction carried in the Facility Master Plan process.





- **Historic Renovation:** Building certified as a historic property, in poor condition, needing substantial renovation. One hundred percent of the cost of new construction carried in the Facility Master Plan process.

Retained and expanded buildings should be examined anew to determine whether there have been any significant changes that could affect the Board of Education's decision-making process.

D. PLANNING PRINCIPLES

This Facility Master Plan contains many decisions that will have long-term impact on the City of Bridgeport, its citizens and its students. Many of the decisions required careful deliberation from among choices that were not ideal. All of the decisions, however, were guided by a short list of Planning Principles.

The Planning Principles were developed specific to Bridgeport. They reflect a number of different factors, including School Board policy, community values expressed in the Community Dialogues, concerns of the Steering Committee, experience of the educational planning consultant, school facilities funding realities, and land acquisition limitations inherent in urban contexts. The Planning Principles that guided this Facility Master Plan are:

a. All Schools

1. Pre-K to 8, 9-12

The School Board has adopted a concept of two types of schools for Bridgeport:

- Pre-kindergarten through grade 8.
- High schools serving grades 9 through 12.

Many of the existing schools in Bridgeport were built for other grade groupings. Additions and renovations, and in certain cases site acquisition, will be necessary to some existing buildings to appropriately serve the functions needed.

2. Contiguous Sites

To adequately serve educational and operational needs, every school building needs several critical site functions. These include a safe bus drop-off/pick-up area, parking for teachers, staff, and visitors, a service zone for loading/unloading supplies, playgrounds, and playfields. Ideally every school building in the city would have all of these functions as close as possible to the school, and on one property.

The acreage requirements for these functions, including the building footprint, can range from five acres for a 500 student Pre-K to 8 school, to thirty acres and more for a high school. In a city as established as Bridgeport it is difficult to acquire the appropriate amount of acreage, because doing so often means displacement of housing or commercial businesses. Any requirement that school functions be located on single, contiguous properties, places an additional burden on the land acquisition process.

Identification of specific properties for acquisition is beyond the scope of this Facility Master Plan. Additional acreage needed for schools should create a single parcel for each school to the greatest extent possible. If, however, this is not reasonable given the urban context of individual school buildings, the school site functions could be placed on several, unconnected properties in close proximity. Attention should be paid to safety of students and teachers if moving between sites, and minimization of disruption to the local neighborhoods caused by such movement. At a minimum, the property with the school building should also contain the bus drop-off/pick-up, service zone, and, for Pre-K to 8, the playground. Parking, on or off a separate site, would ideally be visible from the building, and well lighted.



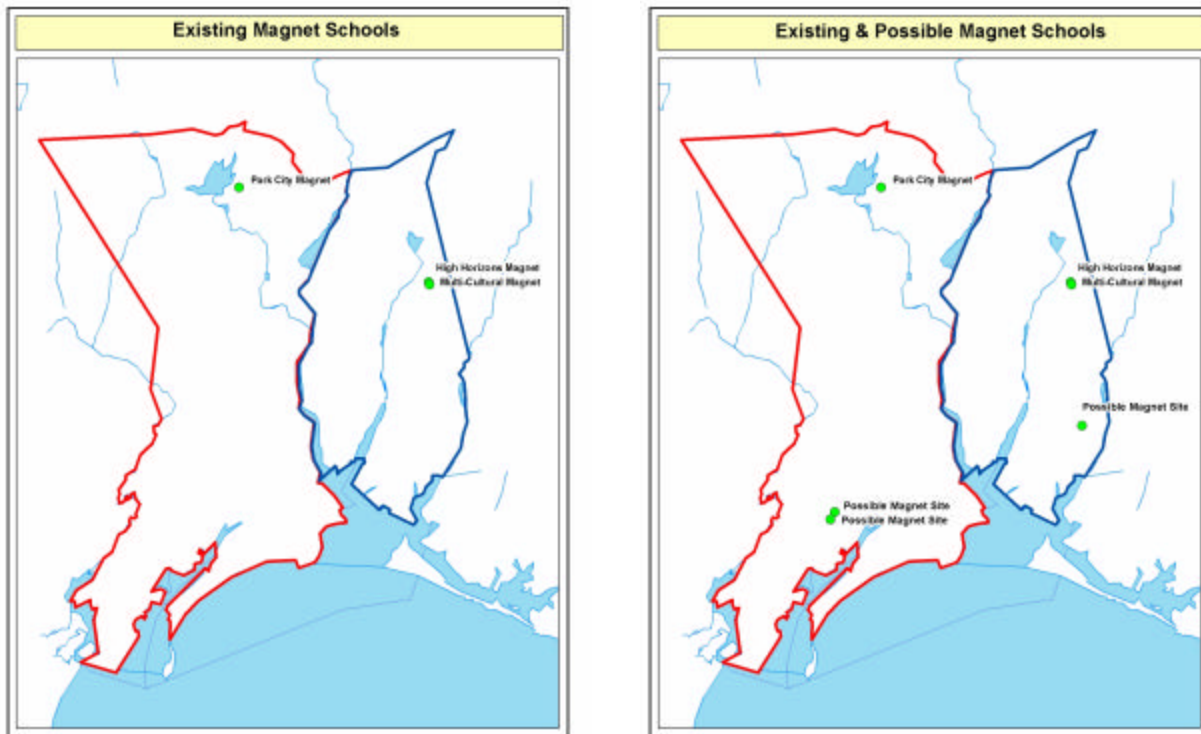
3. Magnet Schools

There are presently three Pre-K to 8 and three high school magnet schools in the city. The program is popular with students, parents, and community members. Each magnet school currently draws students from the entire city. Each magnet school has a unique educational theme.

This Facility Master Plan recommends increasing the number of magnet schools. Doing so would increase opportunities for students and parents to choose a focused education. The Community Dialogue responses supported increased number of magnet schools.

The Facility Master Plan is based on creating three additional Pre-K to 8 magnet schools, for a total of six. The current schools are located in the northern areas of the city. To achieve a better balance and possibly reduce travel time and costs, new Pre-K to 8 magnet schools could be located in the south.

Currently each Pre-K to 8 magnet school draws students from the entire city. The creation of additional magnets would create sufficient number of schools to allow some of them to be semi-districted, allowing some priority for students within the same quadrant of the city. Four of the Pre-K to 8 schools, for example, could be semi-districted, drawing 1/2 of their students from the 1/4 of the city in which they are located, and 1/2 from the entire city. The other two magnets could serve city-wide students.



Note: Possible magnet sites indicate general areas of Bridgeport, not specific sites.

High school magnet schools are typically highly focused on specific areas of study. In Bridgeport the magnets have been very popular with students and parents. The number and size of magnets should be able to grow with demand and educational appropriateness. This Facility Master Plan includes the magnet concept as independent learning communities, but physically located within the comprehensive high school properties unless there is a compelling reason to locate them separately. This will allow flexibility for future growth and change, as well as increasing operational efficiency and minimize land acquisition needs.



4. Special Needs Schools

The district currently operates several schools for students with special needs. Among these are schools for special education, schools for students with behavior issues, and alternative schools for students needing a different learning model. The Skane School, Sheridan School, Park City Alternative School, and the CIE Learning serves these needs. To some extent there may be reduced need for special education buildings as more general education buildings become fully accessible and equipped with appropriate spaces.

Generally school buildings for these uses tend to be smaller than those for regular education. The focus of the Facility Master Plan is to serve the general education needs. Special needs buildings will still be required. Consideration should be given to use of buildings that are no longer appropriate for general use for special needs.

5. Class Size

The number of students in individual classrooms is an inherent factor in the planning of new facilities. Smaller class size implies a greater number of classrooms, and often results in slightly larger buildings to serve a given student population. Presently the teacher contracts in Bridgeport limits class size to 25 in kindergarten and 1st grade classrooms and 30 students for the remaining grades. The general consensus among community members in the Community Dialogues and educators participating in the Educational Specifications process was that facilities in Bridgeport should be planned to allow for a lower student-teacher ratio.

Class size issues were thoroughly reviewed in the parallel Educational Specifications process. A student teacher ratio of 25 to one was used as the basis of planning for grades 1 through 12, and 18 to 1 was used for Pre-K and kindergarten. The overall building sizes developed in that process were reflected in this Facility Master Plan process, and, as a result, the class sizes noted above have been incorporated.

6. State Funding Limits

The State of Connecticut participates in the funding of approved new construction and renovation for schools. The funding could cover approximately 75% of the cost of construction in Bridgeport, including soft costs and land acquisition. [There is currently a proposal to reduce the percentage of state participation.] One limit in the funding is the total size of school buildings, as measured on a square foot per student capacity. Funding limitations are approximately 140 square foot per student for Pre-K to 8, and approximately 180 square foot per student for high schools. The limits established by the state have been incorporated in the Facility Master Plan.

7. Historical Significance

The city has a diverse stock of school buildings. Many of these were built before World War II. Of these several have historical significance. Whether they remain in use or are discontinued as schools, efforts should be made to verify their historical stature and assure historically appropriate renovations to maintain their significance and value for future generations.

The National Register of Historic Places and the Secretary of the Interior's standards are the national basis for determining historic value. Generally a building must be 50 years old and have unique significance or be a contributing component of a designated historic district to qualify.

The Barnum School is currently listed on the National Register. Other school buildings that are eligible but are not yet listed include Beardsley, Garfield, Howe, Madison, Maplewood, McKinley, Newfield, Sheridan, Waltersville, and Webster.



8. Recent Renovations

Bridgeport Public Schools embarked on a renovation/addition program in the mid to late 1990's. In it a reasonably thorough job was done to bring several older elementary school buildings up to a good, contemporary standard of construction. The renovation scope of work included mechanical and electrical systems, window replacement, roofing, fire safety systems, new interior finishes, and site improvements. Additionally space modifications were made to better support current educational practices.

The schools included in this recent program were Back Rock, Bryant, Hallen, Hooker, Madison, Read. Several of these schools are relatively small and on very small sites, and are thus not ideal candidates for continued use as Pre-K to 8 schools. In an effort to maintain the investments made in them during the renovation program, every effort has been made to continue their use in the Pre-K to 8 concept or as special schools. The Recommendations portion of this report outlines the details.

Some schools are too small to hold a full Pre-K to 8 program, and are located in parts of Bridgeport that make land acquisition very difficult. Some of these have been proposed to become Pre-K to 2 or Pre-K to 5 schools, each linked to a specific Pre-K to 8 school nearby that would receive their 6th, 7th, and 8th grade students. In other cases additions and possibly land acquisition were deemed reasonable to accomplish, and the recently renovated elementary schools have been proposed to become full Pre-K to 8 schools.

9. Discontinued Schools

There are several instances in which existing buildings are proposed to be discontinued as general use schools. These school buildings are generally very small, older, in need of significant renovation, and located on small sites. Specific reuses of these buildings are beyond the scope of this Facility Master Plan.

While not viable for general school use, the buildings and sites are valuable real estate. A reasonable process to follow in determining reuse would be to first consider whether the buildings could house special schools, or non-instructional school department functions such as administrative offices. If no school department uses are viable, the buildings might be used for other City departments. Otherwise the buildings could be sold for private commercial or residential use. Several of them might make excellent housing units or offices.

10. Neighborhood Schools

Many students in Bridgeport are bused to their schools. This may be partly an outcome of the 1970's desegregation order, which is still in effect. Busing is primarily due to the circumstance that the locations and capacities of existing school buildings does not match the pattern of where students live. There are considerably fewer school seats on the east side of the city than there are students. Additionally there are fewer seats in the older, central portions of the city than there are students.

One overwhelming value expressed by participants in the first Community Dialogue was the desire for neighborhood schools. Ideally, every child could be able to walk to a Pre-K to 8 school. This is achievable.

The Facility Master Plan has made every attempt to develop the planning concept for neighborhood schools. For the Pre-K to 8 schools, this is possible if new schools are built or additions are made to schools in the older, central portions of the city. Considerably more schools need to be built on the east side. For high schools, the neighborhood schools concept means a new school is needed in the northern part of the city.

Creating additional schools in the neighborhoods where students live will not be easy. It will require land acquisitions for buildings and site functions. This often will require purchasing housing units and relocating families. It may also mean acquiring commercial property. There may be fortunate instances where unused land or vacant buildings can be the starting point of land acquisition.



11. Attendance Boundaries

This Facility Master Plan recommends a strategy of repair, additions, and replacement of school buildings to create school capacity reasonably close to where students live. The analysis and recommendations were based on current student housing locations and projected future student enrollment, not on current attendance area boundaries. As the Master Plan unfolds, attendance area boundaries will need to be developed incorporating the new pattern of school locations. This can be determined only after specific sites for new schools is known. Determining attendance area boundaries is beyond the scope of this facility Master Plan.

12. Practicality

Recommendations within this Facility Master Plan have been developed to minimize disruptions and save money, to the greatest extent possible.

b. Pre-K to 8 School

1. Recommended School Size: 500 to 1,000 students

A school size of 500 to 1,000 students is recommended, with 750 considered the ideal for Bridgeport's Pre-K to 8 schools. This recommendation balances the educational and community building advantages of small schools with the operational efficiencies and program advantages of larger schools. Citizens participating in the Community Dialogue preferred smaller schools. Pre-K to 8 schools of up to 750 students were most preferred. On the other hand, smaller schools are more expensive to operate per student, have greater challenges in providing needed support and specialized learning areas, and, in the aggregate, will require more acres of property acquisition to serve the city's total future enrollments.

Pre-K to 8 schools encompass ten grade levels. As was noted earlier, these grade levels are proposed to be arranged in new and renovated buildings in three clusters, each with three or four grades. Each cluster will have as many support services included within it as is practicable. By doing so the domain of any student is restricted to one cluster plus special learning and shared spaces, such as cafeteria, gymnasium, and nurse's office. Effectively there will be three Small Learning Communities within each Pre-K to 8 school.

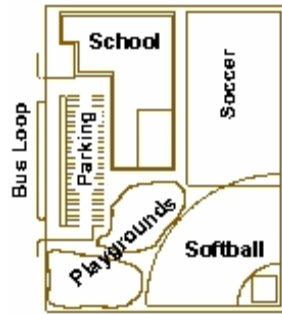
In general, larger schools can offer more specialized programs than smaller schools while remaining within state mandated square foot per student size limits. This is because support and special learning spaces, such as administration, food service kitchen, gymnasium, and media center consume a greater percentage of the total in a small school than in a larger school.

As noted earlier, fully detailed Educational Specifications were developed in a related process for Pre-K to 8 schools of 500, 750, and 1,000 student enrollments. These will be used as a basis of the detailed design of each upcoming school in Bridgeport. While each is a complete program, the 750-student program has fewer compromises than the 500, and no more than the 1,000-student program.

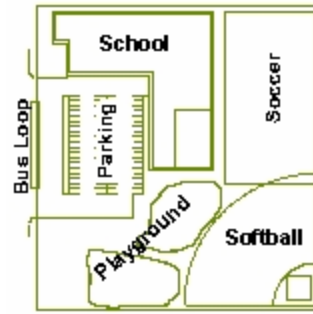
2. Recommended Site Size: 5, 6 or 7 acres

As was noted earlier, the Educational Specifications process developed detailed site needs for Pre-K to 8 schools in Bridgeport. Included, in addition to the building footprint, are bus pick-up/drop-off, parking for visitors and staff, service zone for loading/unloading supplies, playgrounds, and playfields.

These functional needs can be met on five acres for a 500-student school, 6 acres for a 750-student school, and 7 acres for a 1,000-student school.



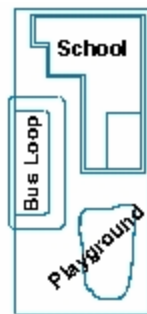
5 Acre Site



6 Acre Site

Note: A 3-story building is assumed in these diagrams. This diagram idealized - actual sites may not hold these functions due to topography, site shape, and size.

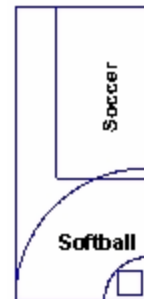
Ideally, each school site would be on a single property. In urban situations, this is not always possible. At the very minimum, the building, bus zone, service zone, and playgrounds should be contiguous. This will require 2.9 acres. Parking, if on a separate site, would ideally only be across the street from the school. It should have a clear site line to the school, and be well lit at night. Parking will require approximately 1/3 acre. Playfields will need an additional 2.7 acres if on a separate site.



Minimum
Elementary
School Site



Minimum
Elementary School
Parking



Minimum
Elementary School
Playfields

Note: this diagram idealized - actual sites may not hold these functions due to topography, site shape, and size.

c. High School 9-12

1. Recommended School Size: 900 to 1,200 students

The 2010-12 high school enrollments are expected to be approximately 4,800 students, according to the H.C. Planning Consultants study. The Facility Master Plan recommendation is to plan for 4,800 high school students.



The citizens participating in the Community Dialogue were highly supportive of smaller high schools, preferring schools in the 900 to 1,200-student range, and the continuation and expansion of the magnet schools program. The Facility Master Plan proposes both.

Comprehensive high schools of 1,200 students are proposed. Bridgeport’s future high schools were conceived by the Educational Specifications planning workshops, working in a process corollary to this Facility Master Plan, to be organized as several separate Small Learning Communities sharing a common core. [See diagram, earlier].

A magnet school of 300 to 400 students is proposed for each high school. The magnet school would be self-contained for all core subjects and administrative functions, but would share support services and functions, such as the media center. This concept of organization assures definition, focus and containment of the magnet school, while still achieving space efficiencies and some administrative efficiencies that come with larger school buildings.

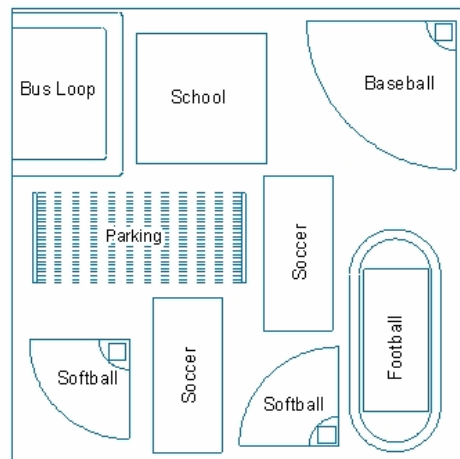
Magnet schools could be located separately if there was a compelling focus-related reason to do so. A method of sharing large and expensive support functions, such as gymnasium and auditorium, with a comprehensive school would need to be developed.

Each 1,200-student school could contain three Small Learning Communities and a Magnet School.

2. Recommended Site Size: 30 acres

High school site needs increased significantly in the later decades of the Twentieth Century as physical education and athletics became more significant components to high school academic and social life. In suburban and rural situations, it is not unusual for a high school site to be 50 or more acres. In cities this is generally not achievable because of the difficulties in assembling land.

The Facility Master Plan utilized site acreages for high schools that were more reasonable for Bridgeport’s density and extent of existing development. Sites of 30 acres were incorporated in the calculations for new schools. This size can include a reasonable amount of site functions, but may not completely meet school needs. Supplemental sites, for example parkland, may be necessary. The diagram below represents possible site functions. Irregular site shape and steep slopes will reduce the amount of functions from those shown here.

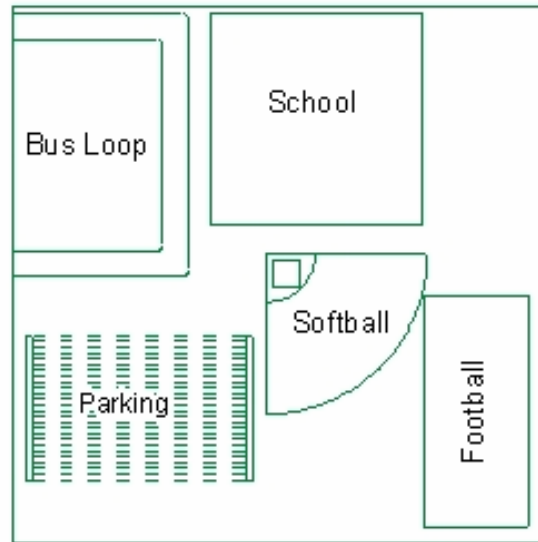


30 Acre Site

Note: this diagram idealized - actual sites may not hold these functions due to topography, site shape, and size.



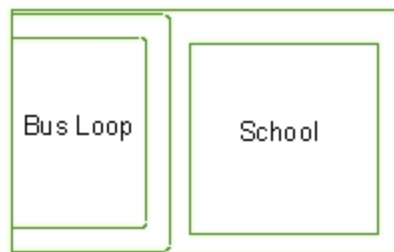
Thirty acres may be too large of a parcel to obtain in densely settled parts of Bridgeport. The Facility Master Plan utilized sixteen acres as the basis of planning for those high schools. The diagram below shows that a school footprint, bus drop-off/pick-up, parking and physical education fields may fit, assuming reasonable site shape and a nearly flat site.



16 Acre Site

Note: A 3-story building is assumed in these diagrams. This diagram idealized - actual sites may not hold these functions due to topography, site shape, and size.

In some situations a single site even of this size may be difficult to assemble. As with the Pre-K to 8 schools, a high school site may be placed on several closely related properties if no better choices exist. A school building with a bus zone would consume almost seven acres. Parking, if not on the school site, should be visible from the site and well lit. Playfields generally require two to four acres per field. The path of travel from school building to any remote functions should be carefully studied for the safety of students, staff, and visitors, and to assure minimal school disruptions to the surrounding community.



**Minimum
High School
Site**

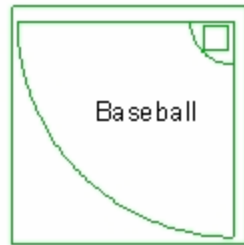


**Minimum
High School
Parking**

A school site comprised of multiple parcels will generally consume more property



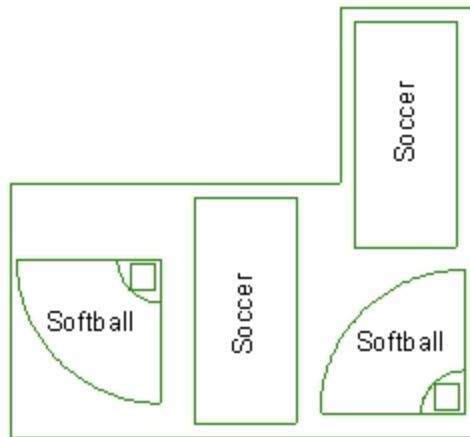
than a single site containing all functions.



Baseball Field



**Football
Field/ Track**



Other Playfields

Note: this diagram idealized - actual sites may not hold these functions due to topography, site shape, and size.

3. Replacement and Renovation

All of Bridgeport’s high schools need significant renovation to improve operating efficiency, assure safety, and improve educational adequacy. The citizens participating in the Community Dialogue strongly supported replacement of Harding and Bassick, and the renovation of Central with reduced enrollments. All of this can be accomplished while retaining each school’s historical legacy.

4. Locations Within the City

City high schools are districted, but all are located in the older, central portion of the city. Students living in the north are under-served. Ironically, this is the reverse pattern shown by the current elementary and middle schools, which tend to under-serve students in the older, central portions of the city.

This report recommends the siting of new high schools in a manner that is evenly distributed around the city. Acquiring adequately sized land will be a challenge, but the long-term advantages for students will be a handsome payoff.



E. RECOMMENDATIONS

Based on analysis of existing facility conditions, locations, and sizes, future enrollment projections, community comments from two city-wide Community Dialogues, numerous Steering Committee meetings, consultation with Bridgeport Departments of Planning and Public Works, and drawing upon the consultants expertise, the following long-term recommendations are presented to the Board of Education:

- **Pre-K to 8 and 9 to 12 System:** Continue with the current Board of Education policy to create a school system based on Pre-K to 8 schools, and 9 to 12 high schools. The city-wide analysis indicates that most elementary and middle school buildings, which are reasonable to continue in use as schools, can be adapted to meet the functional demands of Pre-K to 8.
- **Four High Schools:** Bridgeport should initiate steps to create a fourth high school, to create a 9 to 12 system with similarly sized schools, geographically distributed throughout the city.
- **Magnet Schools:** The current magnet school program is well regarded by educators and community members. The program should be expanded to create more opportunities for Bridgeport’s children by creating three more Pre-K to 8 magnets [total six], and at least one magnet for each high school [total four minimum]. Pre-K to 8 magnets should be geographically distributed around the city, and could be semi-districted, with ½ of each school’s enrollment coming from the quadrant of the city in which the school is located. The planning of the high schools should allow creation of additional magnets as is appropriate to meet curriculum goals.
- **Renovated, Expanded, and or Replaced Pre-K to 8 Schools:** A plan to thoroughly update the Pre-K to 8 component of the facilities system through carefully considered additions, renovations, and replacements of existing buildings should be undertaken. Additional land acquisition, necessary in many cases, should be judiciously pursued to minimize disruption of existing neighborhoods.
- **Continuing Infrastructure and Support:** The Bridgeport School Board should establish an internal administrative infrastructure and continued system of external support through consultants to undertake the Facility Master Plan.
- **Discontinued School Buildings:** Establish a process to determine priorities of future uses and possibly ownership of existing school buildings that will not be needed for education purposes in the future. A possible priority is as follows:
 - Other school needs, such as special schools, adult education, etc.
 - Other School department needs, such as conferencing, administration, etc.
 - Other City uses
 - Lease to others
 - Sell for private uses

	Pre K-8		High School	
	Current	Proposed	Current	Proposed
Number of School Building Owned				
General Instruction	30	29	3	4
Special Needs	2	TBD	1	1
Number of School Buildings Leased	4	0	0	0
Total Square Footage	1,876,100 SF	2,500,500 SF	736,600 SF	863,500 SF
Total Acreage	133 Acres	189 Acres	55 Acres	131 Acres
New Buildings		11		3
Additions		11		0
Renovations		11		2



Recommendations specific to each school were made with consideration of several factors. These included:

- Condition of existing school buildings
- School site size and location
- The home locations of students in Bridgeport. Community members strongly supported neighborhood schools in the Community Dialogues held as a part of this process.

A chart illustrating recommendations and approximate costs [in 2003 dollars] for all existing school buildings immediately follows. The action related to each school is described on the following pages:

a. Pre-K to 8 Schools

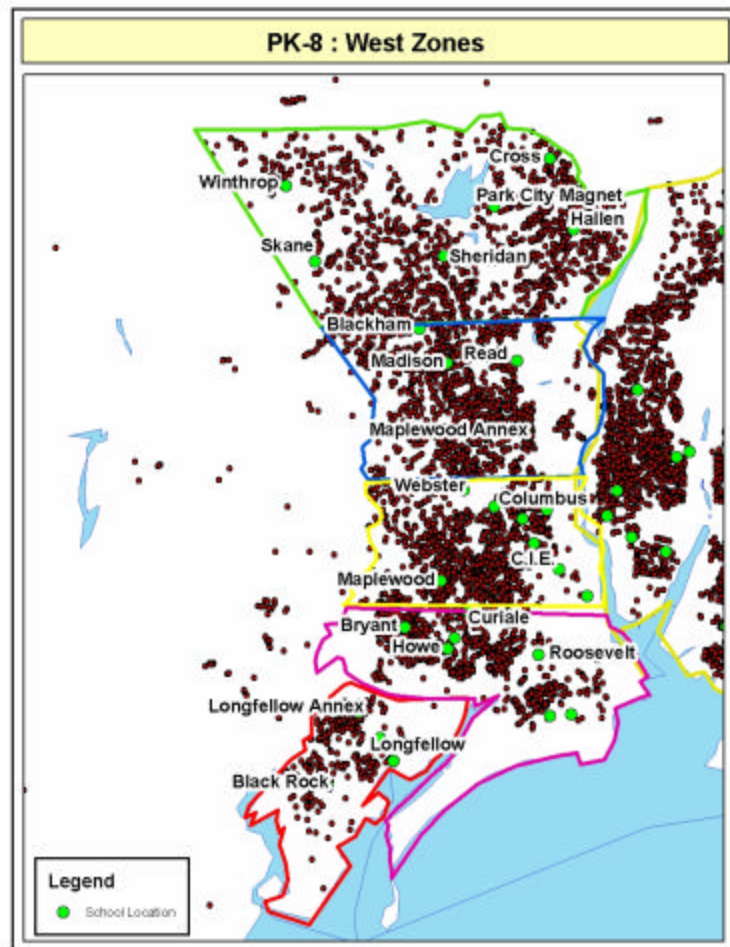
Home locations for all students were mapped using Geographic Information Systems mapping. Maps for high school students and Pre-K to 8 students immediately follow. For Pre-K to 8 schools, the city was subdivided into West and East components [with the river and Interstate 8/15 as the divide], and, within these, into zones based on .7 miles. Many community members desired Pre-K to 8 schools to be within reasonable walking distance for all students. One mile takes approximately fifteen minutes to walk. The .7 mile zone assured that wherever buildings were located the walk would not be more that a mile.

The use of this zoning concept was a planning tool only. It does not represent attendance areas for schools.

WEST ZONE

- Dots indicate student housing locations.

Pre-K to 8- Students in West Zone





**Pre-K to 8 Schools
WEST-RECOMMENDATION**

RECOMMENDATION				
SCHOOL	SUGGESTED GRADES	SUGGESTED # STUDENTS	SUGGESTED ACTION	TOTAL PROJECT COST
Skane	PK-8 Magnet	SEE BELOW	SEE BELOW	
Winthrop	PK-8	750	Moderate Reno-Addn	\$12-\$14M
Hallen	PK-8	500	Gen Maint-Addn	\$9-\$11M
Cross	PK-8	750	Major Reno-Addn	\$18-\$20M
Sheridan	Special	varies	See Note1	
Blackham	PK-8	936	Moderate Reno	\$13-\$15M
Madison	PK-5	435	Gen Maint	\$5-\$7M
Read	PK-8	500	Gen Maint	\$4-\$6M
Webster	PK-8	750	New Bldg-New Site	\$30-\$32M
Columbus	PK-8	750	Moderate Reno-Addn	\$14-\$16M
Maplewood		0	Discontinue	
Curiale	PK-8	500	Moderate Reno	\$7-\$9M
Bryant	PK-5	350	Gen Maint	\$6-8M
Howe	PK-8	1,140	New Bldg-New Site	\$44-\$46M
Roosevelt	PK-8	750	Major Reno-Addn	\$18-\$20M
Black Rock	PK-2	300	Gen Maint-Addn	\$4-\$6M
Longfellow	3-8	450	Major Reno	\$12-\$14M
Longfellow Annex/Whittier			Note 1	
Park City Magnet	9-12		SEE HIGH SCHOOLS	
Skane Magnet	PK-8 Magnet	500	Moderate Reno-Addn	\$11-\$12M
New Magnet	PK-8 Magnet	500	New Bldg-New Site	\$21-\$23M
New Magnet	PK-8 Magnet	500	New Bldg-New Site	\$21-\$23M
CIE/ Wheeler			Discontinue Lease	
Maplewood Annex			Discontinue Lease	
Subtotal PK-8 West		10,361		\$260-280M

Note 1: Consider reuse as special school, school department administrative uses, city use or priv 2003 costs, not including borrowing costs

NOTE: The above listed school groupings do not represent attendance areas.



**Pre-K to 8 Schools
WEST-SUPPORT DATA**

SCHOOL	DATE BUILT/ RENO/ ADD		ACRE- AGE	ZONE GOAL	SUGGESTED ZONE BLDG CAPACITY	SITE ACQUI- SITION
Skane	1952/1980/1996	7.8		1,988	2,000	
Winthrop	1955/1969/1997	5.8				0
Hallen	1930/1948/1976/	1.4				3.6
Cross	1959/1660	10.6				0
Sheridan	1895/1980	2.1				
Blackham	1964/1970/1989	10.9		2,310	1,871	0
Madison	1916/1999	1.3				3.7
Read	1968/1999	2.9				3.1
Webster	1884/1940	0.7		2055	1,500	6.0
Columbus	1965/1985	4.3				1.7
Maplewood	1890-94/1984	0.7				
Curiale	1984/1996	5		1835	2,740	0
Bryant	1912/1995	1				4.0
Howe	1889/1939/1972	0.8				7.5
Roosevelt	1965/1974/1980	5.3				0.7
Black Rock	1900/1905/1992	1.6		568	750	2
Longfellow	1959/1987	3.3				0
Longfellow Annex/Whittier						
Park City Magnet	1959	16.2		1,500	1,500	
Skane Magnet						0
New Magnet						5
New Magnet						5
CIE/ Wheeler	City Owned					
Maplewood Annex	Leased					
Subtotal PK-8 West		82		10,256	10,361	42

NOTE: The above listed school groupings do not represent attendance areas.



Skane: Convert to Magnet School for 500 students. Addition and moderate renovation needed. Consider extent of Special Education needs when other buildings are made accessible. Integrate Special Education in expanded building or relocate to other site, as necessary. (Special Education needs not included in costs.)

Winthrop: Expand building to hold 750 students at appropriate square feet per student. Moderate renovation needed.

Hallen: Expand building to hold 500 students. Acquire land. No renovation needed since recently updated.

Cross: Expand building to hold 750 students at appropriate square feet per student. Addition and major renovation needed.

Sheridan: Continue use as special school. Major renovation needed. (Not included in costs.)

Blackham: Reduce enrollment to approximately 940. Renovate. Pre-K to 8, but serve additional 6 to 8 students from from Madison. Moderate renovation needed.

Madison: Convert to PreK-5 school, with 6-8 students continuing at Blackham. Land acquisition required. No renovation needed since recently updated.

Read: Reduce enrollment to 500 to achieve appropriate square feet per student. No renovation needed since recently updated.

Webster: Replace with new building for 750 students on new site. Discontinue use of existing building.

Columbus: Expand and renovate building to hold 750 students with appropriate square feet per student. Moderate renovation needed.

Maplewood: Discontinue use as school.

Curiale: Reduce enrollment to 500 to achieve appropriate square feet per student. Moderate renovation needed.

Bryant: Convert to Pre-K to 5 school, with 6-8 students continuing at Howe replacement. Land acquisition required. No renovation needed since recently renovated

Howe: Replace with new building for 1,140 students on new site. Pre-K to 8, but serve additional 6 to 8 students from Bryant. Discontinue use of existing building.

Roosevelt: Expand and renovate building to hold 750 students with appropriate square feet per student. Land acquisition required. Moderate renovation needed.

Black Rock: Convert to Pre-K to 2 school, with 3-8 students continuing at Longfellow. Land acquisition required. No renovation needed since recently renovated.

Longfellow: Renovate for 450 students in grades 3 to 8. Intensify use of adjacent park spaces. Moderate renovation needed.

Park City Magnet: Relocate magnet school uses to Skane. Use site as building site for new high school.



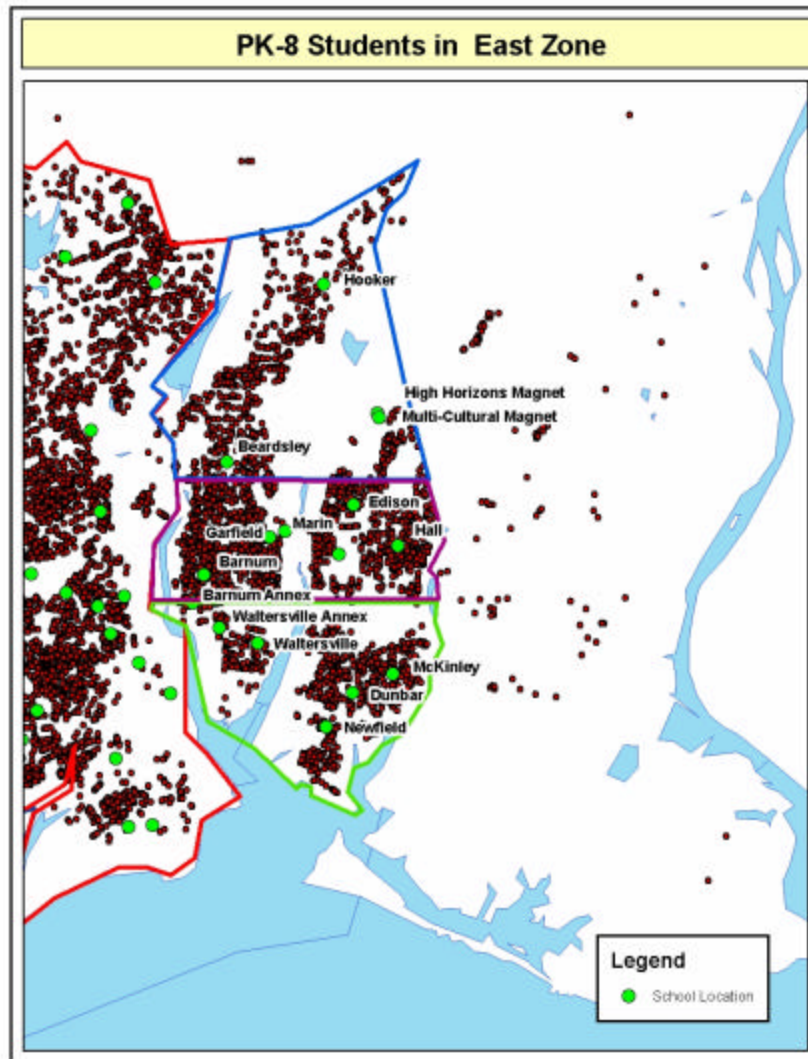
Two New Magnet Schools: Build two new magnet schools for 500 students each, one of which should be in the southeast quadrant of the city.

Longfellow Annex/ Whittier: Discontinue general school use.

CIE: Leave in City-owned former Wheeler School or relocate to discontinued school.

Maplewood Annex: Leased facility. Discontinue use.

EAST ZONE



- Dots

indicate student housing locations.

Pre-K to 8 – Students in East Zone



**Pre-K to 8 Schools
EAST-RECOMMENDATION**

		RECOMMENDATION			
SCHOOL	SUGGESTED GRADES	SUGGESTED # STUDENTS	SUGGESTED ACTION	TOTAL PROJECT COST	
Thomas Hooker	PK-8	750	General Maint-Addn	\$8-\$10M	
Beardsley	PK-8	750	New Bldg - New Site	\$30-\$32M	
Luis Munoz Marin	PK-8	750	Gen Maint-Minor Addn	\$1-\$3M	
Garfield	PK-8	750	New Bldg - New Site	\$30-\$32M	
Edison	PK-8	1,000	Redistrict w/ Hall	\$39-\$41M	
Hall		0	New Bldg - New Site		
Barnum	PK-8	500	New Bldg - New Site (Note 1)	\$22-\$24M	
Waltersville	PK-8	500	New Bldg - New Site	\$22-\$24M	
Dunbar	PK-8	500	Minor Reno	\$8-\$10M	
McKinley	PK-8	0	Redistrict w/ Newfield (Note 1)		
Newfield	PK-8	500	New Bldg - New Site	\$22-\$24M	
High Horizon [JFK]	PK-8 Magnet	500	Moderate Reno-Addn	\$9-\$11M	
Multi Cultural [JFK]	PK-8 Magnet	500	Moderate Reno-Addn	\$9-\$11M	
New Magnet	PK-8 Magnet	500	New Bldg - New Site	\$22-\$24M	
Barnum Annex			Discontinue Lease		
Waltersville Annex			Discontinue Lease		
6 To 6 Regional			Regional Program		
Subtotal Pre-K to 8 East		7,500		\$220-\$240M	

Note 1: Consider reuse as special school, school department administrative uses, city use or private use 2003 costs, not including borrowing costs

NOTE: The above listed school groupings do not represent attendance areas.



**Pre-K to 8 Schools
EAST-RECOMMENDATION**

SCHOOL	DATE BUILT/ RENO/ ADD	ACRE- AGE	ZONE GOAL	SUGGESTED ZONE BLDG CAPACITY	SITE ACQUI- SITION
Thomas Hooker	1927/1950/ 1999/2000	7.3	1,360	1,500	0
Beardsley	1904/1924/1985	2.1			6.0
Luis Munoz Marin	1990-92	5.1	2,626	3,000	0.9
Garfield	1911/1917/1979	0.7			6.0
Edison	1935/1942/1999	1.5			7.0
Hall	1914/1939	1.3			
Barnum	1892/1984	1.8			5.0
Waltersville	1890/1979/1981	1.6	1,519	1,500	5.0
Dunbar	1984	3.9			2.1
McKinley	1908/1920/ 1939/1969/1976	1.8			
Newfield	1906/1940	0.4		5.0	
High Horizon [JFK]	1969/1992	23.7	1,500	1,500	0
Multi Cultural [JFK]	1969/1993	total			0
New Magnet					5.0
Barnum Annex					
Waltersville Annex					
6 To 6 Regional					
Subtotal Pre-K to 8 East		51.20	7,005	7,500	42

Note 1: Consider reuse as special school, school department administrative uses, city use or private use

NOTE: The above listed school groupings do not represent attendance areas.



Beardsley: Replace with new building for 750 students on new site. Discontinue use of existing building.

Hooker: Expand building to hold 750 students with appropriate square feet per student. No renovation or land acquisition required.

Marin: Reduce enrollment to 750 to achieve appropriate square feet per student. General maintenance and minor addition needed.

Garfield: Replace with new building for 750 students on new site. Discontinue use of existing building.

Edison: Redistrict with Hall. Discontinue use of existing building.

Hall: Replace with new building for 1000 students on new site. Discontinue use of existing building. Consider use of Harding site or buildings.

Barnum: Replace with new building for 500 students on new site shared with Waltersville replacement. Consider reuse of present building, with historic renovation, as school department administrative uses, special school, or city uses.

Waltersville: Replace with new building for 500 students on new site shared with Barnum replacement. Discontinue use of existing building.

Dunbar: Reduce enrollment to 500 to achieve appropriate square feet per student. Moderate renovation needed.

McKinley: Redistrict with Newfield. Discontinue use as school.

Newfield: Replace with new building for 500 students on new site. Discontinue use of existing building D

High Horizons: Continue as magnet school for 500 students. Moderate renovation needed.

Multicultural: Continue as magnet school for 500 students. Moderate renovation needed.

New Magnet School: Build new magnet school for 500 students in southeast quadrant of the city.

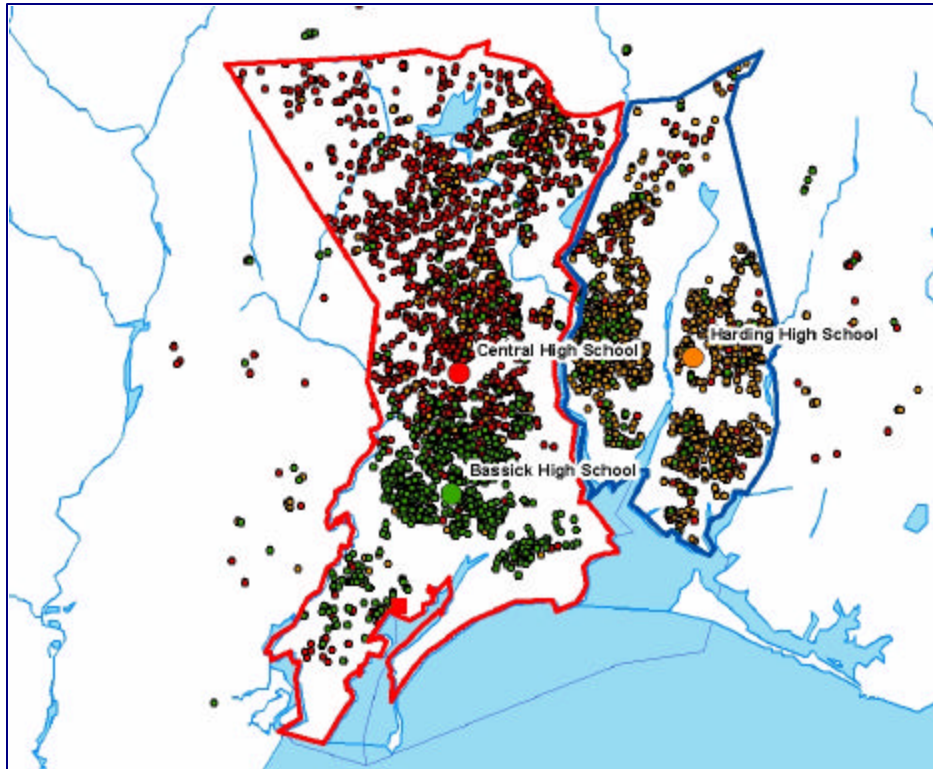
Barnum Annex: Leased facility. Discontinue use.

Waltersville Annex: Leased facility. Discontinue use.

Six to Six: Regional program. Not included in Facility Master Plan.



b. High Schools



- Dots indicate high school student housing locations

**High Schools
RECOMMENDATIONS**

SCHOOL	CURRENT SF	2002-2003 ENROLLMENT	RECOMMENDATION	
			SUGGESTED ACTION	TOTAL PROJECT COST
Bassick	253,136	1,100	New Bldg-New Site	\$62-\$64M
Central	231,830	2,316	Major Reno & Community Use	\$40-\$42M
Harding	251,600	1,360	New Bldg-New Site	\$62-\$64M
New High School			New Bldg-Park City Magnet Site	\$60-62M
Park City Alt		55	New Bldg-Discontinue School	\$4-6M
Regional Vocational Aquaculture Center			Regional Program	
Subtotal HS	736,566	4,831		\$220-240M

2003 costs, not including borrowing costs



High Schools
SUPPORT DATA

SCHOOL	DATE BUILT/ RENO/ ADD	ACRE-AGE	CURRENT SF PER STUDENT	SUGGESTED # of STUDENTS	SITE PURCHASE
Bassick	1929/1967	7.5	230	1,200	30
Central	1962-64/1998	37.4	100	1,200	
Harding	1925/1935/1965/1 982/1997	8.2	185	1,200	30
New High School				1,200	13.8
Park City Alt		1.6		Varies	2
Regional Vocational Aquaculture Center	1990				
Subtotal HS		55		4,800	76

Central: Reduce enrollments to 1,200 students, with self contained Magnet School within. Major renovation required.

Bassick: Replace with new 1,200-student building, including self contained Magnet School within. Review capability of existing site to hold new building and bus loop with supplementary functions with the neighborhood [new building on new site has been calculated in project costs]. Review capability of existing building and/or site for Pre-K to 8 school.

Harding: Replace with new 1,200-student building, including self contained Magnet School within, on new site.

New High School: Develop new high school for 1,200 students, with self contained Magnet School. Use site of Park City magnet as building location.

Park City Alternative: Replace leased building with new building on new site, or use existing building no longer needed for general school use [Webster, Howe, Maplewood, McKinley, New field, with renovations].



F. SUMMARY OF COSTS

Costs were noted in the previous charts on pages 21, 24, and 26 for each school by zone [Pre-K to 8 East and West and High Schools]. Overall they are as follows:

COMPONENT	COST IN 2003 DOLLARS
Pre-K to 8 West	\$260 - \$280 M
East	\$220 - \$240 M
High School	\$220 - \$240 M
TOTAL	\$700 - \$760 M



G. ESTIMATED REVENUE AND FINANCING SOURCES

Funding for new school facilities generally comes from state grants and local property tax revenue. The current Connecticut grant system follows a variable support concept based on each community's ability to pay. Projects need state approval prior to start of design and land acquisition. Projects for the Howe School replacement, a replacement for Maplewood, and a new high school have already received state approval due to prior year's applications.

Under the current system, Bridgeport would qualify for approximately 80% state support of fundable costs. Due to limits and restrictions on allowable costs, the effective number is closer to 75%. One critical component in the funding is the limit on square footage per student per school. This limit has been respected throughout the Facility Master Plan.

Property tax support calculations are variable. Annual differences in appraisals and actual bonded indebtedness will impact amount of taxes needed to support school facilities projects. The following chart outlines current indebtedness and maturity dates of various bonds. As bonds mature there may be tax revenues to support new school construction without raising taxes.

YEAR ISSUED	ORIGINAL AMOUNT	MATURITY DATE	OUTSTANDING BALANCE	PURPOSE OF BOND
12/15/82	\$15,800,000	12/15/03	\$ 395,000	Major school additions, renovations, roofing, technology furniture, equipment, and vehicles [buses, security vehicles]
07/01/86	\$16,773,120	06/01/06	3,354,624	
05/01/96	\$10,928,960	09/01/15	7,717,500	
03/01/97	\$2,590,012	03/01/19	2,306,692	
01/15/00	\$26,615,000	07/15/19	26,615,000	
07/18/01	\$14,952,240	08/15/21	14,952,240	
Total Indebtness			\$ 55,341,028	

Source: Finance Department, City of Bridgeport

An approximation of the annual tax for properties of various market values [not tax appraisal amount] is as follows. For example, a school project costing \$200 million might impact a homeowner with a home valued at \$150,000, approximately \$150.00 per year, assuming school costs are simply added to existing taxes, rather than supported partially by the retirement of existing bonds.

Market Value of House	Cost to Home Owner Per Year				
	\$100M* PROJECT COST	\$200M PROJECT COST	\$300M PROJECT COST	\$400M PROJECT COST	\$500 M PROJECT COST
\$50,000	\$25	\$50	\$75	\$100	\$125
\$100,000	\$50	\$100	\$150	\$200	\$250
\$150,000	\$75	\$150	\$225	\$300	\$375
\$200,000	\$100	\$200	\$300	\$400	\$500

Source: DeJong & Associates, Inc

* Assumed debt service \$2M per year



H. IMPLEMENTATION

Execution of this Facility Master Plan will take years of dedicated efforts from many City departments, boards, and individuals. An overall administrative, leadership continuity, and phasing strategy must be developed to assure steady progress and eventual success in rebuilding the City's school network.

Administrative issues include:

- ***Develop and implement a financial plan.***
The district should retain the services of financial consultants to develop a detailed plan for funding the projects identified. Consideration will need to be given to the potential refinancing of existing debt and the existing revenue sharing arrangement between the City and the school district.
- ***Update enrollment projections annually and update this Facility Master Plan concurrently.***
It is important to maintain up-to-date enrollment projections for the district in order to keep the department's planning efforts on target with needs. Periodically the overall Facility Master Plan will need to be updated to reflect work which has been completed, new issues which may arise as well as changing demographics or other factors.
- ***Retain professional services necessary to undertake the projects.***
Further analysis of each project and more detailed cost estimates and designs will be required to formulate the final plans and implement the projects identified. The district will need to retain planning services to develop educational specifications, design services, construction services, and other professional expertise in order to complete the projects identified.
- ***Continue to inform and involve the community at all stages in the implementation of these recommendations.***
Community involvement should be maintained through follow-up committees, additional community dialogues, newsletters, and other methods of communication and collaboration.
- ***Continue to use and update the GIS database.*** This tool is highly effective for analyzing school enrollment, zoning, and on-going property analysis.

To implement the Facility Master Plan, the Bridgeport Public Schools must expand its capacity to deliver and manage these projects. The proposed Facility Master Plan calls for a significant increase in the scope of the capital improvement program for it to be completed in a timely manner. The credibility of the plan is not only the approval of the plan but the ability to implement the plan in the time stated.

Capital improvement projects of this scale require both internal capacity [within the school department] and external capacity [contracted services] in order to accomplish this program. Some may argue that the school district should staff up internally to manage this program. Others would argue that the school department should outsource this program entirely. An effective capital improvement program requires a combination of internal management and outsourcing. There are several ways in which this structure can be developed. Further study will be required and decisions have to be made before the plan can be effectively implemented.

Capital improvement programs of this magnitude require the involvement of an external program management firm as well as an internal management and leadership structure. The school department, as the owner, clearly must be in charge of the capital improvement program. At the same time, additional leadership, management and support systems are needed to ensure timely management of the program. Typically, the majority of these services are outsourced to a program management firm.

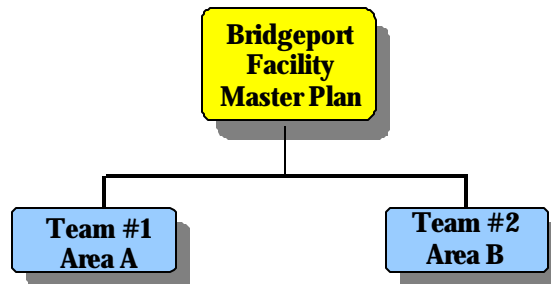
Many services could be either internal, external or some combination. For example, estimating services could be contracted out or it could be internal. It could be contracted out as part of the program manager's responsibility or contracted out as part of the internal responsibility. There are numerous such examples that need to be addressed.



Throughout the implementation of a master plan, the owner's [school district's] representation is essential. At a minimum, the owner should be involved in developing and approving the scope of the project and project budgets, participating in the selection of architectural and other firms, reviewing designs, monitoring the construction process, and providing an ongoing communication structure among the district, consultants, and stakeholders. To accomplish this objective, the department must develop the internal capacity for planning, design and engineering, accounting, and owner's representatives on projects identified. Outside firms will be needed to provide architectural, engineering, bidding, estimating, construction, project accounting, and overall construction and program management services.

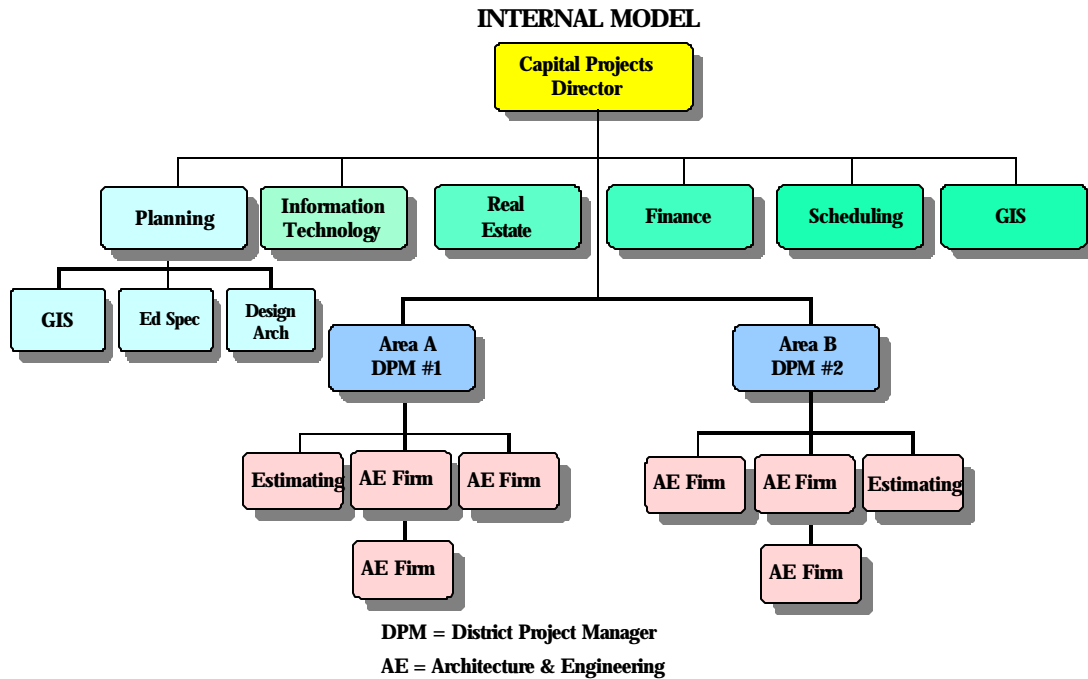
In addition to an overall program manager, multiple construction managers may be needed. The magnitude of this program requires it to be divided into smaller, manageable parts. In the development of the Facility Master Plan, it would have been difficult to deal with all the schools at one time. Likewise, it would be difficult for firms to coordinate 5 or more major projects simultaneously. One way to divide the program might be to organize the internal and external resources in teams that focus on different areas of the city.

The framework below suggests one approach that may be used. Two teams could be formed. Each team would have responsibility for the projects identified in an area. Based on the proposed projects and time lines, each team would be concentrating on 3-6 major projects at one time. Two to three projects would be in design and 2-3 projects would be under construction. Using this example, the internal capacities of the district and external capacities would be developed to ensure the complete program would have the appropriate management.

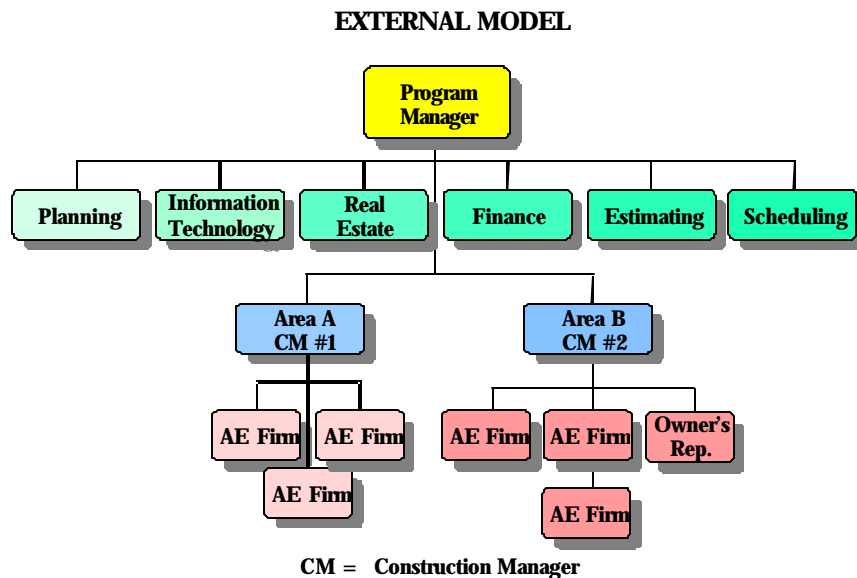




The following diagram is an example of how the internal operation might be organized. It should be pointed out that each area would be a department not a single person. For example to have an effective planning operation several planners would be needed in the area of demographics, school site planning, ed spec development, working with community groups, etc. The owner's representative would be the prime contact for the project and would provide continuity of leadership and direction.



Below is an example of the manner in which the external operations might be organized.



To successfully implement this plan, a clear organizational structure will be required.



Leadership Continuity Issues

Constructing a new generation of schools will be a process that will last for more than ten years. This will also require ongoing collaboration between the City council, mayor's office, superintendent's office, school board, public works, and the community. A structure should be considered that fosters collaboration and provides continuity of leadership over the course of time to insure that the vision that has been created becomes a reality.

This structure might be a joint policy committee, oversight committee, or some other structure that has a mission to be the caretaker of this plan to provide accountability, monitor progress, and report to the public. Membership might include representatives from the various local policy organizations and might include prominent individuals in the community with considerable local influence and credibility.

There has been significant change in recent years in the organizations that govern public education and provide various forms of oversight. A structure should be considered that would yield continuity of leadership and oversight to provide some assurance to the community that the plan developed would be implemented.

Several communities throughout the United States have developed various methods to address this situation. Clark County, Nevada [Las Vegas] has had an oversight committee to provide ongoing guidance and to extend credibility to their large-scale building program. New York City has established a separate School Building Authority. Beaufort County, South Carolina has a citizen-based oversight committee, as does Wake County, North Carolina.

Just as with building a highway, expanding an airport or building a space station, long-term projects require continuity of leadership structures at the policy, community, and staff levels. This issue must be addressed if this plan is to be successful.

Implementation Strategies should include:

- 1. Develop a timeline of implementation to complete these projects over the next decade or more** –The results of the Community Dialogues indicate that the community would support the construction/renovation projects needed to be undertaken by the district. These projects will need to be phased in during the next ten or more years.
- 2. Currently Funded Projections** – Several school construction projects have received funding grants from the state. The general scope and size of these projects have been incorporated in this Facility Master Plan, although specifics may change in correlation with other related issues.
- 3. Site Based Educational Specifications** – District-wide educational specifications for Pre-K to 8 and high schools have been developed. Site-specific educational specifications should be developed for each school to guide the renovation or replacement of each building.
- 4. Develop magnet school curriculums** – The Facility Master Plan calls for expansion of the magnet school program. Curricular concepts should be developed to identify any issues related to guiding locations of specific programs, particularly at the high school level.
- 5. Review repair/maintenance plan for all existing buildings** – Determining the order in which buildings will be replaced or renovated will improve the investment strategy of the capital improvement program. Correlate extent of future repair/maintenance with expected life of building. For example, if a building needs a new roof and the building is slated for replacement in year one, the investment in the roof should not be made. However if the building is slated for replacement in year three, a short-term fix may be in order. If the building is slated for replacement in the out years, a roof replacement may be cost effective.



6. **Chronic conditions** – Maintenance needs of all existing school buildings should be reviewed and placed in a hierarchy of need. Schools with problems needing most attention should be considered for renovation early in the overall process to correct chronic conditions, unless the building is to be discontinued.
7. **Establish process equity** – Consider overall city equity in the sequence of school construction. Select the first projects to have effect in many parts of the city.
8. **Sequence construction** – Develop a sequential list of school projects, with anticipated delivery dates for each. Build least disruptive school projects first. This generally implies new schools of major additions on large sites that can be accomplished while school is in session.
9. **Develop a plan to create “swing space”** – Implementation of this Facility Master Plan requires temporary school facilities that can be used to hold students while permanent buildings are renovated. Swing space may be a new school building which is later assigned a permanent use, leased space, or a combination of portable, or modular units. Selection of locations throughout the city for swing spaces is extremely critical to minimize disruption and to families and school staff.
10. **Boundary Adjustments & School Feeder Patterns** – School attendance boundaries need to be adjusted with Pre-K to 8 and high school feeder patterns established to align with the Facility Master Plan.
11. **Special-needs Students** – Develop a plan to ensure inclusion of the special-needs population as facility improvements are addressed. This includes provisions for students with learning disabilities, and students who may be physically or mentally challenged, as well as bilingual students and students with limited English proficiency.
12. **Appropriate Re-Use of Discontinued Schools or Former School Sites** – When a school building is recommended for closing, appropriate alternative use for the facility and site be sought in order to minimize the impact on the surrounding neighborhood.
13. **Confirm interrelated projects** – Interrelate high school sites with Pre-K to 8 sites. Park City Magnet site is proposed as a site for a new high school. Site evaluations and search for additional land nearby should be conducted immediately to confirm the viability of this concept. Additionally, the viability of reusing Bassick and Harding buildings and/or sites for Pre-K to 8 schools should be confirmed.
14. **Review the plan regularly** – Develop a build-out program in several phases, with reconsideration of each successive phase as the plan proceeds. As the Facility Master Plan is implemented, housing patterns will continue to change, more students may attend public schools, and lessons will be learned related to school size, site size, and programs offered.