

# ASSESSMENT REPORT

NOTE: This report has not considered the special educational needs of the district as those are immeasurable and can change from year to year. It also does not intended to be document as a recommendation for the COVID-19 pandemic.



## ACKNOWLEDGEMENTS

The team would like to extend our appreciation to Franklin Public School District (FPS) for choosing our team to conduct this comprehensive assessment. We must thank the school principals, custodial staff, teachers, facilities department, and the entire FPS staff who provided input, feedback, and guidance throughout this process.

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Demographics Report: Franklin Public Schools: Population and Enrollment Forecasts 2020-21 through 2029-2030

> Prepared by: McKibben Demographic Research, LLC

The Franklin Public Schools will foster within its students the knowledge and skills to find and achieve satisfaction in life as productive global citizens.

#### Our Mission

The Franklin Public Schools, in collaboration with the community, will cultivate each student's intellectual, social, emotional and physical potential through rigorous academic inquiry and informed problem solving skills within a safe, nurturing and respectful environment.



# **Executive Summary**

The Franklin Public Schools occupy multiple facilities ranging from 6 to 96 years of age. Over this period we have seen monumental shifts in how we educate students, particularly with regards to technology and educational delivery methods used. These changes have an impact on the ability of a facility to function as it was intended and as it needs to in the future.

In December of 2019, the Franklin Public Schools engaged Kaestle Boos Associates (KBA) to develop a Comprehensive Facilities Assessment focusing on capacity and the educational adequacy of the current schools.

Prior to engaging KBA, the District was provided with a Demographics Report that indicated enrollment was going to decline by approximately 12% over the next 10 years.

Utilizing this data, educational assessments of existing facilities and an inventory of existing spaces was collected through site visits and conversations with District leadership.

The results of the analysis indicate that Franklin Public Schools facilities are currently 26% under capacity and are anticipated to continue to decline to 31% in the next 10 years.

### Franklin Public Schools



District Total 2019-2020 5,069 students

> 2029-2030 **4,458** students

-12%

# If no changes were to occur the school facilities would:

- all continue to operate under capacity
- continue to create a financial burden in the maintenance of these underutilized facilities
- suffer reduced educational adequacy in schools built prior to 1996

# Introduction and Methodology

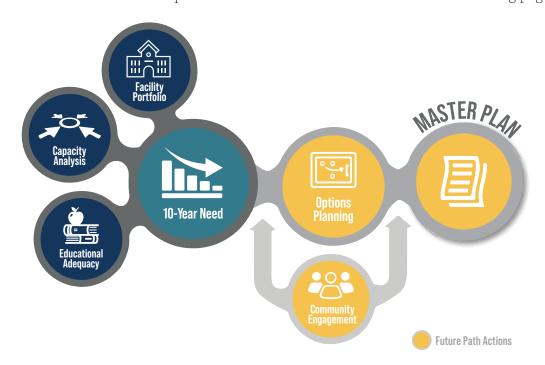


In order to support Franklin Public School's (FPS or the District) scholastic vision, each campus facility must be well-equipped with appropriate learning spaces for students and faculty alike. FPS has embarked on a comprehensive assessment of district facilities in order to gather the information needed to achieve the District's vision, goals, and objectives.

This report summarizes the results of the 2020 comprehensive assessment for FPS and provides options for future master planning. These components include a review of the District's facility portfolio, a capacity analysis, an educational adequacy assessment, and a 10-year utilization of facilities based on enrollment forecasts. Data is combined to formulate total district-wide space needs for the next ten years, which can be used to develop a facility master plan and forecast future funding requirements.

This report provides findings and recommendations for each component of the FPS comprehensive assessment. As shown below, each individual assessment or data-gathering exercise leads to the production of a list of needs over the next ten years. As a follow-on activity, Kaestle Boos Associates can use the information gathered in the comprehensive assessment to develop a facility master plan. Creating the facility master plan also involves community engagement meetings to capture information and reaction from important public sources.

Each comprehensive assessment component is described in further detail in the following pages.



Note: This report has not considered the special educational needs of the district as those are immeasurable and can change from year to year. It also does not intended to be document as a recommendation for the COVID-19 pandemic.



In order to produce accurate data regarding a district's portfolio, a facility inventory must be prepared. The Kaestle Boos team achieved this by gathering FPS's school data and meetings with administrators. During the initial stages of the assessment, data was collected, analyzed, and correlated for use throughout the remainder of the assessment. Final results can be used for future facility management.



A "functional capacity" approach was used to capture an inventory of all instructional spaces in their current use and determine the space utilization. At the elementary level, only rooms in which students receive their daily instruction were counted. Spaces dedicated to special instruction, such as music and art rooms, were not included as capacity spaces. At secondary levels, all instructional spaces were calculated into capacity with a utilization factor applied to allow for conference periods and other breaks in the instructional schedule. These capacity values are used to evaluate space utilization based on school type.



An educational adequacy assessment is used to measure the ability of existing facilities to support modern 21st century learning environments and deliver the desired educational program. It considers physical features, outdoor area, learning environments, social areas, media access, transition spaces and circulation routes, visual appearance, degree of safety and security, and site access. This data is collected by visual observations during the school day and self assessment by school administrators.

# **Future Path: Options Planning and Facility Master Plan**

As a follow-on activity to this assessment, FPS can use the information gathered here to develop a facility master plan. A facility master plan is often used by Districts to plan capital improvement programs before identifying a funding stream or acquiring funding. By developing decisions based on the prioritization and categorization of needs identified during the assessment, a district can begin planning with an objective foundation for long-term decision making. Combining assessment data with enrollment projections, capacity and utilization data, geographical information data, and community input will help facilitate the development of achievable, long-range options. Such options may include renovations, new construction, school consolidation, attendance area realignment, and possible facility closures.

# **Options Planning**

Based on information collected during an assessment, a district could begin to plan a facilities modernization program to address deteriorating buildings that are under or over utilized. Many different scenarios are possible that take into account facility condition, capacity, attendance zone utilization, and other factors to determine the future serviceability of facilities across a district. Each scenario would have a different impact on the actual cost related to facility condition improvements, life cycle costs, and costs of replacing some facilities in poor condition with new buildings.

It is important to note that developing actual potential scenarios must involve reviewing these factors, as well as additional planning involving key stakeholders and community members.

# **Facility Master Plan**

Once the results from the options planning process are vetted with the community, recommendations for a facility master plan would be compiled. This final report would outline an action for each of FPS's facilities. Recommendations would be presented by priority and in phases showing which facilities should be addressed first and then the subsequent order for remaining facilities.



# FRANKLIN PUBLIC SCHOOLS

is a highly rated, public school district located in Franklin, MA. It has approximately 5,100 students serving grades PK, K-12 with an average student-teacher ratio of 13 to 1. Approximately 1,000 of those students have an IEP (Individualized Educational Program) and 80 students part of the ELL (English Language Learner) program. The average graduation rate is 96%.

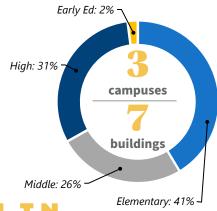
According to state test scores from 2019, Franklin Public Schools was above the state average in all three measured assessments. Overall the state classifies the District as "not requiring assistance or intervention" because of substantial progress towards targets.

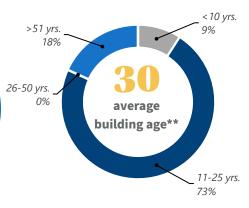
Currently the District has 7 total buildings with 3 of the buildings containing both Elementary Schools and Middle Schools. The average building age in the District is 30 years, but this data is skewed as a result of the age of Parmenter and Davis Thayer Elementary Schools which have outlived their intended life span (typical life span is 50 years).

	Frank	Massa	Compa
English Language Arts	68%	<b>53</b> %	<b>↑15</b> %
Mathematics	66%	50%	<b>↑16</b> %
Science	70%	<b>54</b> %	<b>↑16</b> %
0 1			• D . C1

in Public Schools

Source: Massachusetts DESE School and District Profiles





\*\* Davis Thayer Elementary: 96 years old Parmenter Elementary: 69 years old

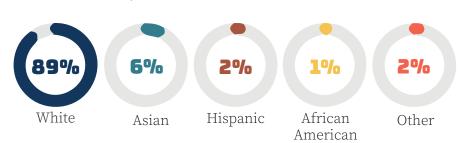
# TOWN OF FRANKLIN

# **DEMOGRAPHICS**

Total Population: 33,022

Median Household Income: \$115,355

Total Households: 11,655





Source: Education Demographic and Geographic Estimates

# **School Facility Portfolio**



# DAVIS THAYER ELEMENTARY SCHOOL



137 West Central Street Franklin, MA 02038

Year Built: 1924

Size: 45,000 gross square feet Functional Capacity: 281 students

Davis Thayer Elementary School serves a population of approximately 225 students in grades K through 5 with a student teacher ratio of 12 to 1. According to state test scores, 5% of students are above state average math and 13% above state average in english language arts.

Students from Davis Thayer transition to Annie Sullivan Middle School, where they combine populations with Helen Keller Elementary.



#### OAK STREET ELEMENTARY SCHOOL



224 Oak Street Franklin, MA 02038

Year Built: 1962 (renovated 2004) Size: 83,850 gross square feet Functional Capacity: 515 students

Oak Street Elementary School serves a population of approximately 390 students in grades K through 5 with a student-teacher ratio of 15 to 1. According to state test scores, 24% of students are above state average math and 30% above state average in english language arts.

Students from Oak Street transition to Horace Mann Middle School, where they combine populations with Kennedy Elementary.

#### HELEN KELLER Elementary School



500 Lincoln Street Franklin, MA 02038

Year Built: 2002 Size: 103,860 gross square feet Functional Capacity: 536 students

Helen Keller Elementary School serves a population of approximately 350 students in grades K through 5 with a student-teacher ratio of 14 to 1. According to state test scores, 23% of students are above state average math and 16% above state average in english language arts.

Students from Hellen Keller transition to Annie Sullivan Middle School, where they combine populations with Davis Thayer Elementary.



#### JOHN F. KENNEDY ELEMENTARY SCHOOL



551 Pond Street Franklin, MA 02038

Year Built: 1964 (renovated 1999)

Size: 55,000 gross square feet (not including temporary trailers)

Functional Capacity: 443 students

Kennedy Elementary School serves a population of approximately 350 students in grades K through 5 with a student teacher ratio of 15 to 1. According to state test scores, 28% of students are above state average math and 25% above state average in english language arts.

Students from Kennedy transition to Horace Mann Middle School, where they combine populations with Oak Street Elementary.



# GERALD M. PARMENTER ELEMENTARY SCHOOL



235 Wachusett Street Franklin, MA 02038

**Year Built:** 1951 (additions in 1968 & 1987)

Size: 56,000 gross square feet Functional Capacity: 384 students

Parmenter Elementary School serves a population of approximately 345 students in grades K through 5 with a student-teacher ratio of 15 to 1. According to state test scores, 16% of students are above state average math and 16% above state average in english language arts.

Students from Parmenter transition to Remington Middle School, where they combine populations with Jefferson Elementary.



#### JEFFERSON ELEMENTARY SCHOOL



628 Washington Street Franklin, MA 02038

Year Built: 1996

Size: 64,000 gross square feet Functional Capacity: 433 students

Jefferson Elementary School serves a population of approximately 345 students in grades K through 5 with a student-teacher ratio of 14 to 1. According to state test scores, 21% of students are above state average math and 15% above state average in english language arts.

Students from Jefferson transition to Remington Middle School, where they combine populations with Parmenter Elementary.



# HORACE MANN MIDDLE SCHOOL



224 Oak Street Franklin, MA 02038

Year Built: 1962 (renovated 2004) Size: 96,150 gross square feet Functional Capacity: 720 students

Horace Mann Middle School serves a population of approximately 450 students in grades 6 through 8 with a student teacher ratio of 11 to 1. According to state test scores, 11% of students are above state average math and 7% above state average in english language arts.

Students transition to Horace Mann from Oak Street Elementary and Kennedy Elementary School.



#### ANNIE SULLIVAN MIDDLE SCHOOL



500 Lincoln Street Franklin, MA 02038

Year Built: 2002

**Size**: 76,150 gross square feet **Functional Capacity**: 716 students

Annie Sullivan Middle School serves a population of approximately 380 students in grades 6 through 8 with a student teacher ratio of 11 to 1. According to state test scores, 9% of students are above state average math and 24% above state average in english language arts.

Students transition to Annie Sullivan from Helen Keller Elementary and Davis Thayer Elementary School.

# MIDDLE SCHOOL

# REMINGTON MIDDLE SCHOOL



628 Washington Street Franklin, MA 02038

Year Built: 1996

Size: 80,000 gross square feet Functional Capacity: 718 students

Remington Middle School serves a population of approximately 400 students in grades 6 through 8 with a student teacher ratio of 10 to 1. According to state test scores, 15% of students are above state average math and 9% above state average in english language arts.

Students transition to Remington from Jefferson Elementary and Parmenter Elementary School.

# The following schools are not included in this study.



# FRANKLIN EARLY CHILDHOOD DEVELOPMENT CENTER



224 Oak Street Franklin, MA 02038

**Year Built:** 2004 20,000 gross square feet

Franklin Early Childhood Development Center serves a population of approximately 110 students who are between the ages of 3 and 5 years old.



#### FRANKLIN High School



218 Oak Street Franklin, MA 02038

**Year Built**: 2014 306,550 gross square feet

Franklin High School serves a population of approximately 1750 students in grades 9 through 12 with a student-teacher ratio of 15 to 1. According to state test scores, 15% of students are above state average math and 11% above state average in english language arts.



The capacity of a school reflects how many students the school's physical facility can effectively serve. There are various methodologies that exist to calculate capacity. It is not uncommon to review an existing building only to find that the capacity that once had been assigned to a building is greater than what can be reasonably accommodated today. This is primarily due to a change in how programs are currently delivered.

During the past thirty years, programs in a public school system and the manner in which they are delivered have changed significantly. Repeatly the argument made is that "This school was able to accommodate 600 students thirty years ago and now you are saying it can only accommodate 400 students today. How can this be the case?" Persons making these statements often do not realize that when the building was originally constructed, the average class size was 30 students, the music program was being held on the stage, the teacher provided art on a cart, there were no computer labs, the Kindergarten program was only half-day, and students with severe challenges and special education needs were in separate facilities.

Historically, building capacity in many districts has been calculated based upon the number of general classrooms in elementary schools, the number of core instructional suites in middle schools, and the number of classrooms with a scheduling factor applied for high schools. This approach is referred to as the "design capacity" of the building. This methodology is rigid and does not accommodate district sponsored programs.

#### The capacity of a school building is driven by four main factors:

- 1. the physical size of the instructional spaces
- 2. the class size limits
- 3. the schedule of uses
- 4. the programs that are offered by the school

Just as education has evolved, the way schools facilities are utilized has evolved. Because of the dynamic, collaborative learning environments that are required to prepare students for the modern world a more flexible approach is utilized and referred to as the "functional capacity." The functional capacity of an educational facility is defined as the number of students the facility can accommodate. More specifically, a school's capacity is the number of students which can be accommodated given the specific educational programs, the class schedules, the student-teacher ratios, and the size of the rooms. The utilization rate of a facility is calculated by dividing the current or projected enrollment of the educational facility by the capacity. The utilization rate is used to determine if the facility has excess space or if it is lacking sufficient space for the given enrollment.

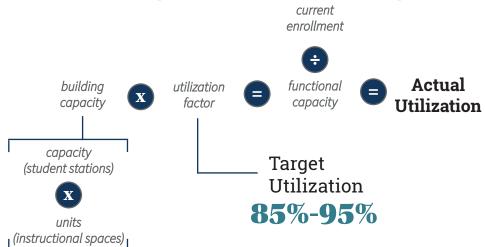


## **METHODOLOGY**

For the Franklin Public School District analysis, a single method of calculating capacity was used – the instructional space model. This brings both consistency and clarity to the process of determining capacity. To determine capacity of the buildings in FPS, a "functional capacity" approach was employed. To calculate functional capacity, an inventory of current use was collected for all teaching spaces. At the elementary level, rooms where students receive their standard daily instruction were counted as capacity, while spaces dedicated to special instruction such as gyms, computer labs, and library media center did not affect capacity. Special education rooms were used in capacity calculations but at a reduced student per room rate. At secondary levels, all instructional spaces were figured into capacity calculations. Again, in the middle schools, special education rooms were incorporated but at a lower student count per room.

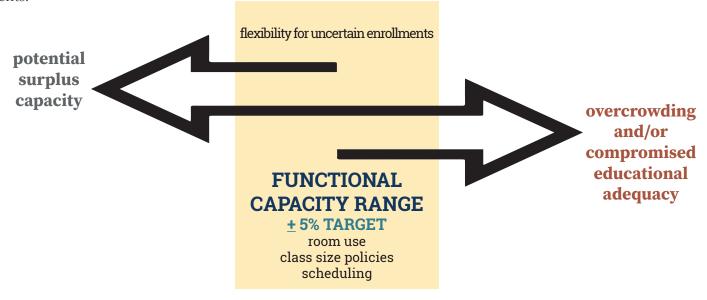
Existing building capacity information was gathered though analysis of building floor plans and interviews with district personnel. The calculations required a variety of information:

- plans, maps, diagrams, and drawings of existing buildings
- information regarding the numbers of teaching spaces and their uses
- square footage information for each school
- interviews with school administration

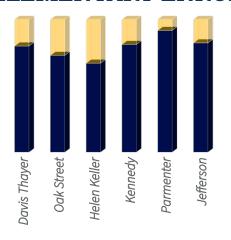


There are many capacity variables including physical, operational and programmatic that are considered as part of an analysis. The intent and goal for utilization of a school facility is to maximize the use of the building, resulting more educationally efficient buildings that have a lower operational cost. The average utilization rate nationally is 95-100% for elementary schools and 80-85% for middle and high schools. For the purposes of this study we have used the Massachusetts School Building Authority's standard utilization rates which are 95% for elementary schools and 85% for middle and high schools.

The standard utilization rates function as a way to benchmark the utilization of a facility as a snapshot of a certain point in time. To account for this it is common to use a standard  $\pm$  range of 5% to account for flexibility of uncertain enrollments.



## **ELEMENTARY ENROLLMENT VS. CAPACITY**



**CURRENT** 

**77%** 

PROJECTED 80%

As a district, the current K-5 enrollment is below capacity at all six of the schools. The total current elementary utilization is 77%. The projected 10-year enrollment slightly increases the utilization rate to 80%, but still well below the national and state averages. Current and future utilization rates mean that as a district most of the elementary schools currently underutilized will remain under capacity for the next ten years with no action.

Individually the utilization rates for each school are as follows:

# Target Utilization: 95%

#### 2019-2020 School Year

Helen Keller Elementary: 65% Davis Thayer Elementary: 81% Kennedy Elementary: 79% Oak Street Elementary: 70% Parmenter Elementary: **90%** 

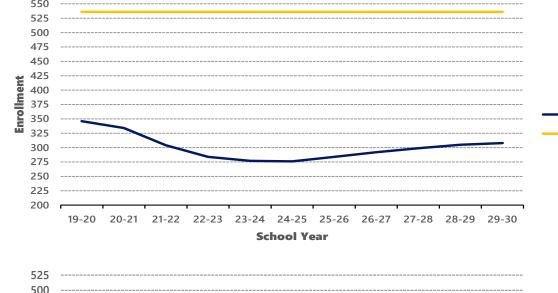
Jefferson Elementary: 80%

#### 2029-2030 School Year

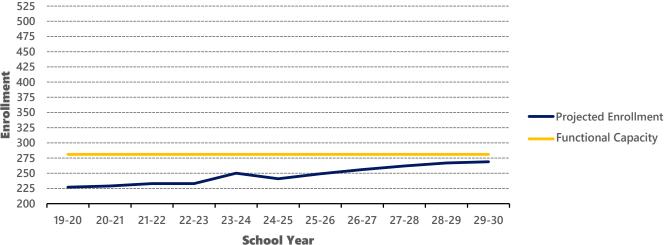
Helen Keller Elementary: 57%
Davis Thayer Elementary: 96%
Kennedy Elementary: 66%
Oak Street Elementary: 78%
Parmenter Elementary: 104%
Jefferson Elementary: 78%

The graphs below show the current capacity, enrollment and utilization for each school as well as the projected enrollment and utilization rates based on enrollment data provided.





Davis Thayer Elementary

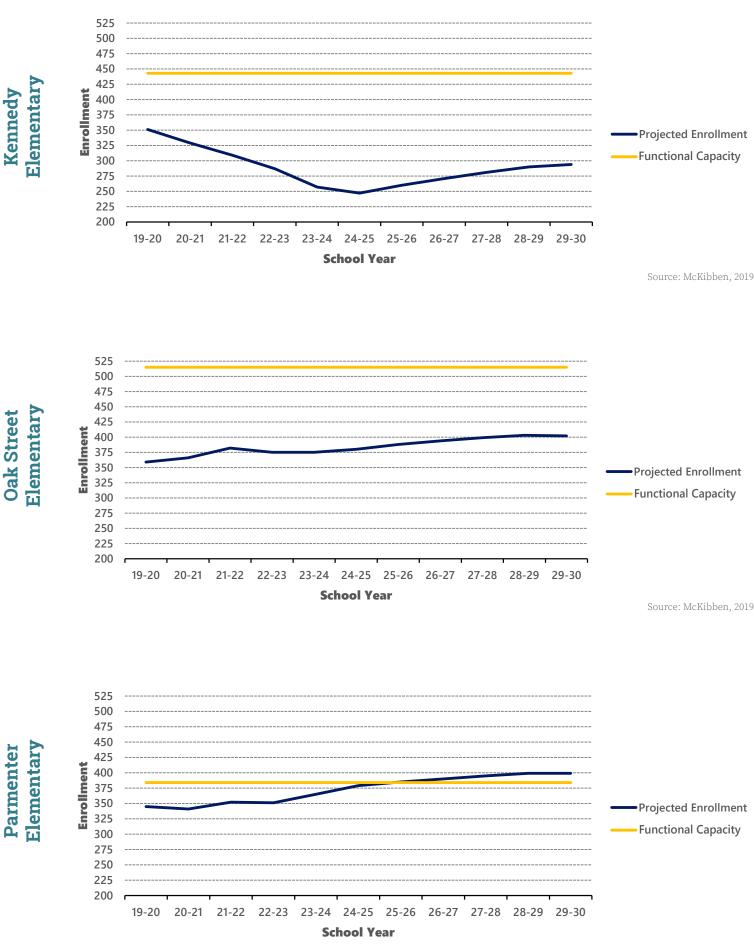


Source: McKibben, 2019

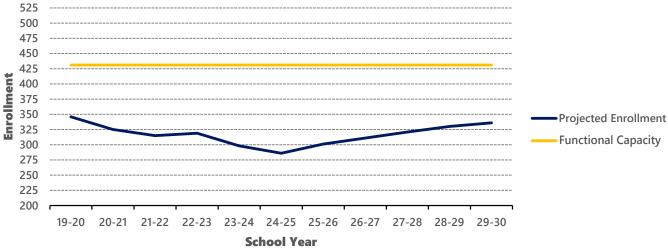
Projected Enrollment

**Functional Capacity** 

Source: McKibben, 2019

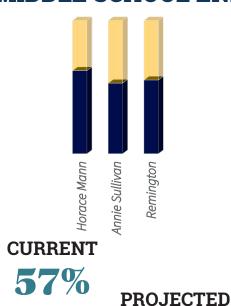






Source: McKibben, 2019

# MIDDLE SCHOOL ENROLLMENT VS. CAPACITY



48%

and state averages. Current and future utilization rates mean that as a district all of the currently underutilized middle schools will remain under capacity for the next ten years with no action.

Individually the utilization rates for each school are as follows:

As a district, the current 6-8 enrollment is below capacity in the all three of the schools. The total current elementary utilization is 47%. The projected 10-year enrollment decreases the utilization rate to 48%, well below the national

# Target Utilization: 85%

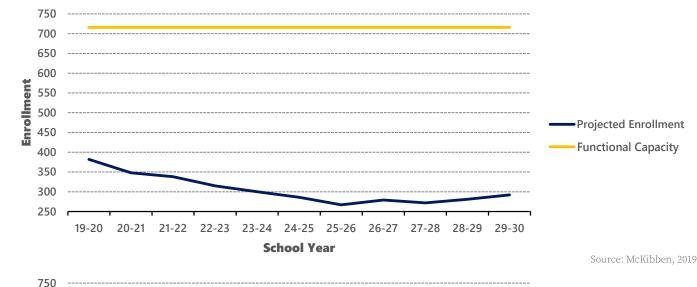
#### 2019-2020 School Year

Annie Sullivan Middle: 53% Horace Mann Middle: 63% Remington Middle: 56%

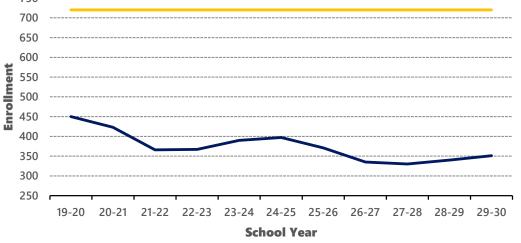
#### 2029-2030 School Year

Annie Sullivan Middle: 41% Horace Mann Middle: 49% Remington Middle: 53%





Horace Mann Middle

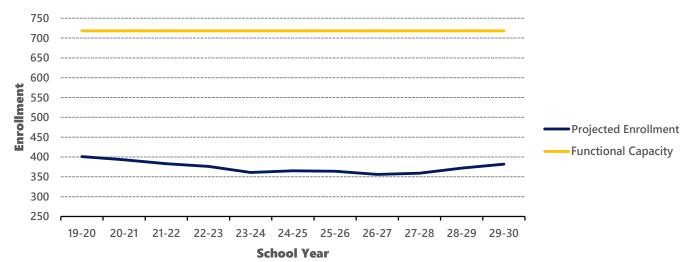


Source: McKibben, 2019

**Projected Enrollment** 

**Functional Capacity** 





Source: McKibben, 2019



A critical component to functional equity across the broad spectrum of the Franklin Public School District is educational adequacy. The Educational Adequacy Index [EAI] is used as a comparative indicator to identify the relative programmatic needs of a facility, group of buildings, or an entire portfolio.

Not only used as a way to compare facilities, an educational adequacy assessment is imperative to determine how well a renovated school will support teaching curriculum. The assessment is valuable when campuses are faced with significant capital needs including major renovation or replacement. Decision makers must evaluate the cost tradeoff of using a facility which has challenges facilitating future-focused education for long term use. When considering long term strategic plans, it is not wise to spend millions of dollars renovating a facility with a low suitability score only to have a newly renovated, but educationally obsolete, school facility.

There are several challenges in assessing educational adequacy. First is that programmatic needs change far quicker than the facilities themselves do. For example, many facilities built in the 1950s did not have a separate music and art room. These programs were held in the student's home room as "art on a cart" or on the stage of the multi-purpose room. Special education programs were not delivered in the regular public school and spaces have been retro-fitted with the proper restrooms, changing rooms, and specialty spaces required to serve that student population. Itinerant workers who require offices and support spaces including psychologists, behavior analysts, and social workers, did not exist when most facilities were planned. Another challenge is that elements that make up educational adequacy are difficult to quantify. For example, based on current educational specifications, each classroom should have natural lighting. This evaluation can be somewhat subjective depending on the assessor conducting the survey.

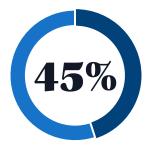
# WHY EDUCATIONAL ADEQUACY MATTERS



Research supports the benefits of modern classroom design.

of students reported better grades, better attendance, or improved creativity in newly designed active learning environments

Source: Mark Fehlandt, Hamline University, "Flexible Classroom Design and Its Effects on Student-Centered Teaching and Learning," August 2017



increase in academic engagement can result from improvements to the classroom layout such as creating space for independent work or making a clear pathway to access school supplies

## 21<sup>ST</sup> CENTURY LEARNING ENVIRONMENTS

# **Primary Teaching Space: Classrooms**

Although we are moving towards an educational environment where learning occurs anywhere, facilitated learning remains focused on the classroom unit. Historically, classrooms were one-size-fits-all to support a stand and deliver approach to content delivery. We now know that every student learns differently, and physical space has as much of an impact on how a student learns as the content itself.

In primary schools, students spend greater amounts of time in a single classroom where they receive most of their content and leave these spaces for enrichment courses only. Large boxy classrooms are broken down into designated activity zones through furniture placement which allows for differentiated instruction based on content area. While using furniture and finishes works to create zones, the space can also be designed in alternative shapes to reflect the ideas of zoning. In many districts, additional educators or specialists may also be working with groups of students in the classroom for specialized content, push-in services, or to allow an educator to focus on smaller groups of students.





In secondary schools, several different content areas could utilize a single room during different periods of the day depending on the teaching model and schedule. It is important that classrooms are flexible enough to provide for different content area instruction. Student-centric educational delivery focuses on student collaboration which necessitates lightweight, easily movable furnishings so that groupings can be facilitated quickly and easily among students. Additionally, different pedagogical approaches (including STEAM) may encourage team teaching and cross collaboration so physical connections between classrooms and access to breakout space is increasingly important.

Classroom design that is flexible enough to accommodate multiple teaching zones is critical. Solutions should include providing several teaching walls with access to technology and writable surfaces. Designers must also ensure that there are zones within a classroom for activities that are quiet or loud and that distractions are minimized between these zones. Finally, it is important for teachers to resist adorning their classroom walls with decor as these can be significant distractions particularly for students with attention disorders or autism.

# **Secondary Teaching Spaces: Small Group and Breakout Spaces**

Space variety is important not only within the classroom but also adjacent or in proximity to classrooms. Creating small group areas and breakout space within sight line from a classroom space allows a few students to work in a more private space. Access to a variety of spaces can allow for a teacher to differentiate instruction to individuals more easily.

Additionally, evidence has proven that students with special or alternative needs (such as English Language Learners) are most successful when they can be included in the general classroom and receive services through push-in and pull-out. Pull-out services provided by a specialist, ideally occur close to the classroom so that it minimizes disruption to the students' classroom time traveling.

Breakout space can also provide an alternative look and feel. Some students learn most effectively in soft seating and a more casual environment. It is also important to recognize that the stresses on all students social/emotional needs in the world sometimes necessitates a break. Adjacent spaces with alternative and flexible uses can provide a respite for students as needed.



# STEAM | Makerspace

STEAM is a pedagogical approach to teaching and learning which utilizes the content areas of science, technology, engineering, arts, and mathematics together. It allows students to pursue alternative methods of inquiry, critical thinking, and dialogue to allow for a more holistic approach to curriculum delivery. The interweaving of content and discovery that STEAM provides allows students to create multidimensional connections between learning areas which prepares them for the real world. STEAM has been proven an effective approach for all students, particularly those at-risk or with special needs as it shifts away from outcome-based education by focusing on problem solving, exploration, innovation, and relevancy. Additionally, the project-based approach that STEAM can facilitate taps into hands-on, tactile learners in a way that stand and deliver education typically cannot.



#### **Media Center**

Media centers are not your traditional library. It is important to recognize that traditional libraries in education are a thing of the past. Future focused media centers are the educational heart of a school building. While they do still have books, much of the focus of the media center is technology and student driven inquiry. Media centers vary depending on each individual district or school building however they may include spaces for fabrication labs, maker spaces, small



group spaces, breakout, formal and informal study areas, tv and visualization studios, computer labs, reading rooms, and research labs. Much like other educational spaces, they should include flexible seating including a variety of traditional furnishings and soft seating to accommodate different types of learners.

The role of the librarian has also changed into the role of a media specialist. This shift allows the specialist to guide students in their exploration through a diverse set of media, and to be the moderator of technical spaces like fabrication labs and maker spaces. The media specialists can also serve the role of push-in services to aid classroom educators in student-centric investigation.



Because the media center is the educational heart of a school building. It is important that it can be accessed by all students for extended hours. While a facility may have security in place to isolate classroom wings during non-school hours, it is important that the media center be available for mornings, evenings, and weekends. The space is a very important resource for community groups, small businesses, and professional development which can occur all times of day.

# **Faculty Support Spaces**

We have clearly seen a shift away from the assembly line method of stand and deliver education over the last several decades. Moving from the model of "Sage on stage" to "Guide on the side" does not diminish the role of the educator by any means. In fact, there are additional pressures placed on educators as their need to differentiate instruction can require individualized lesson plans.

In secondary education, scheduling and space utilization means some classrooms remain empty several periods a day if they were "owned" by one teacher. In an effort to activate space and increase utilization, most traditional classroom spaces can be shared between a few educators throughout the day. This allows fewer classrooms to be constructed and reduces overall construction costs and can reduce financial burdens on a community. The result is that teachers do not "own" a classroom however they still need to be working when they are not actively teaching.

Interdisciplinary instruction, STEM/STEAM, and future-focused pedagogical approaches to curriculum requires teacher collaboration more than ever. It is important that this need is supported by physical space. Centralized



collaboration areas for teachers is critical to support these new teaching methods. Additionally, it is important that each educator has a place for them to work individually that they "own" like a desk or a workstation. These two spaces can be co-located to encourage extemporaneous collaboration between educators. Other unforeseen positives from co-location of staff are that they learn more from each other about their students and can inadvertently become more in tune with any personal issues that may affect their schoolwork.

# **Outdoor Learning**

Spending time outdoors immersed in the natural environment should occur more often than Physical Education lessons. In an era where students are spending increasingly more time plugged in and staring at screens, we have learned that there are significant benefits to outdoor learning. There is proven health, social/emotional, and engagement benefits to incorporating the outdoor environment into day to day teaching and learning.

Curriculum can also be significantly enhanced by outdoor learning spaces. For example, simple amphitheater tiered seating can create a space for theater, music, and humanities. Sculpture gardens and outdoor art studios elevate artistic diversity. Outdoor space for construction related vocational spaces can also create significant benefits such as home mock-ups. Science investigation and experimentation can take the shape of rocket launches or environmental studies to extend the classroom to the outdoor world.

As expensive as construction has become, it is important to utilize every part of a facility including the site as an opportunity for learning. Site design can be as simple as a touchdown space when waiting for a parent pickup, to recess, outdoor play areas, discovery zones, as well as free-form nature play learning areas, and formal outdoor classrooms. It is important that there be a variety of spaces as it creates flexibility in the use of outdoor space.



## **METHODOLOGY**

# **Educational Adequacy Index [EAI]**

In order to provide an educational adequacy assessment with objective and consistent results, a collection and reporting instrument was developed by Kaestle Boos Associates for this study. The assessment was conducted by a sole educational planner and was based on the the following reports:

- · Clever Classrooms, by Peter Barrett, Dr Yufan Zhang, Dr Fay Davies & Dr Lucinda Barrett
- · School Building Assessment Methods, by Henry Sanoff

The Educational Adequacy Index [EAI] was developed as a measurement indicator of quality utilizing the following categories:

Physical Features
Outdoor Areas
Learning Environments
Social Areas
Media Access
Transition Spaces and Circulation Routes
Visual Appearance
Degree of Safety and Security
Site Access



To calculate the Educational Adequacy Index [EAI] each category type was given a score out of 5. The total number of requirements for a category was calculated and divided up to determine the average for that category. Finally, a weight factor is applied to the categories that are deemed more important and have a greater "weight" in the Educational Adequacy Index [EAI] total. The table below lists all of the requirements, including the weight factor for that category.

#### **Physical Features -15%**

Connection between indoor and outdoor areas within the campus

Appropriate building for learning

Accessibility for people with disabilities

Building designed and built to the scale of children

Control of internal and external noise level

Views and natural light through windows

Visibility of main entrance for students and visitors

#### **Outdoor Areas - 5%**

Appropriate outdoor areas for learning

Green areas adjacent to the learning environments

Outdoor play areas for students

Outdoor learning environments with natural elements

Outdoor learning environments for social interaction

#### **Learning Environments - 20%**

Indoor learning areas for individual learning styles

Breakout rooms adjacent to classrooms

Areas of instruction for the arts

Areas of instruction for sciences

Teachers workspace

Comfortable and stress-free classrooms

Stimulating classroom atmosphere for learning

Indoor air quality in classrooms

Adaptability of classrooms to changing uses

Lighting quality in classrooms

Classroom walls conducive for displaying students'

work

Hallways conducive for displaying student work

#### Social Areas - 10%

Inside quiet areas for eating

Outside quiet areas for eating

Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)

Places where students can be noisy and engage in physical activity

Public areas fostering a sense of community Students personalizing their own places

#### **Media Access - 10%**

Media and technology access for students in the learning environments

Media and technology access for teachers in the learning environments

#### **Transition Spaces and Circulation Routes - 5%**

Circulation routes within and among learning environments

Hallways as passageways within the school

Clear markings for interior circulation routes

Transition spaces inside and outside of the learning environments

#### **Visual Appearance - 10%**

Visual appearance of the exterior of school building

Visual appearance of the interior of school building Harmony of the school building with surroundings Variation of ceiling heights within the school for comfort and intimacy

Visual stimulation of school building

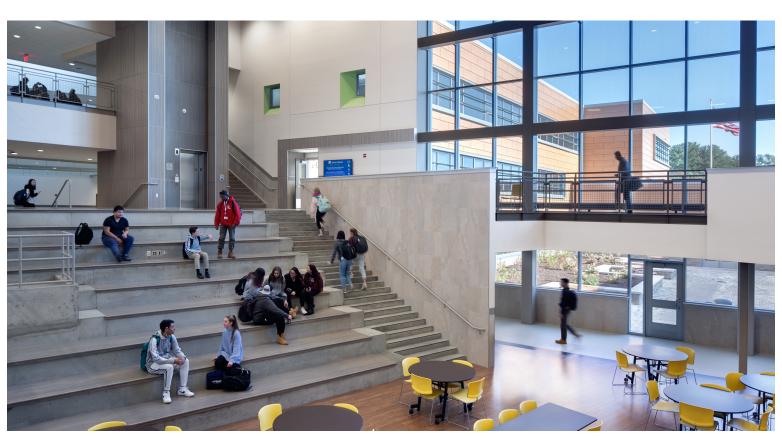
#### **Degree of Safety and Security - 15%**

Safe location of learning environments; free of non-pedestrian traffic

Safe indoor environments for students to learn Safe outdoor environments for students to learn Secured storage spaces for students Secured storage spaces for teachers

#### **Site Access - 10%**

Vehicular/bus circulation Pedestrian circulation Emergency Access



## **FINDINGS**

The final Educational Adequacy Index [EAI] can then be sorted as a ranking to compare each type of facility to each other. The ranking system lists from 1 to 6 for elementary schools and 1 to 3 for middle schools. 1 being the school with the highest Educational Adequacy Index [EAI]. This ranking says nothing about the condition of a facility or how it performs educationally it is simply a measurement of how the facility aligns with current educational design guidelines.

# **Elementary Schools**

The Educational Adequacy Index [EAI] for each elementary school is shown in the table below.

HELEN KELLER Elementary School	<b>77</b> %
OAK STREET ELEMENTARY SCHOOL	<b>73</b> %
JEFFERSON ELEMENTARY SCHOOL	64%
PARMENTER Elementary School	47%
KENNEDY ELEMENTARY SCHOOL	42%
DAVIS THAVER ELEMENTARY SCHOOL	40%

# **Middle Schools**

The Educational Adequacy Index [EAI] for each middle school is shown in the table below.

HORACE MANN MIDDLE SCHOOL	<b>76</b> %
ANNIE SULLIVAN MIDDLE SCHOOL	74%
REMINGTON MIDDLE SCHOOL	68%



# DAUIS THAYER **ELEMENTARY SCHOOL**

# **Mission Statement**

Davis Thayer, in collaboration with the district, families, and the community, will foster a school that learns by equipping students with the skills and knowledge essential to becoming productive citizens and lifelong learners. We will provide a physically and intellectually safe learning environment by modeling and promoting our core values of Respect, Encourage, Challenge, Include, Persevere, and Engage to nurture fulfillment of each student's potential.

# Core Values

**Respect:** Recognize the value each person brings to our community.

**Encourage:** Inspire the best in others by cheering them on and telling them they can do it!

Challenge: Set goals and reach beyond them, always striving to do the best we can.

Include: Welcome everyone because we all belong to our school community.

Persevere: Keep on trying and never give up, even when learning is challenging.

**Engage:** Actively participate in our learning by being focused and involved.

# Educational Adequacy Index Score

# Summary

#### SITE

- · Lack of Sufficient Parking
- Students Cross Driveway to Access Playground
- · On-site Parent Drop-off shared with Bus Drop-off

#### **BUILDING**

- · Well-maintained
- · Built during the Industrial Era
- · Lack of Accessibility
- Poor Natural Security
  - Access to Building and Student Population Before Entering Main Office

#### **EDUCATIONAL**

- All Spaces below Current Educational Size Standards (-200sf)
- Multiple Building Levels Impede Student / Staff Collaboration
- Lack of Break-out / Collaboration / Makerspaces

ysical Features	10/35
Connection between indoor and outdoor areas within the campus	1
Appropriate building for learning	1
Accessibility for people with disabilities	0
Building designed and built to the scale of children	1
Control of internal and external noise level	1
Views and natural light through windows	4
Visibility of main entrance for students and visitors	2
tdoor Areas	7/25
Appropriate outdoor areas for learning	0
Green areas adjacent to the learning environments	3
Outdoor play areas for students	3
Outdoor learning environments with natural elements	0
Outdoor learning environments for social interaction	1
arning Environments	26/55
Indoor learning areas for individual learning styles	2
Breakout rooms adjacent to classrooms	0
Areas of instruction for the arts	3
Areas of instruction for sciences	NA
Teachers workspace	1
Comfortable and stress-free classrooms	3
Stimulating classroom atmosphere for learning	2
Indoor air quality in classrooms	2
Adaptability of classrooms to changing uses	3
Lighting quality in classrooms	3
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	4
cial Areas	9/30
Inside quiet areas for eating	2
Outside quiet areas for eating	0
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	2
Places where students can be noisy and engage in physical activity	3
Public areas fostering a sense of community	0
Students personalizing their own places	2

Media Access	6/10
Media and technology access for students in the learning environments	3
Media and technology access for teachers in the learning environments	3
Transition Spaces and Circulation Routes	7/20
Circulation routes within and among learning environments	4
Hallways as passageways within the school	2
Clear markings for interior circulation routes	1
Transition spaces inside and outside of the learning environments	0
Visual Appearance	14/25
Visual appearance of the exterior of school building	5
Visual appearance of the interior of school building	2
Harmony of the school building with surroundings	4
Variation of ceiling heights within the school for comfort and intimacy	1
Visual stimulation of school building	2
Degree of Safety and Security	9/25
Safe location of learning environments; free of non-pedestrian traffic	3
Safe indoor environments for students to learn	3
Safe outdoor environments for students to learn	1
Secured storage spaces for students	0
Secured storage spaces for teachers	2
Site Access	4/15
Vehicular/bus circulation	1
Pedestrian circulation	1
Emergency access	2



# OAK STREET **ELEMENTARY SCHOOL**

# **Mission Statement**

Oak Street School creates a safe, nurturing, inclusive child-centered environment that promotes a variety of effective teaching and learning strategies, while fostering a positive self-image for all learners.

Students work hard to achieve their maximum potential toward life-long learning based on their abilities, learning styles, and development stages. Our educational programs strive to meet student needs and develop critical thinking skills, as well as emphasize academic excellence. Such excellence depends on diversity of perspective, a spirit of independence, and a community of trust. Oak Street School aims to create cooperative partnerships linking our school with the home and community.

# **Core Values**

#### **WE Strive to Be:**

**A**chieving

**C**aring

**O**riginal

**R**espectful

Never Give Up

**S**afe

# **73%** Educational Adequacy Index Score

# **Summary**

#### SITE

- Generally Adequate
- Separate Bus / Parent / Service Circulation
- · Lack of Sufficient Parent Drop-off

#### **BUILDING**

- · Well-maintained
- Relatively New Construction
- Overlap of Elementary & Middle School Students for Cafeteria, Auditorium & Gymnasium

#### **EDUCATIONAL**

- Modern Small-learning Community Organization
- Secure Courtyard Provides Safe Outdoor Learning Space
- Lack of Break-out / Collaboration / Makerspaces
- · Playground Location "Remote" from School

ysical Features	27/35
Connection between indoor and outdoor areas within the campus	4
Appropriate building for learning	4
Accessibility for people with disabilities	4
Building designed and built to the scale of children	4
Control of internal and external noise level	4
Views and natural light through windows	4
Visibility of main entrance for students and visitors	3
ıtdoor Areas	13/25
Appropriate outdoor areas for learning	3
Green areas adjacent to the learning environments	2
Outdoor play areas for students	4
Outdoor learning environments with natural elements	2
Outdoor learning environments for social interaction	2
arning Environments	39/55
Indoor learning areas for individual learning styles	4
Breakout rooms adjacent to classrooms	2
Areas of instruction for the arts	4
Areas of instruction for sciences	NA
Teachers workspace	3
Comfortable and stress-free classrooms	4
Stimulating classroom atmosphere for learning	4
Indoor air quality in classrooms	4
Adaptability of classrooms to changing uses	4
Lighting quality in classrooms	4
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	3
cial Areas	17/30
Inside quiet areas for eating	2
Outside quiet areas for eating	3
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	4
Places where students can be noisy and engage in physical activity	5
Public areas fostering a sense of community	2
Students personalizing their own places	1

Media Access	8/10
Media and technology access for students in the learning environments	4
Media and technology access for teachers in the learning environments	4
Transition Spaces and Circulation Routes	11/20
Circulation routes within and among learning environments	3
Hallways as passageways within the school	4
Clear markings for interior circulation routes	2
Transition spaces inside and outside of the learning environments	2
Visual Appearance	21/25
Visual appearance of the exterior of school building	4
Visual appearance of the interior of school building	4
Harmony of the school building with surroundings	5
Variation of ceiling heights within the school for comfort and intimacy	4
Visual stimulation of school building	4
Degree of Safety and Security	19/25
Safe location of learning environments; free of non-pedestrian traffic	4
Safe indoor environments for students to learn	5
Safe outdoor environments for students to learn	4
Secured storage spaces for students	3
Secured storage spaces for teachers	3
Site Access	12/15
Vehicular/bus circulation	4
Pedestrian circulation	3
Emergency access	5



# HELEN KELLER **ELEMENTARY SCHOOL**

# **Mission Statement**

The mission of the Helen Keller Elementary School, through strong support systems, and with the cooperation of parents and community, strives to educate all students to high levels of performance, measured by local and state standards. We are committed to fostering strong social values and responsibility to self, others and the global community. The entire Keller staff pledges to support this mission in a safe and nurturing environment.

# **Core Values**

#### **Keller Kids Are:**

Caring

Inclusive

Unique

Intelligent

# **77%** Educational Adequacy Index Score

# **Summary**

#### SITE

- Generally Adequate
- Overlapping Bus / Parent / Service Circulation
- · Limited Secondary Emergency Access

#### BUILDING

- · Well-maintained
- Relatively New Construction
- · Clear Separation of Elementary and Middle School Population

#### **EDUCATIONAL**

- Modern Small-learning Community Organization
- · Secure Courtyard Provides Safe Outdoor Learning Space and Playground
- Centrally Located Collaboration Spaces Integrated into Learning Communities

ysical Features	31/35
Connection between indoor and outdoor areas within the campus	4
Appropriate building for learning	5
Accessibility for people with disabilities	5
Building designed and built to the scale of children	4
Control of internal and external noise level	4
Views and natural light through windows	4
Visibility of main entrance for students and visitors	5
ıtdoor Areas	13/25
Appropriate outdoor areas for learning	3
Green areas adjacent to the learning environments	2
Outdoor play areas for students	4
Outdoor learning environments with natural elements	2
Outdoor learning environments for social interaction	2
arning Environments	47/55
Indoor learning areas for individual learning styles	5
Breakout rooms adjacent to classrooms	5
Areas of instruction for the arts	4
Areas of instruction for sciences	NA
Teachers workspace	4
Comfortable and stress-free classrooms	5
Stimulating classroom atmosphere for learning	4
Indoor air quality in classrooms	4
Adaptability of classrooms to changing uses	4
Lighting quality in classrooms	4
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	5
cial Areas	22/30
Inside quiet areas for eating	3
Outside quiet areas for eating	4
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	4
Places where students can be noisy and engage in physical activity	5
Public areas fostering a sense of community	4
Students personalizing their own places	2

Media Access	8/10
Media and technology access for students in the learning environments	4
Media and technology access for teachers in the learning environments	4
<b>Transition Spaces and Circulation Routes</b>	14/20
Circulation routes within and among learning environments	5
Hallways as passageways within the school	4
Clear markings for interior circulation routes	3
Transition spaces inside and outside of the learning environments	2
Visual Appearance	21/25
Visual appearance of the exterior of school building	4
Visual appearance of the interior of school building	4
Harmony of the school building with surroundings	5
Variation of ceiling heights within the school for comfort and intimacy	4
Visual stimulation of school building	4
Degree of Safety and Security	19/25
Safe location of learning environments; free of non-pedestrian traffic	4
Safe indoor environments for students to learn	5
Safe outdoor environments for students to learn	4
Secured storage spaces for students	3
Secured storage spaces for teachers	3
Site Access	8/15
Vehicular/bus circulation	2
Pedestrian circulation	3
Emergency access	3



## JOHN F. KENNEDY ELEMENTARY SCHOOL

### **Mission Statement**

The mission of the John F. Kennedy Elementary School is to enable, encourage and challenge every student to continue the pursuit of lifelong learning by providing a safe, nurturing and enjoyable academic environment. Through the collaborative efforts of staff, parents and community we strive to help each student become a confident, responsible and active citizen of an everchanging global society

### **Core Values**

JFK Ladybugs care!

We are **CONSIDERATE** and kind.

We **ACHIEVE** and persevere.

We are **RESPECTFUL** and safe.

We **ENGAGE** and include.

42% Educational Adequacy Index Score

## **Summary**

#### SITE

- Overlapping Bus / Parent / Service Circulation
- Students Cross Driveway at Arrival and Pick-up

#### BUILDING

- · Well-maintained, but Dated
- · Lack of Accessibility
- Temporary Modular Classrooms Have Extended beyond Useful Life
- Poor Natural Security
  - Access to Building and Student Population Before Entering Main Office
  - Multiple Building Entries

- Lack of Break-out / Collaboration / Makerspaces
- Entry to Educational Spaces through Gym, Cafeteria, Media Center

Connection between indoor and outdoor areas within the campus  Appropriate building for learning  Accessibility for people with disabilities  Building designed and built to the scale of children  Control of internal and external noise level  O Views and natural light through windows  Visibility of main entrance for students and visitors  Intdoor Areas  Appropriate outdoor areas for learning environments  Outdoor play areas for students  Outdoor learning environments with natural elements  Outdoor learning environments for social interaction  Earning Environments  Breakout rooms adjacent to classrooms  Areas of instruction for the arts  Areas of instruction for sciences  Teachers workspace  Comfortable and stress-free classrooms  Adaptability of classrooms to changing uses  Lighting quality in classrooms  Classroom walls conducive for displaying student work  Hallways conducive for displaying student work  Outcla Areas  11/3  11/3  12  13	35
Accessibility for people with disabilities  Building designed and built to the scale of children  Control of internal and external noise level  Views and natural light through windows  Visibility of main entrance for students and visitors  Polycenary  Appropriate outdoor areas for learning  Green areas adjacent to the learning environments  Outdoor play areas for students  Outdoor learning environments with natural elements  Outdoor learning environments for social interaction  Carning Environments  Breakout rooms adjacent to classrooms  Areas of instruction for the arts  Areas of instruction for sciences  NA  Teachers workspace  Comfortable and stress-free classrooms  Stimulating classroom atmosphere for learning  Indoor air quality in classrooms  Classroom walls conducive for displaying students work  Hallways conducive for displaying student work  4	
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Lighting quality in classrooms       3         Classroom walls conducive for displaying students' work       3         Hallways conducive for displaying student work       4	
Classroom walls conducive for displaying students' work  Hallways conducive for displaying student work  4	
students' work  Hallways conducive for displaying student work  4	
ocial Areas 11/3	
·	30
Inside quiet areas for eating 3	
Outside quiet areas for eating 0	
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	
Places where students can be noisy and engage in physical activity 3	
Public areas fostering a sense of community 2	
Students personalizing their own places 2	

Media Access	6/10
Media and technology access for students in the learning environments	3
Media and technology access for teachers in the learning environments	3
Transition Spaces and Circulation Routes	7/20
Circulation routes within and among learning environments	4
Hallways as passageways within the school	2
Clear markings for interior circulation routes	1
Transition spaces inside and outside of the learning environments	0
Visual Appearance	12/25
Visual appearance of the exterior of school building	3
Visual appearance of the interior of school building	2
Harmony of the school building with surroundings	4
Variation of ceiling heights within the school for comfort and intimacy	1
Visual stimulation of school building	2
Degree of Safety and Security	8/25
Safe location of learning environments; free of non-pedestrian traffic	2
Safe indoor environments for students to learn	3
Safe outdoor environments for students to learn	1
Secured storage spaces for students	0
Secured storage spaces for teachers	2
Site Access	6/15
Vehicular/bus circulation	1
Pedestrian circulation	1
Emergency access	4



## GERALD M. PARMENTER **ELEMENTARY SCHOOL**

#### **Mission Statement**

The Gerald M. Parmenter School community's mission is to prepare all students to meet the opportunities and challenges of their lives with confidence and compassion. Parmenter creates a learning environment that encourages students to:

- strengthen their character and self-worth with a strong emphasis on our essential core values;
- value other points of view and differences;
- become self-motivated and independent learners who strive to attain high levels of achievement and think critically;
- work individually and cooperatively to solve problems creatively.

#### **Core Values**

Caring

**Inclusion** 

Respect

Courage

Leadership

**Effort** 

47% Educational Adequacy Index Score

### Summary

#### SITE

- Overlapping Bus / Parent / Service Circulation
- · Parking Along Bus Loop
- · Lack of Sufficient Parent Drop-off

#### **BUILDING**

- · Well-maintained
- · Simple, Compact Organization
- · Kindergarten Classrooms Lack Dedicated Bathroom

- Modern Small-learning Community Organization
- · Media Center Located a "Heart" of Building
- · Lack of Outdoor Learning Spaces
- Lack of Break-out / Collaboration Spaces
- Students Cross Driveway to Access Playground

nysical Features	26/35
Connection between indoor and outdoor areas within the campus	3
Appropriate building for learning	3
Accessibility for people with disabilities	4
Building designed and built to the scale of children	4
Control of internal and external noise level	3
Views and natural light through windows	4
Visibility of main entrance for students and visitors	5
ıtdoor Areas	8/25
Appropriate outdoor areas for learning	1
Green areas adjacent to the learning environments	3
Outdoor play areas for students	2
Outdoor learning environments with natural elements	1
Outdoor learning environments for social interaction	1
arning Environments	24/55
Indoor learning areas for individual learning styles	1
Breakout rooms adjacent to classrooms	0
Areas of instruction for the arts	2
Areas of instruction for sciences	NA
Teachers workspace	2
Comfortable and stress-free classrooms	2
Stimulating classroom atmosphere for learning	2
Indoor air quality in classrooms	2
Adaptability of classrooms to changing uses	3
Lighting quality in classrooms	3
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	4
ocial Areas	9/30
Inside quiet areas for eating	2
Outside quiet areas for eating	0
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	1
Places where students can be noisy and engage in physical activity	3
Public areas fostering a sense of community	1
Students personalizing their own places	2

Media Access	6/10
Media and technology access for students in the learning environments	3
Media and technology access for teachers in the learning environments	3
Transition Spaces and Circulation Routes	5/20
Circulation routes within and among learning environments	1
Hallways as passageways within the school	2
Clear markings for interior circulation routes	2
Transition spaces inside and outside of the learning environments	0
Visual Appearance	11/25
Visual appearance of the exterior of school building	2
Visual appearance of the interior of school building	2
Harmony of the school building with surroundings	4
Variation of ceiling heights within the school for comfort and intimacy	1
Visual stimulation of school building	2
Degree of Safety and Security	9/25
Safe location of learning environments; free of non-pedestrian traffic	2
Safe indoor environments for students to learn	3
Safe outdoor environments for students to learn	1
Secured storage spaces for students	1
Secured storage spaces for teachers	2
Site Access	8/15
Vehicular/bus circulation	1
Pedestrian circulation	3
Emergency access	4



## JEFFERSON **ELEMENTARY SCHOOL**

## **Mission Statement**

Jefferson Elementary School is an inclusive learning environment dedicated to high standards in teaching and learning for all students. We support students in their pursuit of academic and social success. We inspire life-long learning and develop responsible, selfconfident students capable of effective communication and problem solving. Through a collaboration of staff, families, students and the community we foster a safe and respectful learning environment embracing creativity and individuality.

#### **Core Values**

We are: Safe - We nurture a positive and safe learning environment based on student needs.

**Respectful** - We recognize the value and strengths each person brings to our community.

**Inclusive** - We welcome everyone because we all belong to our school community.

**Creative** - We are resourceful thinkers who work together to solve problems.

**Invested** - We actively participate in our learning by being focused and involved

# 64 Educational Adequacy Index Score

### Summary

#### SITE

- Simple Site Circulation
- Pathways to Adjacent Neighborhoods
- Significant Vegetation and Site Features Obstruct Natural Surveillance

#### **BUILDING**

- Well-maintained
- Relatively New Construction
- · Simple, Compact Organization
- · Clear Separation of Elementary and Middle School Population
- · Secure Main Entry

- Media Center Located a "Heart" of Building
- Lack of Outdoor Learning Spaces
- Lack of Break-out / Collaboration / Makerspaces

ysical Features	28/35
Connection between indoor and outdoor areas within the campus	4
Appropriate building for learning	3
Accessibility for people with disabilities	4
Building designed and built to the scale of children	4
Control of internal and external noise level	4
Views and natural light through windows	5
Visibility of main entrance for students and visitors	4
tdoor Areas	19/25
Appropriate outdoor areas for learning	3
Green areas adjacent to the learning environments	5
Outdoor play areas for students	5
Outdoor learning environments with natural elements	3
Outdoor learning environments for social interaction	3
arning Environments	30/55
Indoor learning areas for individual learning styles	2
Breakout rooms adjacent to classrooms	2
Areas of instruction for the arts	4
Areas of instruction for sciences	NA
Teachers workspace	3
Comfortable and stress-free classrooms	4
Stimulating classroom atmosphere for learning	3
Indoor air quality in classrooms	4
Adaptability of classrooms to changing uses	3
Lighting quality in classrooms	3
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	3
cial Areas	19/30
Inside quiet areas for eating	2
Outside quiet areas for eating	3
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	3
Places where students can be noisy and engage in physical activity	4
Public areas fostering a sense of community	4
Students personalizing their own places	3
•	

Media Access	6/10
Media and technology access for students in the learning environments	3
Media and technology access for teachers in the learning environments	3
Transition Spaces and Circulation Routes	13/20
Circulation routes within and among learning environments	4
Hallways as passageways within the school	3
Clear markings for interior circulation routes	4
Transition spaces inside and outside of the learning environments	2
Visual Appearance	22/25
Visual appearance of the exterior of school building	5
Visual appearance of the interior of school building	4
Harmony of the school building with surroundings	5
Variation of ceiling heights within the school for comfort and intimacy	4
Visual stimulation of school building	4
Degree of Safety and Security	15/25
Safe location of learning environments; free of non-pedestrian traffic	4
Safe indoor environments for students to learn	4
Safe outdoor environments for students to learn	2
Secured storage spaces for students	2
Secured storage spaces for teachers	3
Site Access	15/15
Vehicular/bus circulation	5
Pedestrian circulation	5
Emergency access	5



## **HORACE MANN** MIDDLE SCHOOL

#### **School Motto**

Home of the Lightning

## **Core Values & Beliefs About Learning**

Students thrive at Horace Mann Middle School when:

- Behavioral and academic expectations are clearly articulated, appropriately challenging, modeled, building confidence and the desire for students to always do their best.
- They can count on an environment where they feel safe to take academic risks, focus on learning, strive for excellence, and presume that their experiences will be positive.
- The entire school community promotes supportive relationships which model compassion, quality, empathy, and accountability.
- Our words and actions are respectful, fostering a genuine interest in each other and creating an atmosphere of openness and trust.

## Six Pillars of Character

Trustworthiness - Respect - Responsibility Fairness - Caring - Citizenship

# **76%** Educational Adequacy Index Score

## **Summary**

#### SITE

- Generally Adequate
- Separate Bus / Parent / Service Circulation
- · Lack of Sufficient Parent Drop-off

#### **BUILDING**

- · Well-maintained
- Relatively New Construction
- Overlap of Elementary & Middle School Students for Cafeteria, Auditorium & Gymnasium

- Modern Small-learning Community Organization
- Secure Courtyard Provides Safe Outdoor Learning Space
- Lack of Break-out / Collaboration / Makerspaces
- Art and STEM Lab Location "Remote" from Core Academic Spaces

ysical Features	31/35
Connection between indoor and outdoor areas within the campus	4
Appropriate building for learning	5
Accessibility for people with disabilities	5
Building designed and built to the scale of children	4
Control of internal and external noise level	4
Views and natural light through windows	4
Visibility of main entrance for students and visitors	5
tdoor Areas	10/25
Appropriate outdoor areas for learning	2
Green areas adjacent to the learning environments	2
Outdoor play areas for students	4
Outdoor learning environments with natural elements	1
Outdoor learning environments for social interaction	1
arning Environments	52/60
Indoor learning areas for individual learning styles	5
Breakout rooms adjacent to classrooms	5
Areas of instruction for the arts	4
Areas of instruction for sciences	5
Teachers workspace	4
Comfortable and stress-free classrooms	5
Stimulating classroom atmosphere for learning	4
Indoor air quality in classrooms	4
Adaptability of classrooms to changing uses	4
Lighting quality in classrooms	4
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	5
cial Areas	22/30
Inside quiet areas for eating	3
Outside quiet areas for eating	4
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	4
Places where students can be noisy and engage in physical activity	5
Public areas fostering a sense of community	4
Students personalizing their own places	2

Media Access	8/10
Media and technology access for students in the learning environments	4
Media and technology access for teachers in the learning environments	4
Transition Spaces and Circulation Routes	13/20
Circulation routes within and among learning environments	5
Hallways as passageways within the school	4
Clear markings for interior circulation routes	3
Transition spaces inside and outside of the learning environments	1
Visual Appearance	21/25
Visual appearance of the exterior of school building	4
Visual appearance of the interior of school building	4
Harmony of the school building with surroundings	5
Variation of ceiling heights within the school for comfort and intimacy	4
Visual stimulation of school building	4
Degree of Safety and Security	19/25
Safe location of learning environments; free of non-pedestrian traffic	4
Safe indoor environments for students to learn	5
Safe outdoor environments for students to learn	4
Secured storage spaces for students	3
Secured storage spaces for teachers	3
Site Access	8/15
Vehicular/bus circulation	2
Pedestrian circulation	3
Emergency access	3



## ANNIE SULLIVAN MIDDLE SCHOOL

### **School Motto**

Setting Our Goals Higher and Higher

## **School Vision**

To foster within middle school students the desire to achieve and to help them make healthy decisions in all areas (academic, social, behavioral and physical) that will chart their course for a positive and productive future.

#### **School Mission**

PERSONAL GROWTH - ASMS celebrates the unique qualities of early adolescence by nurturing the physical, social, emotional and intellectual growth of all students.

ACADEMIC STANDARDS - We encourage independent, creative and critical thinking in a rigorous program of studies that promotes student excellence. Our team of educators combines passion with innovative practices to inspire lifelong learning.

CULTURE - We provide a safe learning environment that fosters tolerance and respects individual differences. COMMUNITY - In partnership with the Franklin community, our mission is to educate our students to be resourceful, responsive and contributing members of our evolving society.

# **75%** Educational Adequacy Index Score

### **Summary**

#### SITE

- · Generally Adequate
- Overlapping Bus / Parent / Service Circulation
- · Limited Secondary Emergency Access

#### BUILDING

- · Well-maintained
- · Relatively New Construction
- Clear Separation of Elementary and Middle School Population

- Modern Small-learning Community Organization
- Secure Courtyard Provides Safe Outdoor Learning Space and Playground
- Centrally Located Collaboration Spaces Integrated into Learning Communities
- · Lack of Outdoor Learning Spaces

ysical Features	29/35
Connection between indoor and outdoor areas within the campus	4
Appropriate building for learning	4
Accessibility for people with disabilities	4
Building designed and built to the scale of children	4
Control of internal and external noise level	4
Views and natural light through windows	4
Visibility of main entrance for students and visitors	5
tdoor Areas	12/25
Appropriate outdoor areas for learning	3
Green areas adjacent to the learning environments	2
Outdoor play areas for students	3
Outdoor learning environments with natural elements	2
Outdoor learning environments for social interaction	2
arning Environments	42/60
Indoor learning areas for individual learning styles	4
Breakout rooms adjacent to classrooms	2
Areas of instruction for the arts	4
Areas of instruction for sciences	3
Teachers workspace	3
Comfortable and stress-free classrooms	4
Stimulating classroom atmosphere for learning	4
Indoor air quality in classrooms	4
Adaptability of classrooms to changing uses	4
Lighting quality in classrooms	4
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	3
cial Areas	20/30
Inside quiet areas for eating	2
Outside quiet areas for eating	3
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	4
Places where students can be noisy and engage in physical activity	5
Public areas fostering a sense of community	4
Students personalizing their own places	2

Media Access	8/10
Media and technology access for students in the learning environments	4
Media and technology access for teachers in the learning environments	4
Transition Spaces and Circulation Routes	12/20
Circulation routes within and among learning environments	3
Hallways as passageways within the school	4
Clear markings for interior circulation routes	3
Transition spaces inside and outside of the learning environments	2
Visual Appearance	21/25
Visual appearance of the exterior of school building	4
Visual appearance of the interior of school building	4
Harmony of the school building with surroundings	5
Variation of ceiling heights within the school for comfort and intimacy	4
Visual stimulation of school building	4
Degree of Safety and Security	20/25
Safe location of learning environments; free of non-pedestrian traffic	4
Safe indoor environments for students to learn	5
Safe outdoor environments for students to learn	5
Secured storage spaces for students	3
Secured storage spaces for teachers	3
Site Access	12/15
Vehicular/bus circulation	4
Pedestrian circulation	3
Emergency access	5



## REMINGTON MIDDLE SCHOOL

#### **School Motto**

"Intelligence plus character - that is the goal of true education." - Dr. Martin Luther King

#### **Mission Statement**

We strive to teach our subject matter with passion, and our students with compassion.

#### **School Mission**

The Remington Middle School Community is dedicated to understanding and guiding students during this unique developmental stage, and facilitating their transition to high school. We are committed to fostering the intellectual, physical, emotional and social needs of our students. Our programs promote academic excellence, equity, responsibility, and development of skills that will encourage students to be independent learners and critical thinkers.

#### Core Values

We live the **REMDAWG** Way! **R**espect, **E**mpathy, Mindfulness, Determination, Acceptance, Worthiness and **G**ratitude

# Educational Adequacy Index Score

## **Summary**

#### SITE

- Simple Site Circulation
- · Pathways to Adjacent Neighborhoods
- Significant Vegetation and Site Features Obstruct Natural Surveillance

#### **BUILDING**

- Well-maintained
- Relatively New Construction
- · Simple, Compact Organization
- · Clear Separation of Elementary and Middle School Population
- · Secure Main Entry

- Media Center Located a "Heart" of Building
- Lack of Outdoor Learning Spaces
- Lack of Break-out / Collaboration / Makerspaces

ysical Features	29/35
Connection between indoor and outdoor areas within the campus	4
Appropriate building for learning	4
Accessibility for people with disabilities	4
Building designed and built to the scale of children	4
Control of internal and external noise level	4
Views and natural light through windows	5
Visibility of main entrance for students and visitors	4
tdoor Areas	18/25
Appropriate outdoor areas for learning	3
Green areas adjacent to the learning environments	5
Outdoor play areas for students	5
Outdoor learning environments with natural elements	2
Outdoor learning environments for social interaction	3
arning Environments	39/60
Indoor learning areas for individual learning styles	2
Breakout rooms adjacent to classrooms	2
Areas of instruction for the arts	4
Areas of instruction for sciences	5
Teachers workspace	3
Comfortable and stress-free classrooms	4
Stimulating classroom atmosphere for learning	3
Indoor air quality in classrooms	4
Adaptability of classrooms to changing uses	3
Lighting quality in classrooms	3
Classroom walls conducive for displaying students' work	3
Hallways conducive for displaying student work	3
cial Areas	19/30
Inside quiet areas for eating	2
Outside quiet areas for eating	3
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas etc.)	3
Places where students can be noisy and engage in physical activity	4
Public areas fostering a sense of community	4
Students personalizing their own places	3

Media Access	6/10
Media and technology access for students in the learning environments	3
Media and technology access for teachers in the learning environments	3
Transition Spaces and Circulation Routes	13/20
Circulation routes within and among learning environments	4
Hallways as passageways within the school	3
Clear markings for interior circulation routes	4
Transition spaces inside and outside of the learning environments	2
Visual Appearance	22/25
Visual appearance of the exterior of school building	5
Visual appearance of the interior of school building	4
Harmony of the school building with surroundings	5
Variation of ceiling heights within the school for comfort and intimacy	4
Visual stimulation of school building	4
Degree of Safety and Security	15/25
Safe location of learning environments; free of non-pedestrian traffic	4
Safe indoor environments for students to learn	4
Safe outdoor environments for students to learn	2
Secured storage spaces for students	2
Secured storage spaces for teachers	3
Site Access	15/15
Vehicular/bus circulation	5
Pedestrian circulation	5
Emergency access	5



#### **SUMMARY OF FINDINGS**

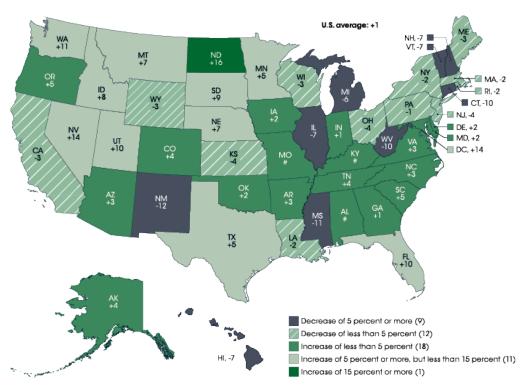
The existing functional capacity and educational adequacy data provides a clear picture of the Franklin Public Schools current state. They provide a baseline to explore potential concepts/options to address current and anticipated deficiencies over the next 10 years and beyond.

#### **District Enrollment**

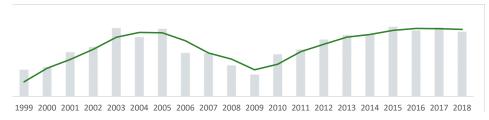
Based on the McKibben Demographic Report, enrollment in the Franklin Public School District is anticipated to see an overall enrollment decrease of approximately 12%. The elementary schools are forecasted to have an increase of 1.6% and the middle schools are forecasted to have an enrollment decrease of 16.9%.

Nationally, public school enrollment is projected to see an overall increase of 1%, but the Northeast Region is anticipated to have an overall decrease of 5.2% over the same time period as shown in the figure to the right.

In addition to the 10 year enrollment forecasts provided in the McKibben Report, national historical public school enrollment data from the US Census Bureau for the previous 20 years a larger sample size helps to provide a better understanding of the cyclical nature of enrollment. The graph to right provides a clear indication that enrollment is typically a 10-year cycle.

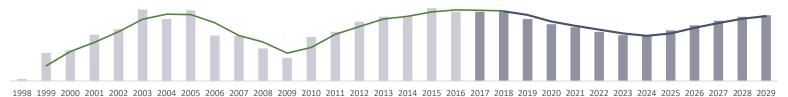


Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Non-fiscal Survey of Public Elementary/Secondary Education," 2017–18; and State Public Elementary and Secondary Enrollment Projection Model, 1980 through 2029



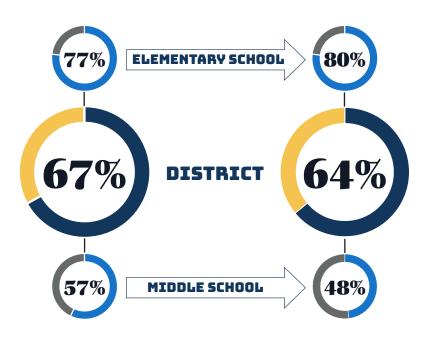
Source: United Census Bureau "CPS Historical Time Series Tables on School Enrollment, 2019"

By overlaying the historic trends with the enrollment forecasts for the elementary schools, it can be seen that 2024 is the trough of the 10 year cycle. This same trend can be seen in the enrollment projections that the middle school enrollment trough will be in 2027.

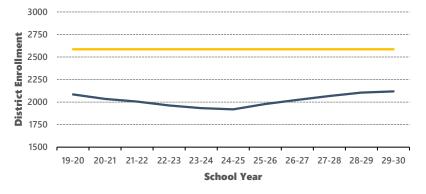


**District Capacity** 

Analyzing the data from each school collected in the capacity analysis, the current elementary school median utilization is 77%. Over the next 10 years the enrollment is anticipated to decline for 5 years and then increase to be 80% in 10 years.



Across the district, each elementary school has different enrollment projections which affect their capacity. Although as a district there is anticipated to be a 3% increase, some elementary schools will see a larger increase and others will see a decrease. This differential in capacity is important to note when looking at the 10-year need.



→ 15% DAVIS THAVER ELEMENTARY

→ 3% OAK STREET ELEMENTARY

→ 7% HELEN KELLER ELEMENTARY

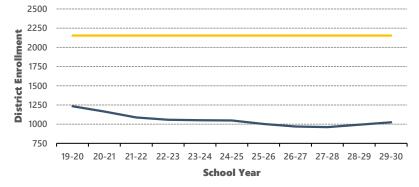
→ 13% KENNEDY ELEMENTARY

→ 14% PARMENTER ELEMENTARY

→ 2% JEFFERSON ELEMENTARY

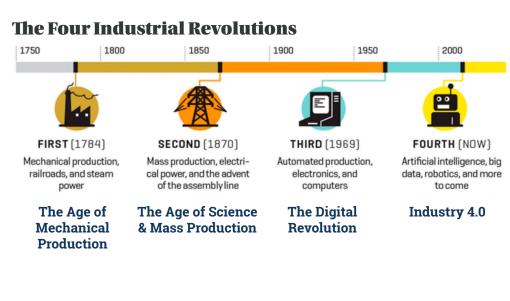
The middle school enrollment is anticipated to see a steady decline for approximately 8 years and start to begin to increase in the final 2 years. Overall the median utilization will decrease from 57% to 48%.

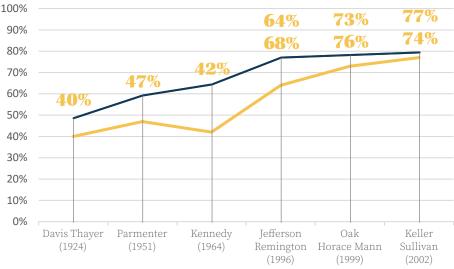




## **District Educational Adequacy**

The educational adequacy metric is a school by school analysis and should not be considered as a district comprehensively. The data can be analyzed to understand how buildings are performing as a comparative tool relating to the age of the building. Educational methodology has drastically changed over the past century as the world around us has evolved and has increased exponentially in the past 10 -15 years.





The modern educational system is and has been focused on preparing students for the future workplace. This directly relates to the "Four Industrial Revolutions."

Built during the "Second Industrial Revolution" Davis Thayer, Parmenter, and Kennedy Elementary Schools were organized based on the factory model of education. Educational delivery was teacher-centered and text-book driven with a focus on independent memorization of facts.

The remaining schools were constructed during the "Third Industrial Revolution" and can be considered the bridge between the current 21st Century Learning model and the factory model of education.

This can been seen when looking at the Educational Adequacy Index of each school organized by timeline.

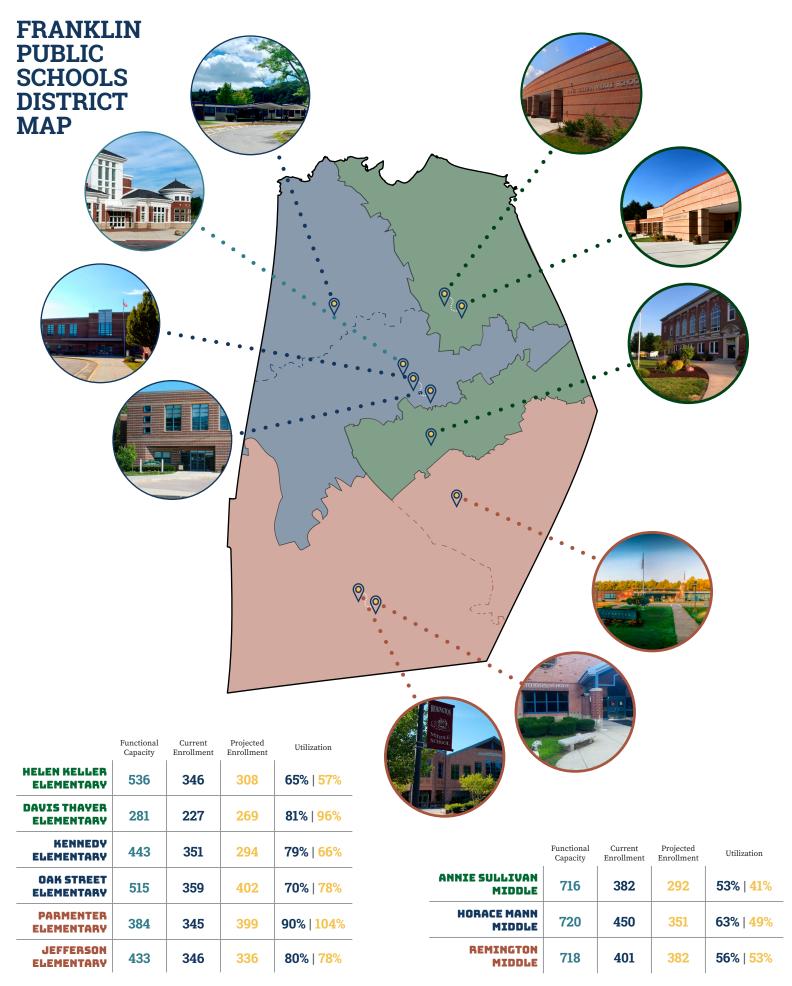
Based on this information if no changes were to occur the school facilities would:

- would continue operate under capacity
- continue to create a financial burden in the maintenance of these underutilized facilities
   \*\*older schools required added cost as building materials and systems extend beyond their useful life
- added financial burden to as it relates to staffing, utility bills, etc.
- suffer reduced educational adequacy in schools built prior to 1996

#### STRATEGIES TO OPTIMIZE FUNCTIONAL CAPACITY

Schools are complexes of many space types such as classrooms, gymnasiums and cafeterias. Different strategies can be used in an effort to optimize functional capacity. These include scheduling, space utilization, reassignment of spaces, blended/remote learning and on a broader scope assessing the district facilities. The purpose of this report is to analyze and assess the District facilities, and to provide a better understanding of potential solutions that could address the deficiencies noted. The following concepts were explored:



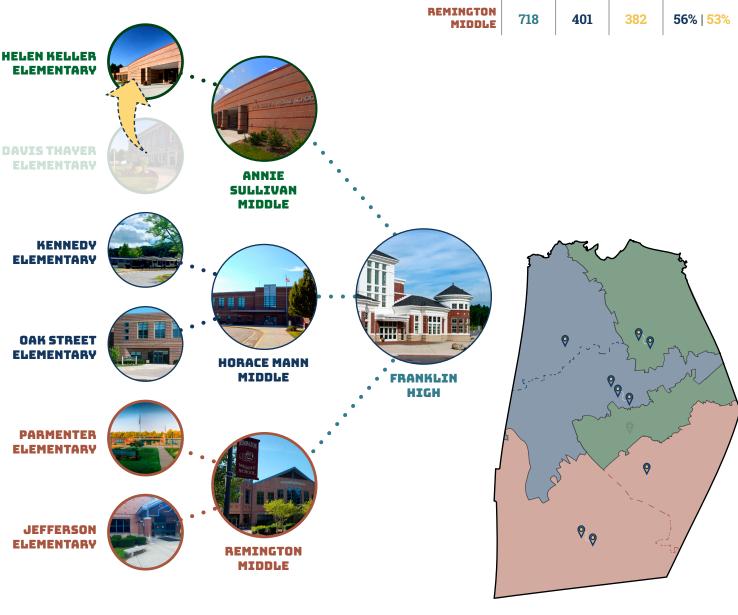


## **CLOSE DAVIS THAYER ELEMENTARY SCHOOL**

Helen Keller ES utilization rate increases from 65% to 107% currently and 57% to 108% in 10 years.

Overall, the Keller/Sullivan School utilization rate increases from 59% to 80% currently and 49% to 74% in 10 years.

		Functional Capacity	Current Enrollment	Projected Enrollment	Utilization
1	HELEN KELLER ELEMENTARY	536	573	577	107% 108%
	DAVIS THAYER ELEMENTARY	281	227	269	81%   96%
	KENNEDY ELEMENTARY	443	351	294	79%   66%
	OAK STREET ELEMENTARY	515	359	402	70%   78%
	PARMENTER ELEMENTARY	384	345	399	90%   104%
	JEFFERSON ELEMENTARY	433	346	336	80%   78%
ANI	NIE SULLIVAN MIDDLE	716	382	292	<b>53</b> %   <b>41</b> %
	HORACE MANN MIDDLE	720	450	351	63%   49%
	REMINGTON MIDDLE	718	401	382	56%   53%



## **CLOSE DAVIS THAYER & KENNEDY ELEMENTARY SCHOOLS**

Helen Keller ES utilization rate increases from 65% to 107% currently and 57% to 108% in 10 years.

Overall, the Keller/Sullivan School utilization rate increases from 59% to 80% currently and 49% to 74% in 10 years.

Oak Street ES utilization rate increases from 70% to 138% currently and 78% to 135% in 10 years.

Overall, the Oak Street/Horace Mann School utilization rate increases from 66% to 100% currently and 63% to 92% in 10 years.

There are not sufficient vehicular routes from the Kennedy ES district to the Helen Keller ES district. Therefore

#### THIS OPTION IS NOT FEASIBLE OR VIABLE.

	Functional Capacity	Current Enrollment	Projected Enrollment	Utilization
HELEN KELLER ELEMENTARY	536	573	577	107% 108%
DAVIS THAYER ELEMENTARY	281	227	269	81%   96%
KENNEDY ELEMENTARY	443	351	294	79%   66%
OAK STREET ELEMENTARY	515	710	696	138% 135%
PARMENTER ELEMENTARY	384	345	399	90%   104%
JEFFERSON ELEMENTARY	433	346	336	80%   78%
ANNIE SULLIVAN MIDDLE	716	382	292	53%   41%
HORACE MANN MIDDLE	720	450	351	63%   49%
REMINGTON MIDDLE	718	401	382	56%   53%



#### **CLOSE DAVIS THAYER & PARMENTER ELEMENTARY SCHOOLS**

Helen Keller ES utilization rate increases from 65% to 107% currently and 58% to 108% in 10 years.

Overall, the Keller/Sullivan School utilization rate increases from 59% to 80% currently and 49% to 74% in 10 years.

Jefferson ES utilization rate increases from 80% to 160% currently and 78% to 170% in 10 years.

Overall, the Jefferson/Remington School utilization rate increases from 68% to 108% currently and 65% to 111% in 10 years.

If students were distributed to Oak Street ES or Helen Keller ES which have the capacity, the Jefferson/Remington School is able to fall within the target utilization rate.

	Functional Capacity	Current Enrollment	Projected Enrollment	Utilization
HELEN KELLER ELEMENTARY	F26	573	577	107% 108%
DAVIS THAYER ELEMENTARY	201	227	269	81%   96%
KENNEDY ELEMENTARY	112	351	294	79%   66%
OAK STREET ELEMENTARY	<b>616</b>	359	402	70%   78%
PARMENTER ELEMENTARY	201	345	399	90%   104%
JEFFERSON ELEMENTARY	122	691	738	160% 170%
ANNIE SULLIVAN MIDDLE	716	382	292	53%   41%
HORACE MANN MIDDLE	720	450	351	63%   49%
REMINGTON MIDDLE	'   71Ω	401	382	56%   53%



## **CLOSE DAVIS THAYER, PARMENTER & KENNEDY ELEMENTARY SCHOOLS**

Helen Keller ES utilization rate increases from 65% to 107% currently and 58% to 108% in 10 years.

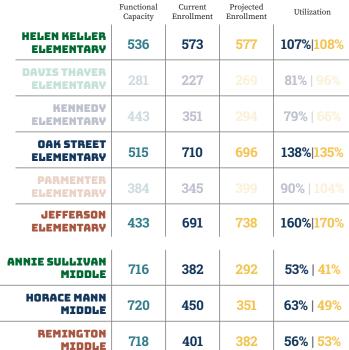
Overall, the Keller/Sullivan School utilization rate increases from 59% to 80% currently and 49% to 74% in 10 years.

Oak Street ES utilization rate increases from 70% to 138% currently and 78% to 135% in 10 years.

Overall, the Oak Street/Horace Mann School utilization rate increases from 66% to 100% currently and 63% to 92% in 10 years.

Jefferson ES utilization rate increases from 80% to 160% currently and 78% to 170% in 10 years.

Overall, the Jefferson/Remington School utilization rate increases from 68% to 108% currently and 65% to 111% in 10



The district elementary school utilization rate in this scenario increases from 135% currently to 138% in 10 years.

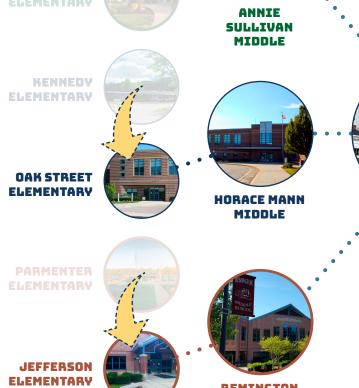
The district elementary/middle school utilization rate in this scenario increases from 96% currently to 93% in 10 years.

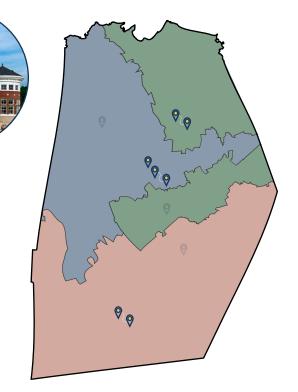
The concepts exceeds the target utilization rate and

IS NOT VIABLE.

HIGH







## **CLOSE DAVIS THAYER & PARMENTER ELEMENTARY SCHOOLS** MOVE OAK STREET TO KENNEDY ELEMENTARY SCHOOL DISTRICT-WIDE HORACE MANN MIDDLE SCHOOL

Revisiting the results of the previous analysis, a more in-depth analys school previo

The di currer

This c all scl

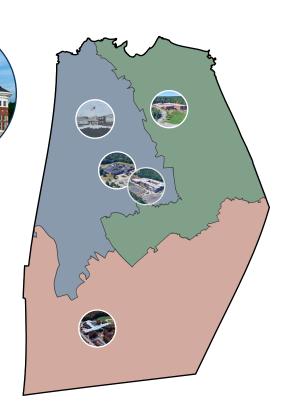
#### **CUR**

but a

develo

		•			
rsis was performed to create a singular central middle ol on the high school site, addressing the viability of the ous concept.	DAVIS THAVER ELEMENTARY	281	227	269	81%   96%
listrict utilization rate in this scenario decreases from 94%	KENNEDY ELEMENTARY	443	710	696	160% 157%
ently to 90% in 10 years.  concept is at or below the target utilization rate for	OAK STREET ELEMENTARY	515	710	696	138% 135%
chools with the exception of Kennedy   Oak Street.  RRENTLY, THIS OPTION IS NOT VIABLE,	PARMENTER ELEMENTARY	384	345	399	90%   104%
LONG TERM MASTER PLAN could further	JEFFERSON ELEMENTARY	1,060	691	735	65%   69%
op this concept to become <b>VIABLE</b> .  KELLER DAVIS THAYER	ANNIE SULLIVAN MIDDLE	716	382	292	53%   41%
IELEN KELLER	HORACE MANN MIDDLE	1,215	1,233	1,025	102%   84%
ELEMENTARY THE PROPERTY SCHOOL	REMINGTON MIDDLE	718	401	382	56%   53%
AUIS THAYER ELEMENTARY					





Current

Enrollment

573

Capacity

1,141

**HELEN KELLER** 

**ELEMENTARY** 

Projected

Enrollment

Utilization

50% | 51%

#### RECOMMENDATIONS

As part of this report, Kaestle Boos was asked to provide recommendations based on the analysis. These recommendations are provide to assist in the District in the development of a Long Range Facilities Master Plan. The recommendations included in this report are a snapshot in time and should be re-evaluated to include current data. They only consider the data that is in this report.

Currently Franklin Public Schools facilities are 26% under capacity and are anticipated to continue to decline to 31% in the next 10 years. Schools across the district are currently operating at different capacities and projected enrollment figures. Because of this, a single solution is not recommended. It should be done in steps based on the current need, while looking towards the future.

#### The Immediate Need

Because current enrollment is under capacity, the simplest and best solution is would be to close existing schools and redistribute the students within their same district. When it comes to reviewing and selecting the appropriate solution(s) the following factors should be considered: the age of the building (cost to maintain), educational adequacy, and capacity of the school.

Currently the District's three standalone elementary schools are the oldest buildings in the district and also received the lowest Educational Adequacy Index (EAI) scores. Multiple solutions presented in the report indicate closing Davis Thayer Elementary only does not address the immediate need. The only viable solution to further address the immediate need would be closing Paramenter Elementary School as well. In the closing of these schools the students from Parmenter would remain in their district and attend Jefferson Elementary School. The students from Davis Thayer Elementary School would also remain in their district and attend Hellen Keller Elementary School. This solution would still leave Kennedy Elementary School as the last remaining stand-alone elementary school. This will be addressed as part of the 10-year need.

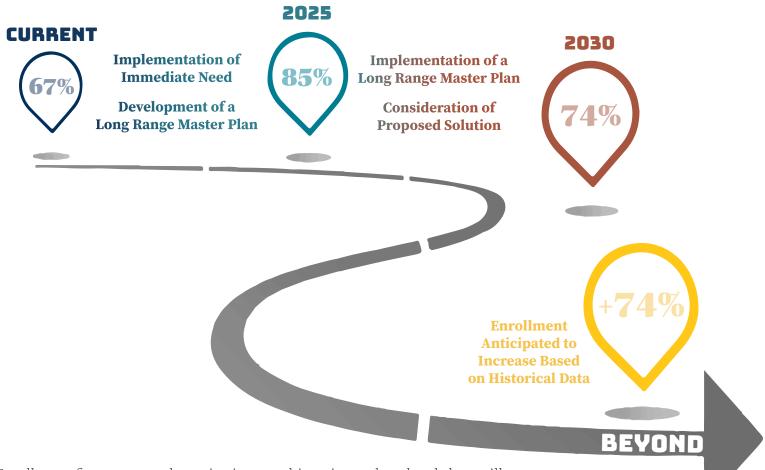
This solution also addresses the district's current utilization increasing it from 67% to 85%, reduces the amount of facilities requiring maintenance and provides opportunities for consolidation of staff. Again, this solution addresses only the immediate need.



#### The 10-Year Need

Any long term solution should be evaluated as part of a District Master Plan. Based on the scope of this report we can offer a solution that can be further analyzed in the development of the Master Plan. This solution assumes that the immediate need solution has been implemented.

In an effort to address the projected decline in enrollment, while continuing to address the EAI results, further consolidation and reorganization of facilities was studied. The timeline below outlines a potential or sample approach for the District. This approach would involve community engagement, decisions beyond the scope of this report, and revisiting enrollment projections. This presented is soley only on the scope of this report and may not be the "right" solution when all factors are considered.



Enrollment figures are only projections at this point and updated data will allow for further development of the proposed solution. Supposing the immediate need solution has been implemented previously, the Kennedy Elementary School would remain as the only stand-alone elementary school be the oldest building in the district and have the lowest EAI in the District. Any solution needs to address these items.

The proposed next step would be to consolidate Oak Street ES | Kennedy ES, however neither facility as it currently exists is capable of handling such a population increase. Additionally, according to the timeline of this solution Kennedy ES school would be 56 years old at this point. The average life span of a school facility is 50 years. With this information in mind we can begin to explore the potential of a new school facility on the existing Kennedy ES site.

A new facility would address the age of the building while providing an opportunity for the development of a design that is flexible and modern. It would also allow the District to revisit any changes in enrollment figures to build a facility that is "right sized".

After consolidating the elementary schools into a singular building for each district, while maintaining all of the facilities built within the past 40 years. To this end the current Oak Street | Horace Mann co-located school would be transformed into a central middle school for the Town of Franklin.

The Horace Mann School is the ideal location for multiple reasons:

- As a building it is the best equipped of the three current buildings as it has a larger gym and auditorium
- Becoming a central middle school on the same site as the high school promotes collaboration between the middle school and high school
- Student who are excelling have the opportunity to take high school courses
- The students are consolidated into a single facility at a younger age
- The population of a larger middle school allows the District to create Smaller Learning Communities and further develop the vision and goals of the educational program.

The chart below illustrates how the capacity of each school is utilized at this 10-year mark. Having the utilization rates be on the lower end of the capacity range gives the flexibility for enrollment to grow, which can be seen in the increasing population at the elementary schools around the 2027-2028 school year. When determining the capacity for the new Kennedy | Oak Street Elementary the boundaries of the districts can be re-evaluated to allow additional students from the existing district attend the Helen Keller | Davis Thayer Elementary; increasing the utilization of that facility. This also provides an opportunity to create a single Helen Keller | Davis Thayer Elementary district as show on the map below.

Projected

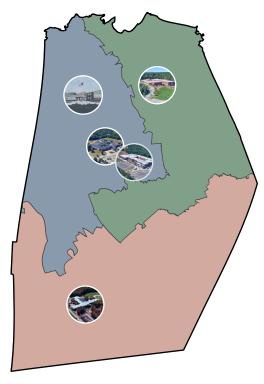
Enrollment

Projected

Functional

Capacity

		1 2		
	HELEN KELLER DAVIS THAYER ELEMENTARY	1,141	577	51%
	KENNEDY OAK STREET ELEMENTARY	TBD	696	TBD
	JEFFERSON PARMENTER ELEMENTARY	1,060	735	69%
KELLER DAVIS THAYER ELEMENTARY	FRANKLIN MIDDLE	1,215	1,025	84%
KENNEDY OAK STREET ELEMENTARY				
JEFFERSON PARMENTER ELEMENTARY	FRANKLIN MIDDLE		FRANI	



# **APPENDIX A**

# **Glossary of Terms**

Building Capacity	The number of students the facility can physically accommodate based on a generic, formula-driven program. Developed by categorizing actual room uses.
Campus	A campus is a site where one or more schools/buildings is/are located.  For example, an elementary school can share a site with a middle school;  therefore, it is considered a campus.
Capacity Analysis	An analysis of how many students the school's physical facility can effectively serve within its classrooms.
Capital Improvement	The addition or restoration of a permanent structure or some aspect of a property that will either enhance the property's overall value or increase its useful life.
Core Spaces	Large areas within a building that are utilized by most students throughout the school day (e.g., cafeteria, gymnasium, library).
Design Capacity	The number of students a school is designed to hold, not factoring for special programs.
Educational Adequacy Index (EAI)	A widely used indicator that provides a relative scale of the educational quality of a facility or group of facilities within a portfolio. A higher EAI indicates a better condition.
Facility Portfolio	An inventory of all the buildings FPS manages.
Functional Capacity	The number of students a school can hold, accommodating for spaces dedicated to special instruction (e.g., gyms, computer labs, music, etc.) and allowing for conference periods and other breaks in instructional schedule.
Overutilized	A school enrollment that is greater than the target utilization.
Pedological	Most commonly understood as the approach to teaching. It refers to the theory and practice of learning, and how this process influences, and is influenced by, the social, political and psychological development of learners.
Student Stations	The number of students a classroom/facility can accommodate without adjusting for efficiencies.
Underutilized	A school enrollment that is less than the target utilization.
Utilization	The calculated rate at which a school is utilized based on current enrollment and the capacity of the school. Calculated by dividing Enrollment by Capacity.

# **APPENDIX B**

# 21st Century Learning Environment Transformation

In addition to the capacity analysis, the District asked Kaestle Boos Associates to provide an idea of how the existing buildings could be transformed into 21st Century Learning Environments. These ideas presented are not final solutions and any solution should be reviewed by a registered design professional to ensure compliance with the building code, accessibility, etc.

#### **ELEMENTARY SCHOOL**

When Jefferson Elementary School was constructed in 1996, students were mostly educated in the same way as their peers with a focus on the stand and deliver teaching approach. Science and psychology now suggest that each student learns differently. This knowledge requires a different teaching model which in turn requires different physical architecture to support those educational needs.

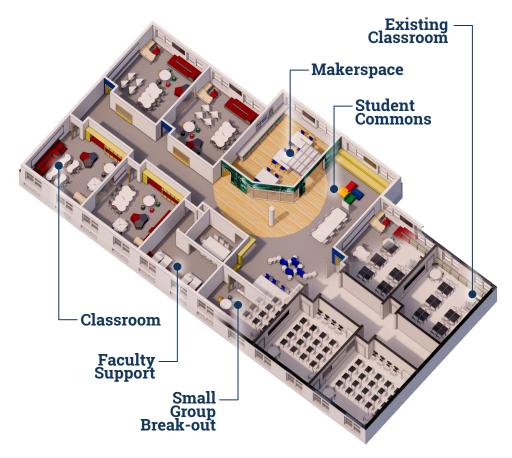
In this concept, the classroom wing is broken down to a small learning community (SLC). Students in primary school typically spend most of their day within their primary learning space: the classroom. By carving out the center of a long double-loaded corridor for shared learning and support spaces, we expand their primary learning environment to include spaces within the corridor by creating a learning commons. Transparency from the classroom to the corridor and shared spaces creates opportunities for students to see what others are doing within their SLC without sacrificing safety. Additionally, operable glass sliding doors between classrooms create opportunities for teachers to work together in larger classrooms and do some team teaching as students enter the older grade levels.

The incorporation of a Makerspace/ Project Room / STEAM space within the SLC creates a place where students can go for tactile hands on lessons or experimentation while still being connected to their primary educational space.

The student commons space provides a space where multiple groups can come together and work within the SLC. This space can serve as a place for collaboration or breakout. Glazing from many spaces allows teachers to have visual surveillance over students while providing an independent place for work to occur.

Adjacent to the student common area is a dedicated teacher planning and conference space. Also included is a small group room for pull-out instruction and small group collaboration. These spaces allow teaching and learning to occur in a flexible adaptable environment that caters to many learning styles. These small group rooms can also be used for small cohorts of special education students as needed.

Within the general classroom there is also opportunity for personalization. Zones are established with different furnishings to provide settings for



different types. Light-weight tables and chairs on casters can be easily rearranged to create different groupings and configurations on the fly for different experiences within the classroom. Reading nooks have been incorporated into the corridor as zones for quiet, self-directed learning. Multiple white boards and touch screen monitors located on all of the walls allow for each to be a different teaching zone. These interventions allow teachers to personalize their lessons for the students and practice differentiation.

Wayfinding at the classroom portals and within the commons areas creates a hierarchy of spaces that is easy to understand and clearly marked.

#### SECONDARY SCHOOL

As an example in a secondary school, we developed a concept using the Horace Mann Middle School to illustrate the possibilities.

Currently, the facility houses both elementary and middle school students. Should the district move towards a model of having dedicated middle school buildings, updates will be required to suite the teaching and learning at these buildings.

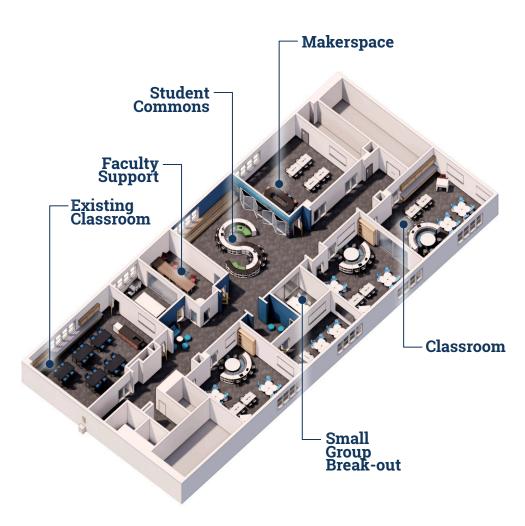
Much like most buildings of a similar vintage, Horace Mann Middle School, constructed in 1964 and substantially renovated in 1999, was designed for stand and deliver direct instruction. A shift in understanding of education has created a desire to have more student-centric spaces and opportunities for project based learning and interdisciplinary instruction.

In this concept, the classroom wing is broken down into a small learning community (SLC). Centralized classrooms are carved out to break up the existing isolated double loaded corridor. Existing plumbing from science classrooms can be re-purposed to support a maker space/STEAM lab. Having this space adjacent to the other classroom spaces will allow teachers and students to freely move between their classrooms and this project area to support project-based learning.

Large glazing panels create transparency from the classroom to the corridor. This supports the continuity of space by allowing teachers to have visual surveillance in students utilizing spaces outside of the classroom as learning environments. These spaces include the maker/ STEAM lab, student commons, small group rooms, and breakout areas. Additionally, operable glass sliding doors between classrooms create opportunities for teachers to work together in larger classrooms and do some team teaching by bringing two groups of students together into one larger space.

The incorporation of a Makerspace/ Project Room / STEAM space within the SLC creates a place where students can go for tactile hands on lessons or experimentation while still being connected to their primary classroom space.

The student commons space provides a space where multiple groups can come together and work within the SLC. This space can be utilized as a



learning space but it also serves as a space for the small learning community to get together during class time. It is also useful as an alternative space during lunch or after school areas for groups to study and work together. Informal learning areas like the commons support the social emotional health of students by creating comfortable spaces where students can be known by their peers and educators.

Adjacent to the student common area is a dedicated teacher planning and conference space. Teachers who share classrooms in secondary education learning environments need space for them to work while their classroom spaces are occupied by others. These teacher workrooms and planning centers are a hub for collaboration where teachers can work together on interdisciplinary project ideas as well as serving their day to day needs.

The small learning community includes one resource room to serve the cohort of students. Locating special education spaces adjacent to traditional classrooms allows students to quickly move between the two and creates empathy by including these students into a cohort of students.

Small group rooms accessed from the student commons can also be used for small group instruction as well as testing, meetings, and conferences. Breakout areas with soft seating can also support individual student directed learning and informal meetings.

Science classrooms are modified by creating shared tables with epoxy resin tops which are on casters and can be organized into groups as well as reconfigured along the perimeter of the classroom for experimentation. By creating a teacher planning/prep area in an adjacent space, teachers can prepare lessons while other classes are taking place as well as provide additional storage for science equipment. In high schools, universal labs, equipped with water and gas at each perimeter station create flexibility as all science courses can be taught in each room which helps school organization and scheduling of rooms.

General classrooms are also designed with flexibility in mind. In secondary education, teachers typically share classrooms and as a result, different disciplines utilize a single room. Much like in the elementary schools, creating classroom zones for different types of learners is important. Light-weight flexible and adaptable furnishings including tables and chairs on casters can be easily rearranged to create different groupings and configurations on the fly for different experiences within the classroom. Individual nesting desks, group tables of varying heights, and soft group instruction seating are all important to include within a single room. Every wall within a classroom is outfitted with a white board or touch screen monitor so that there are multiple different areas for activities to occur.

Wayfinding at the classroom portals and within the commons areas creates a hierarchy of spaces that is easy to understand and clearly marked. Flooring transitions for shared common areas is also indicative of the activity that occurs within the space.

# APPENDIX C

# **Demographics Report:**

Franklin Public Schools: Population and **Enrollment Forecasts 2020-21 through 2029-2030** 

## FRANKLIN PUBLIC SCHOOLS:

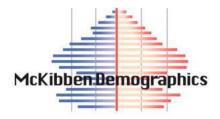
## POPULATION AND ENROLLMENT FORECASTS, 2020-21 THROUGH 2029-30

**DECEMBER 2019** 

McKibben Demographic Research, LLC Jerome McKibben, Ph.D. **Rock Hill, SC** 

j.mckibben@mckibbendemographics.com

978-501-7069



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#### **EXECUTIVE SUMMARY**

- 1. The resident total fertility rate for the Franklin Public Schools over the life of the forecasts is below replacement level. (1.63 vs. the replacement level of 2.1)
- 2. Most in-migration to the district continues to occur in the 0-to-9 and 25-to-44 year old age groups.
- 3. The local 18-to-24 year old population continues to leave the district, going to college or moving to other urbanized areas. This population group accounts for the largest segment of the district's out migration flow and will increase steadily over the next 10 years. The second largest migration outflow is in the 70+ age groups.
- 4. The primary factors causing the district's enrollment to decrease over the next five years is the increase in empty nest households, the relatively low number of elderly housing units turning over coupled with a flat rate of in migration of young families.
- 5. Changes in year-to-year enrollment over the next five years will primarily be due to small cohorts entering and moving through the school system in conjunction with larger cohorts leaving the system.
- 6. The elementary enrollment will slowly decrease over the next five school years, then start to rise after 2024-25.
- 7. The median age of the district's population will increase from 38.4 in 2010 to 45.7 in 2030.
- 8. Even if the district continues to have some amount of annual new housing unit construction over the next 10 years, the rate, magnitude and price of existing home sales will become the increasingly dominant factor affecting the amount of population and enrollment change.
- 9. Total district enrollment is forecasted to decrease by 639 students, or -12.6%, between 2019-20 and 2024-25. Total enrollment will increase by 28 students, or 0.6%, from 2024-25 to 2029-30.

#### INTRODUCTION

By demographic principle, distinctions are made between projections and forecasts. A projection extrapolates the past (and present) into the future with little or no attempt to take into account any factors that may impact the extrapolation (e.g., changes in fertility rates, housing patterns or migration patterns) while a forecast results when a projection is modified by reasoning to take into account the aforementioned factors.

To maximize the use of this study as a planning tool, the ultimate goal is not simply to project the past into the future, but rather to assess various factors' impact on the future. The future population and enrollment change of each school district is influenced by a variety of factors. Not all factors will influence the entire school district at the same level. Some may affect different areas at dissimilar magnitudes and rates causing changes at varying points of time within the same district. The forecaster's judgment, based on a thorough and intimate study of the district, has been used to modify the demographic trends and factors to more accurately predict likely changes. Therefore, strictly speaking, this study is a forecast, not a projection; and the amount of modification of the demographic trends varies between different areas of the district as well as within the timeframe of the forecast.

To calculate population forecasts of any type, particularly for smaller populations such as a school district,

realistic suppositions must be made as to what the future will bring in terms of age specific fertility rates and residents' demographic behavior at certain points of the life course. The demographic history of the school district and its interplay with the social and economic history of the area is the starting point and basis of most of these suppositions particularly on key factors such as the age structure of the area. The unique nature of each district's and attendance area's demographic composition and rate of change over time must be assessed and understood to be factors throughout the life of the forecast series. Moreover, no two populations, particularly at the school district and attendance area level, have exactly the same characteristics.

The manifest purpose of these forecasts is to ascertain the demographic factors that will ultimately influence the enrollment levels in the district's schools. There are of course, other nondemographic factors that affect enrollment levels over time. These factors include, but are not limited to transfer policies within the district; student transfers to and from neighboring districts; placement of "special programs" within school facilities that may serve students from outside the attendance area; state or federal mandates that dictate the movement of students from one facility to another (No Child Left Behind was an excellent example of this factor); the development of charter schools in the district; the prevalence of home schooling in the area; and the dynamics of local private schools.

Unless the district specifically requests the calculation of forecasts that reflect the effects of changes in these nondemographic factors, their influences are held constant for the life of the forecasts. Again, the main function of these forecasts is to determine what impact demographic changes will have on future enrollment. It is quite possible to calculate special "scenario" forecasts to measure the impact of school policy modifications as well as planned economic and financial changes. However in this case the results of these population and enrollment forecast are meant to represent the most likely scenario for changes over the next 10 years in the district and its attendance areas.

The first part of the report will examine the assumptions made in calculating the population forecasts for the Franklin Public Schools. Since the results of the population forecasts drive the subsequent enrollment forecasts, the assumptions listed in this section are paramount to understanding the area's demographic dynamics. The remainder of the report is an explanation and analysis of the district's population forecasts and how they will shape the district's grade level enrollment forecasts.

#### **DATA**

The data used for the forecasts come from a variety of sources. The Franklin Public Schools provided enrollments by grade and attendance center for the school years 2014-2015 to 2019-2020. Birth and death data for the years 2000 through 2017 were obtained from the Massachusetts Department of

Health. The net migration values were calculated using Internal Revenue Service migration reports for the years 2000 through 2016. The data used for the calculation of migration models came from the United States Bureau of the Census, 2005 to 2010, and the models were designed using demographic and economic factors. The base age-sex population counts used are from the results of the 2010 Census.

Recently the Census Bureau began releasing annual estimates of demographic variables at the block group and tract level from the American Community Survey (ACS). There has been wide scale reporting of these results in the national, state and local media. However, due to the methodological problems the Census Bureau is experiencing with their estimates derived from ACS data, particularly in areas with a population of less than 60,000, the results of the ACS are not used in these forecasts.

For example, given the sampling framework used by the Census Bureau, each year only 350 of the over 11,000 current households in the district would have been included. For comparison 1,500 households in the district were included in the sample for the long form questionnaire in the 2000 Census. As a result of this small sample size, the ACS survey result from the last 5 years must be aggregated to produce the tract and block group estimates.

To develop the population forecast models, past migration patterns, current age specific fertility patterns, the magnitude and dynamics of the gross migration, the age specific mortality trends, the distribution of the population by age and sex, the rate and type of existing housing unit sales, and future

housing unit construction are considered to be primary variables. In addition, the change in household size relative to the age structure of the forecast area was addressed. While there was a slight drop in the average household size in the Franklin Public Schools as well as most other areas of the state during the previous 20 years, the rate of this decline in the district has been forecasted to increase slightly over the next ten years.

#### **ASSUMPTIONS**

For these forecasts, the mortality probabilities are held constant at the levels calculated for the year 2010. While the number of deaths in an area are impacted by and will change given the proportion of the local population over age 65, in the absence of an extraordinary event such as a natural disaster or a breakthrough in the treatment of heart disease, death rates rarely move rapidly in any direction, particularly at the school district or attendance area level. Thus, significant changes are not foreseen in district's mortality rates between now and the year 2029. Any increases forecasted in the number of deaths will be due primarily to the general aging of the district's population and specifically to the increase in the number of residents aged 65 and older.

Similarly, fertility rates are assumed to stay fairly constant for the life of the forecasts. Like mortality rates, age specific fertility rates rarely change quickly or dramatically, particularly in small areas. Even with the recently reported rise in the fertility rates of the United States, overall fertility rates have stayed within a 10% range for most of the

last 40 years. In fact, the vast majority of year to year change in an area's number of births is due to changes in the number of women in child bearing ages (particularly ages 20-29) rather than any fluctuation in an area's fertility rate.

The resident total fertility rate (TFR), the average number of births a woman will have while living in the school district during her lifetime, is estimated to be 1.63 for the total district for the ten years of the population forecasts. A TFR of 2.1 births per woman is considered to be the theoretical "replacement level" of fertility necessary for a population to remain constant in the absence of in-migration. Therefore, in the absence of migration, fertility alone would be insufficient to maintain the current level of population and enrollment within the Franklin Public Schools over the course of the forecast period.

A close examination of data for the Franklin Public Schools has shown the age specific pattern of net migration will be nearly constant throughout the life of the forecasts. While the number of in and out migrants has changed in past years for the Franklin Public Schools (and will change again over the next 10 years), the basic age pattern of the migrants has stayed nearly the same over the last 30 years. Based on the analysis of data it is safe to assume this age specific migration trend will remain unchanged into the future. This pattern of migration shows most of the local out-migration occurring in the 18-to-24 year old age group as voung adults leave the area to go to college or move to other urbanized areas. The second group of out-migrants is those householders aged 70 and older who are downsizing their residences. Most of the

local in-migration occurs in the 0-to-9 and 25-44 age groups (the bulk of the which come from areas within 75 miles of the Franklin Public Schools) primarily consisting of younger adults and their children.

As the Norfolk County area is not currently contemplating any major expansions or contractions, the forecasts also assume that the current economic, political, social, and environmental factors, as well as the transportation and public works infrastructure (with a few notable exceptions) of the Franklin Public Schools and its attendance areas will remain the same through the year 2029. Below is a list of assumptions and issues that are specific to the Franklin Public Schools These issues have been used to modify the population forecast models to more accurately predict the impact of these factors on each area's population change.

Specifically, the forecasts for the Franklin Public Schools assume that throughout the study period:

- a. The national, state or regional economy does not go into deep recession at any time during the 10 years of the forecasts; (Deep recession is defined as four consecutive quarters where the GDP contracts greater than 1% per quarter)
- b. Interest rates have reached a historic low and will not fluctuate more than one percentage point in the short term; the interest rate for a 30 year fixed home mortgage stays below 5.0%;

- c. The rate of mortgage approval stays at 2015-2019 levels and lenders do not return to "subprime" mortgage practices;
- d. There are no additional restrictions placed on home mortgage lenders or additional bankruptcies of major credit providers;
- e. The rate of housing foreclosures does not exceed 125% of the 2015-2019 average of Norfolk County for any year in the forecasts;
- f. All currently planned, platted, approved and permitted housing developments are built out and completed by 2028. All housing units constructed are occupied by 2029;
- g. The district has at least 275 existing single-family home sales annually between 2019 and 2029;
- h. The unemployment rates for the Norfolk County and the Boston Metropolitan Area will remain below 6.0% for the 10 years of the forecasts;
- The intra district student transfer policy remains unchanged over the next 10 years;
- j. The rate of students transferring into and out of the Franklin Public Schools will remain at the 2015-16 to 2019-20 average;
- k. The inflation rate for gasoline will stay below 5% per year for the 10 years of the forecasts;

- l. There will be no building moratorium within the district;
- m. The State of Massachusetts does not change any of its current laws regarding inter-district transfers, school vouchers or charter schools;
- n. No new charter schools open in the district or surrounding area in the next 10 years;
- Businesses within the district and the Franklin Public Schools area will remain viable;
- p. The number of existing home sales in the district that are a result of "distress sales" (homes worth less than the current mortgage value) will not exceed 20% of total homes sales in the district for any given year;
- q. Housing turnover rates (sale of existing homes in the district) will remain at their current levels. The majority of existing home sales are made by home owners over the age of 60;
- Private school and home school attendance rates will remain constant;
- s. The rate of foreclosures for commercial property remains at the 2014-2018 average for Norfolk County;

If a major employer in the district or in the Greater Boston Metropolitan Area (and particularly in the western

suburbs) closes, reduces or expands its operations, the population forecasts would need to be adjusted to reflect the changes brought about by the change in economic and employment conditions. The same holds true for any type of natural disaster, major change in the local infrastructure (e.g., highway construction, water and sewer expansion, changes in zoning regulations etc.), a further economic downturn, any additional weakness in the housing market or any instance or situation that causes rapid and dramatic population changes that could not be foreseen at the time the forecasts were calculated.

The high proportion of high school graduates from the Franklin Public Schools that attend college or move to urban areas outside of the district for employment is a significant demographic factor. Their departure is a major reason for the extremely high out-migration in the 18 to 24 age group, and was taken into account when calculating these forecasts. The out-migration of graduating high school seniors is expected to continue over the period of the forecasts and the rate of outmigration has been forecasted to remain the same over the life of the forecast series.

Finally, all demographic trends (i.e., births, deaths, and migration) are assumed to be linear in nature and annualized over the forecast period. For example, if 1,000 births are forecasted for a 5-year period, an equal number, or proportion of the births are assumed to occur every year, 200 per year. Actual year-to-year variations do and will occur, but overall year to year trends are expected to be constant.

#### **METHODOLOGY**

The population forecasts presented in this report are the result of using the Cohort-Component Method of population forecasting (Siegel, and Swanson, 2004: 561-601) (Smith et. al. 2004). As stated in the **INTRODUCTION**, the difference between a projection and a forecast is in the use of explicit judgment based upon the unique features of the area under study. Strictly speaking, a cohort projection refers to the future population that would result if a mathematical extrapolation of historical trends.

Conversely, a cohort-component forecast refers to the future population that is expected because of a studied and purposeful selection of the components of change (i.e., births, deaths, and migration) and forecast models are developed to measure the impact of these changes in each specific geographic area.

Five sets of data are required to generate population and enrollment forecasts. These five data sets are:

- a base-year population (here, the 2010 Census population for the Franklin Public Schools and its attendance areas);
- a set of age-specific fertility rates for the district to be used over the forecast period for the district and each of the attendance areas;
- c. a set of age-specific survival (mortality) rates for the district and the attendance areas;

- d. a set of age-specific migration rates for the district and its attendance areas; and;
- e. the historical enrollment figures by grade.

The most significant and difficult aspect of producing enrollment forecasts is the generation of the population forecasts in which the school age population (and enrollment) is embedded. In turn, the most challenging aspect of generating the population forecasts is found in deriving the rates of change in fertility, mortality, and migration. From the standpoint of demographic analysis, the Franklin Public Schools is classified as a "small area" population (as compared to the population of the state of Massachusetts or to that of the United States).

Small area population forecasts are more complicated to calculate because local variations in fertility, mortality, and migration may be more irregular than those at the regional, state or national scale. Especially challenging is the forecast of the migration rates for local areas, because changes in the area's socioeconomic characteristics can quickly change from past and current patterns (Peters and Larkin, 2002.)

The population forecasts for Franklin Public Schools were calculated using a cohort-component method with the populations divided into male and female groups by five-year age cohorts that range from 0-to-4 years of age to 85 years of age and older (85+). Age- and sex-specific fertility, mortality, and migration models were constructed to specifically reflect the unique demographic characteristics of each of

the attendance areas in the Franklin Public Schools.

The enrollment forecasts were calculated using a modified average survivorship method. Average survivor rates (i.e., the proportion of students who progress from one grade level to the next given the average amount of net migration for that grade level) over the previous five years of year-to-year enrollment data were calculated for grades two through twelve. This procedure is used to identify specific grades where there are large numbers of students changing facilities for nondemographic factors, such as private school transfers or enrollment in special programs.

The survivorship rates were modified or adjusted to reflect the average rate of forecasted in and out migration of 5-to-9, 10-to-14 and 15-to-17-year-old cohorts to each of the attendance centers in Franklin Public Schools for the period 2010 to 2015. These survivorship rates then were adjusted to reflect the forecasted changes in age-specific migration the district should experience over the next five years. These modified survivorship rates were used to project the enrollment of grades 2 through 12 for the period 2015 to 2020. The survivorship rates were adjusted again for the period 2020 to 2025 to reflect the predicted changes in the amount of age-specific migration in the district for the period.

The forecasted enrollments for kindergarten and first grade are derived from the 5-to-9 year old population of the age-sex population forecast at the elementary attendance center district level. This procedure allows the changes

in the incoming grade sizes to be factors of forecasted population change and not an extrapolation of previous class sizes. Given the potentially large amount of variation in Kindergarten enrollment due to parental choice, changes in the state's minimum age requirement, and differing district policies on allowing children to start Kindergarten early, first grade enrollment is deemed to be a more accurate and reliable starting point for the forecasts. (McKibben, 1996) The level of the accuracy for both the population and enrollment forecasts at the school district level is estimated to be +2.0% for the life of the forecasts.

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# **Appendix A: Supplemental Tables**

Table 1: Forecasted Elementary Area Population Change, 2010 to 2020

	2010	2015	2010-2015 Change	2020	2015-2020 Change	2010-2020 Change
Davis Thayer	5,323	5,440	2.2%	5,580	2.6%	4.8%
Jefferson	4,597	4,700	2.2%	4,800	2.1%	4.4%
Keller	5,221	5,300	1.5%	5,400	1.9%	3.4%
Kennedy	4,818	4,950	2.7%	5,080	2.6%	5.4%
Oak Street	5,952	6,080	2.2%	6,120	0.7%	2.8%
Parmenter	5,725	5,790	1.1%	5,820	0.5%	1.7%
District Total	31,635	32,260	2.0%	32,800	1.7%	3.7%

Table 2: Household Characteristics by Elementary Area, 2010 Census

	HH w/ Pop Under 18	% HH w/ Pop Under 18	Total Households	Household Population	Persons Per Household
Davis Thayer	660	37.1%	1,778	4,513	2.54
Jefferson	738	48.2%	1,532	4,597	3.00
Keller	924	59.1%	1,564	5,221	3.34
Kennedy	784	50.8%	1,543	4,818	3.12
Oak Street	876	39.2%	2,235	5,952	2.66
Parmenter	765	32.6%	2,345	5,660	2.41
District Total	4,746	43.2%	10,995	30,760	2.80

Table 3: Householder Characteristics by Elementary Area, 2010 Census

	Percentage of Householders aged 35-54	Percentage of Householders aged 65+	Percentage of Householders who own homes
Davis Thayer	51.0%	16.3%	63.5%
Jefferson	58.7%	13.8%	80.9%
Keller	64.7%	11.2%	97.8%
Kennedy	58.5%	14.0%	96.9%
Oak Street	50.1%	19.6%	88.7%
Parmenter	44.9%	23.7%	59.2%
District Total	53.6%	17.1%	79.7%

Table 4: Percentage of Households that are Single Person Households and Single Person Households that are over age 65 by Elementary Area, 2010 Census

	Percentage of Single Person Households	Percentage of Single Person Households and are 65+
Davis Thayer	27.2%	7.5%
Jefferson	16.6%	4.7%
Keller	7.4%	3.1%
Kennedy	10.4%	3.6%
Oak Street	23.7%	9.1%
Parmenter	31.5%	12.6%
District Total	20.8%	7.4%

Table 5: Elementary Enrollment (K-5), 2019, 2024, 2029

	2019	2024	2019-2024 Change	2029	2024-2029 Change	2019-2029 Change
Davis Thayer	227	241	6.2%	269	11.6%	18.5%
Jefferson	346	286	-17.3%	336	17.5%	-2.9%
Keller	346	276	-20.2%	308	11.6%	-11.0%
Kennedy	351	247	-29.6%	294	19.0%	-16.2%
Oak Street	359	380	5.8%	402	5.8%	12.0%
Parmenter	345	379	9.9%	399	5.3%	15.7%
<b>District Total</b>	1,974	1,809	-8.4%	2,008	11.0%	1.7%

Table 6: Age Under One to Age Ten Population Counts, by Year of Age, by Elementary Area: 2010 Census

	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
Davis Thayer	43	54	73	53	61	72	63	74	68	72	69
Jefferson	40	38	46	64	50	90	78	78	77	93	97
Keller	59	59	71	90	101	116	98	118	139	108	127
Kennedy	43	48	66	54	84	86	84	80	89	95	101
Oak Street	72	68	78	87	76	102	83	96	96	81	88
Parmenter	61	60	65	84	79	73	99	78	92	80	86
District Total	318	327	399	433	452	538	506	524	560	530	567

Table 7: Comparison of District Resident Enrollment by Grade with 2010 Census Counts by Age, 2014-2019

2010 Census	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
Franklin Public Schools Total	318	327	399	433	452	538	506	524	560	530	567	551	568	540
2019 Enrollment	329	349	385	415	433	435	432	447	429					
	103.5%	106.7%	96.5%	95.8%	95.8%	80.9%	85.4%	85.3%	76.6%					
2018 Enrollment	338	349	376	407	431	451	445	438	437	424				
	106.3%	106.7%	94.2%	94.0%	95.4%	83.8%	87.9%	83.6%	78.0%	80.0%				
2017 Enrollment	316	328	359	403	435	446	470	452	437	423	467			
	99.4%	100.3%	90.0%	93.1%	96.2%	82.9%	92.9%	86.3%	78.0%	79.8%	82.4%			
2016 Enrollment	318	327	350	404	427	448	468	474	436	424	470	404		
	100.0%	100.0%	87.7%	93.3%	94.5%	83.3%	92.5%	90.5%	77.9%	80.0%	82.9%	73.3%		
2015 Enrollment	312	330	347	401	424	434	472	469	461	430	474	408	411	
	98.1%	100.9%	87.0%	92.6%	93.8%	80.7%	93.3%	89.5%	82.3%	81.1%	83.6%	74.0%	72.4%	
2014 Enrollment		324	347	409	434	435	467	464	464	455	480	404	416	397
		91.1%	91.6%	98.5%	92.9%	95.0%	88.3%	86.1%	94.6%	89.0%	90.9%	82.8%	83.3%	82.1%

Grade 1 in Red

# **Appendix B: Population Forecasts**

# Franklin Public Schools Total Population

	2010		2015		2020		2025		2030
0-4	1,929		1,440		1,440		1,480		1,570
5-9	2,658		2,120		1,810		1,710		1,880
10-14	2,811		2,750		2,240		1,940		1,850
15-19	2,673		3,020		2,930		2,390		2,030
20-24	1,506		1,550		1,650		1,620		1,350
25-29	1,296		1,450		1,460		1,590		1,570
30-34	1,446		1,540		1,700		1,790		1,920
35-39	2,212		1,680		1,810		2,020		2,110
40-44	2,835		2,360		1,920		2,060		2,240
45-49	3,185		2,820		2,410		1,970		2,080
50-54	2,743		3,140		2,790		2,390		1,940
55-59	1,942		2,690		3,080		2,730		2,350
60-64	1,422		1,880		2,590		2,970		2,620
65-69	926		1,330		1,740		2,420		2,590
70-74	659		900		1,280		1,660		2,220
75-79	561		610		820		1,160		1,420
80-84	425		520		570		780		1,100
85+	406		460		560		610		770
Total	31,635		32,260	;	32,800		33,290		33,610
Median Age	38.4		41.2		43.5		45.1		45.7
Births		1,140		1,160		1,160		1,140	
Deaths		810		930		1,080		1,280	
Natural Increase		330		230		80		-140	
Net Migration		300		340		370		420	
Change		630		570		450		280	

Differences between period Totals may not equal Change due to rounding.

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# **Davis Thayer Elementary Total Population**

	2010		2015		2020		2025		2030
0-4	284		210		220		220		220
5-9	349		280		230		250		270
10-14	335		370		300		250		270
15-19	783		790		820		750		700
20-24	542		530		530		560		500
25-29	289		320		310		310		340
30-34	259		300		330		320		320
35-39	328		270		300		330		330
40-44	412		330		280		320		350
45-49	447		410		330		270		310
50-54	389		440		400		330		270
55-59	257		380		440		390		320
60-64	209		250		370		420		380
65-69	146		200		220		330		370
70-74	99		140		200		190		300
75-79	71		90		130		180		160
80-84	58		60		90		130		170
85+	66		70		80		90		120
Total	5,323		5,440		5,580		5,640		5,700
Median Age	31.5		33.7		35.8		37.4		38.5
Births		190		200		190		190	
Deaths		120		130		160		190	
Natural Increase		70		70		30		0	
Net Migration		50		50		50		50	
Change		120		120		80		50	

Differences between period Totals may not equal Change due to rounding.

# **Jefferson Elementary Total Population**

	2010		2015		2020		2025		2030
0-4	239		180		200		180		200
5-9	416		340		300		280		320
10-14	537		420		360		320		290
15-19	348		480		360		300		240
20-24	178		150		180		150		120
25-29	161		210		180		220		180
30-34	144		210		270		240		280
35-39	269		200		280		340		310
40-44	493		310		280		330		390
45-49	485		490		330		280		330
50-54	454		480		480		330		280
55-59	328		450		470		470		320
60-64	186		320		430		450		460
65-69	132		170		290		410		400
70-74	66		120		150		290		370
75-79	57		60		110		140		230
80-84	52		50		60		100		130
85+	51		60		70		60		90
Total	4,597		4,700		4,800		4,890		4,940
Median Age	40.1		42.6		44.8		46.5		47.1
Births		150		170		160		150	
Deaths		110		120		140		180	
Natural Increase		40		50		20		-30	
Net Migration		50		60		60		70	
Change		90		110		80		40	

Differences between period Totals may not equal Change due to rounding.

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# **Helen Keller Elementary Total Population**

	2010		2015		2020		2025		2030
0-4	380		260		230		260		300
5-9	579		400		320		260		300
10-14	564		600		420		350		280
15-19	410		500		530		350		260
20-24	152		200		220		240		210
25-29	142		170		220		240		260
30-34	204		190		220		280		290
35-39	399		240		240		280		340
40-44	550		430		300		300		330
45-49	569		560		480		350		330
50-54	476		560		560		470		340
55-59	287		460		550		540		470
60-64	204		280		450		530		500
65-69	104		190		260		430		450
70-74	86		100		190		260		390
75-79	66		80		90		180		210
80-84	29		60		70		90		170
85+	19		20		50		60		80
Total	5,221		5,300		5,400		5,470		5,510
Median Age	37.3		41.0		45.0		47.5		47.8
Births		140		130		150		150	
Deaths		90		120		150		180	
Natural Increase		50		10		0		-30	
Net Migration		50		60		60		70	
Change		100		70		60		40	

Differences between period Totals may not equal Change due to rounding.

## J.F. Kennedy Elementary Total Population

	2010		2015	2020		2025		2030
0-4	295		230	220		250		260
5-9	434		320	300		230		260
10-14	481		460	340		330		270
15-19	375		430	400		280		260
20-24	182		200	220		180		140
25-29	150		210	240		240		210
30-34	202		210	270		320		320
35-39	334		260	270		350		420
40-44	447		370	320		350		400
45-49	543		440	360		330		350
50-54	458		540	440		360		320
55-59	302		450	520		430		350
60-64	229		290	430		510		420
65-69	121		210	280		410		410
70-74	91		120	210		270		360
75-79	84		80	110		200		250
80-84	63		80	80		100		190
85+	30		50	70		80		100
Total	4,818		4,950	5,080		5,220		5,290
Median Age	39.4		42.1	44.4		46.2		46.5
Births		180	200		200		190	
Deaths		110	140		160		190	
Natural Increase		70	60		40		0	
Net Migration		60	70		80		90	
Change		130	130		120		90	

Differences between period Totals may not equal Change due to rounding.

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# Oak Street Elementary Total Population

	2010		2015		2020		2025		2030
0-4	382		270		260		270		280
5-9	458		420		350		360		380
10-14	471		470		440		370		390
15-19	424		430		430		390		310
20-24	202		220		230		220		170
25-29	240		250		240		250		250
30-34	326		300		300		320		340
35-39	463		380		370		390		380
40-44	474		500		410		410		440
45-49	615		470		490		410		410
50-54	523		610		460		490		400
55-59	395		510		590		460		480
60-64	320		380		490		570		440
65-69	200		300		350		440		520
70-74	155		200		280		310		410
75-79	123		150		180		230		260
80-84	88		120		130		170		220
85+	93		100		120		140		180
Total	5,952		6,080		6,120		6,200		6,260
Median Age	40.1		43.0		45.3		46.5		47.3
Births		230		220		230		220	
Deaths		170		190		230		260	
Natural Increase		60		30		0		-40	
Net Migration		50		50		60		70	
Change		110		80		60		30	

Differences between period Totals may not equal Change due to rounding.

## **Parmenter Elementary Total Population**

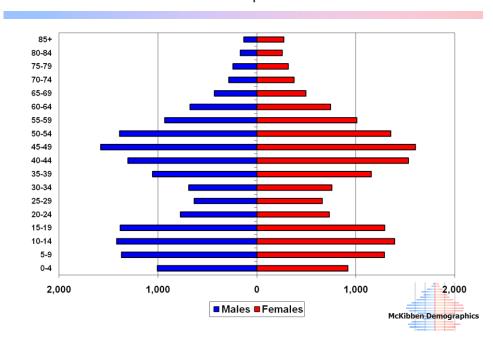
	2010	20:	15	2020		2025		2030
0-4	349	29	0	310		300		310
5-9	422	36	0	310		330		350
10-14	423	43	0	380		320		350
15-19	334	39	0	390		320		260
20-24	250	25	0	270		270		210
25-29	314	29	0	270		330		330
30-34	312	33	0	310		310		370
35-39	419	33	0	350		330		330
40-44	459	42	0	330		350		330
45-49	526	45	0	420		330		350
50-54	443	51	0	450		410		330
55-59	372	44	0	510		440		410
60-64	273	36	0	420		490		420
65-69	224	26	0	340		400		440
70-74	161	22	0	250		340		390
75-79	161	15	0	200		230		310
80-84	135	15	0	140		190		220
85+	148	16	0	170		180		200
Total	5,725	5,7	90	5,820		5,870		5,910
Median Age	40.4	42	7	44.8		46.1		46.6
Births		250	240		230		240	
Deaths		210	230		240		280	
Natural Increase		40	10		-10		-40	
Net Migration		40	50		60		70	
Change		80	60		50		30	

 ${\it Differences \ between \ period \ Totals \ may \ not \ equal \ Change \ due \ to \ rounding.}$ 

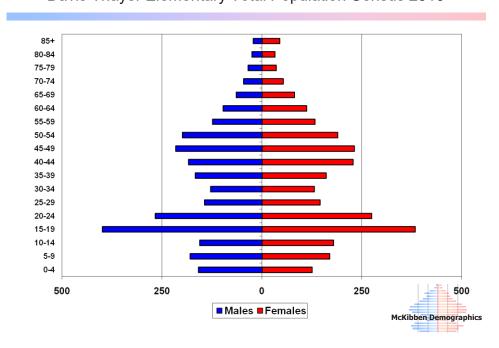
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# **Appendix C: Population Pyramids**

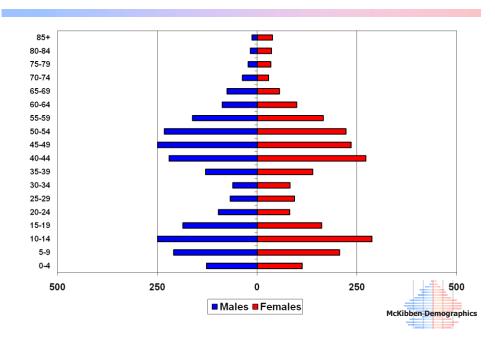
Franklin District Total Population Census 2010



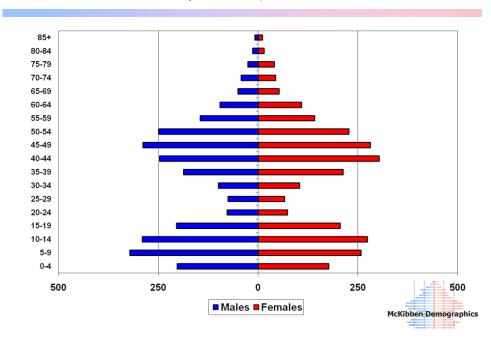
## Davis Thayer Elementary Total Population Census 2010



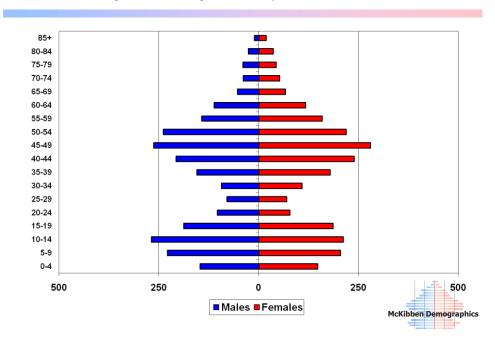
# Jefferson Elementary Total Population Census 2010



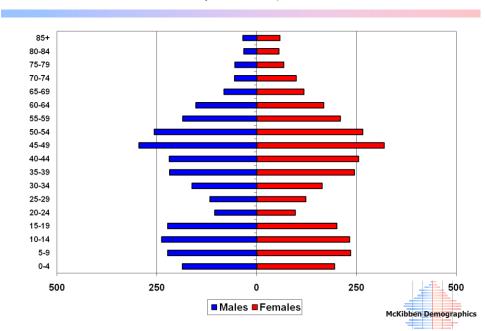
## Keller Elementary Total Population Census 2010



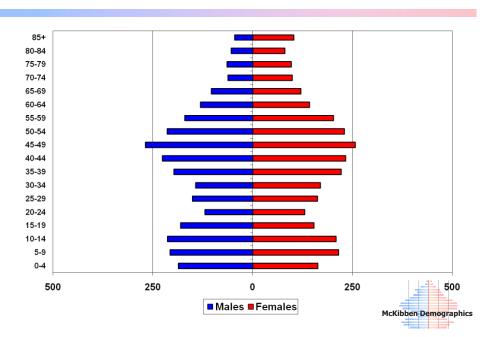
## Kennedy Elementary Total Population Census 2010



## Oak Street Elementary Total Population Census 2010



# Parmenter Elementary Total Population Census 2010



# **Appendix D: Enrollment Forecasts**

#### **Franklin Public Schools Total Enrollment**

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30
PK	131	104	107	111	111	111	111	111	111	111	111	111	111	111
К	326	307	314	285	286	290	293	298	302	314	318	326	329	322
1	318	336	327	325	294	297	302	305	310	314	320	324	332	335
2	327	316	349	337	325	291	295	300	303	315	319	325	329	336
3	350	328	338	349	341	328	294	298	303	312	324	328	334	337
4	404	359	349	329	348	340	327	293	297	309	318	330	334	339
5	427	403	376	349	330	349	341	328	294	303	315	324	336	339
Total: K-5	2283	2153	2160	2085	2035	2006	1963	1933	1920	1978	2025	2068	2105	2119
6	448	435	407	385	357	337	356	349	335	304	314	327	336	345
7	468	446	431	415	388	359	340	359	351	340	309	319	332	342
8	474	470	451	433	419	391	362	343	362	358	347	315	325	338
Total: 6-8	1390	1351	1289	1233	1164	1087	1058	1051	1048	1002	970	961	993	1025
_														
9	436	452	445	435	420	406	379	351	333	355	351	340	309	319
10	424	437	438	432	428	414	400	373	346	328	350	346	335	304
11	470	423	437	447	434	430	416	402	375	348	330	352	348	337
12 SP	404 5	467	424	429	445 8	432	428	414	400	373 8	346	328 8	350 8	346
5P Total: 9-12	5 <b>1739</b>	8 <b>1787</b>	5 <b>1749</b>	8 <b>1751</b>	8 1735	8 <b>1690</b>	8 <b>1631</b>	8 <b>1548</b>	8 <b>1462</b>	8 1412	8 <b>1385</b>	8 1374	8 1350	8 <b>1314</b>
10tai: 9-12	1/39	1/8/	1749	1/51	1/35	1090	1031	1548	1402	1412	1305	13/4	1330	1514
Total: K-12	5412	5291	5198	5069	4934	4783	4652	4532	4430	4392	4380	4403	4448	4458
	0	0_0_	5255	5555		.,,,,								
Total: K-12	5412	5291	5198	5069	4934	4783	4652	4532	4430	4392	4380	4403	4448	4458
Change		-121	-93	-129	-135	-151	-131	-120	-102	-38	-12	23	45	10
%-Change		-2.2%	-1.8%	-2.5%	-2.7%	-3.1%	-2.7%	-2.6%	-2.3%	-0.9%	-0.3%	0.5%	1.0%	0.2%
_														
Total: K-5	2283	2153	2160	2085	2035	2006	1963	1933	1920	1978	2025	2068	2105	2119
Change		-130	7	<i>-75</i>	-50	-29	-43	-30	-13	58	47	43	37	14
%-Change		-5.7%	0.3%	-3.5%	-2.4%	-1.4%	-2.1%	-1.5%	-0.7%	3.0%	2.4%	2.1%	1.8%	0.7%
Total: 6-8	1390	1351	1289	1233	1164	1087	1058	1051	1048	1002	970	961	993	1025
Change		-39	-62	-56	-69	-77	-29	-7	-3	-46	-32	-9	32	32
%-Change		-2.8%	-4.6%	-4.3%	-5.6%	-6.6%	-2.7%	-0.7%	-0.3%	-4.4%	-3.2%	-0.9%	3.3%	3.2%
Total: 9-12	1739	1787	1749	1751	1735	1690	1631	1548	1462	1412	1385	1374	1350	1314
Change		48	-38	2	-16	-45	-59	-83	-86	-50	-27	-11	-24	-36
%-Change		2.8%	-2.1%	0.1%	-0.9%	-2.6%	-3.5%	-5.1%	-5.6%	-3.4%	-1.9%	-0.8%	-1.7%	-2.7%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

## **Davis Thayer Elementary: Total Enrollment**

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
К	44	28	50	41	40	41	41	42	42	44	45	46	46	45
1	32	44	28	53	42	42	43	43	44	44	45	46	47	47
2	40	33	41	23	50	39	39	40	40	42	42	43	44	45
3	46	37	36	39	23	49	38	38	39	40	42	42	43	44
4	44	48	39	35	39	23	49	38	38	40	41	43	43	44
5	66	41	50	36	35	39	23	49	38	39	41	42	44	44
Total K-5	272	231	244	227	229	233	233	250	241	249	256	262	267	269
Total K-5	272	231	244	227	229	233	233	250	241	249	256	262	267	269
Change		-41	13	-17	2	4	0	17	-9	8	7	6	5	2
% Change		-15.1%	5.6%	-7.0%	0.9%	1.7%	0.0%	7.3%	-3.6%	3.3%	2.8%	2.3%	1.9%	0.7%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

#### **Helen Keller Elementary: Total Enrollment**

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
K	68	50	51	46	44	44	45	45	46	47	48	49	50	49
1	76	67	54	49	47	46	46	47	47	48	48	49	50	51
2	51	74	66	53	48	46	45	45	46	48	49	49	50	51
3	71	53	80	67	54	49	47	46	46	48	50	51	51	52
4	82	73	59	75	66	53	48	46	45	47	49	51	52	52
5	65	85	77	56	75	66	53	48	46	46	48	50	52	53
Total K-5	413	402	387	346	334	304	284	277	276	284	292	299	305	308
Total K-5	413	402	387	346	334	304	284	277	276	284	292	299	305	308
Change		-11	-15	-41	-12	-30	-20	-7	-1	8	8	7	6	3
% Change		-2.7%	-3.7%	-10.6%	-3.5%	-9.0%	-6.6%	-2.5%	-0.4%	2.9%	2.8%	2.4%	2.0%	1.0%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

## J.F. Kennedy Elementary: Total Enrollment

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
K	54	66	50	36	37	38	39	40	42	44	45	47	48	47
1	63	62	68	54	38	39	40	41	42	44	45	46	48	49
2	55	63	67	73	55	39	40	41	42	44	46	47	48	50
3	53	57	65	65	74	56	40	41	42	44	46	48	49	49
4	63	55	60	61	64	73	55	39	40	43	45	47	49	50
5	72	64	55	62	61	64	73	55	39	41	44	46	48	49
Total K-5	360	367	365	351	329	309	287	257	247	260	271	281	290	294
Total K-5	360	367	365	351	329	309	287	257	247	260	271	281	290	294
Change		7	-2	-14	-22	-20	-22	-30	-10	13	11	10	9	4
% Change		1.9%	-0.5%	-3.8%	-6.3%	-6.1%	-7.1%	-10.5%	-3.9%	5.3%	4.2%	3.7%	3.2%	1.4%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

### Jefferson Elementary: Total Enrollment

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
К	33	59	56	39	42	43	44	45	46	49	50	52	53	52
1	51	38	61	59	41	44	45	46	47	48	50	51	53	54
2	63	54	44	71	63	43	47	48	49	51	52	54	55	57
3	57	62	57	46	72	64	44	48	49	51	53	54	56	57
4	64	59	69	59	47	73	65	45	49	51	53	55	56	58
5	61	64	62	72	60	48	74	66	46	51	53	55	57	58
Total K-5	329	336	349	346	325	315	319	298	286	301	311	321	330	336
Total K-5	329	336	349	346	325	315	319	298	286	301	311	321	330	336
Change		7	13	-3	-21	-10	4	-21	-12	15	10	10	9	6
% Change		2.1%	3.9%	-0.9%	-6.1%	-3.1%	1.3%	-6.6%	-4.0%	5.2%	3.3%	3.2%	2.8%	1.8%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

#### Oak Street Elementary: Total Enrollment

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
K	62	58	54	60	60	60	60	61	61	64	64	65	65	64
1	49	61	65	59	62	62	63	63	64	64	65	65	66	66
2	57	44	68	68	60	63	63	64	64	66	66	67	67	67
3	71	58	45	68	68	60	63	63	64	65	67	67	68	68
4	94	73	57	48	69	69	61	64	64	66	67	69	69	69
5	80	96	80	56	47	68	68	60	63	63	65	66	68	68
Total K-5	413	390	369	359	366	382	378	375	380	388	394	399	403	402
Total K-5	413	390	369	359	366	382	378	375	380	388	394	399	403	402
Change		-23	-21	-10	7	16	-4	-3	5	8	6	5	4	-1
% Change		-5.6%	-5.4%	-2.7%	1.9%	4.4%	-1.0%	-0.8%	1.3%	2.1%	1.5%	1.3%	1.0%	-0.2%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

#### **Parmenter Elementary: Total Enrollment**

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
K	65	46	53	63	63	64	64	65	65	66	66	67	67	65
1	47	64	51	51	64	64	65	65	66	66	67	67	68	68
2	61	48	63	49	49	61	61	62	62	64	64	65	65	66
3	52	61	55	64	50	50	62	62	63	64	66	66	67	67
4	57	51	65	51	63	49	49	61	61	62	63	65	65	66
5	83	53	52	67	52	64	50	50	62	63	64	65	67	67
Total K-5	365	323	339	345	341	352	351	365	379	385	390	395	399	399
Total K-5	365	323	339	345	341	352	351	365	379	385	390	395	399	399
Change		-42	16	6	-4	11	-1	14	14	6	5	5	4	0
% Change		-11.5%	5.0%	1.8%	-1.2%	3.2%	-0.3%	4.0%	3.8%	1.6%	1.3%	1.3%	1.0%	0.0%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

#### **Annie Sullivan Middle School: Total Enrollment**

	2016-	2017-	2018-	2019-	2020-	2021-	2022-	2023-	2024-	2025-	2026-	2027-	2028-	2029-
	17	18	19	20	21	22	23	24	25	26-	27	28	29	30
6	158	130	122	130	94	112	107	78	99	87	88	93	96	99
7	154	159	127	122	131	94	113	108	78	100	88	89	94	97
8	152	157	158	130	123	132	95	114	109	80	103	90	91	96
Total: 6-8	464	446	407	382	348	338	315	300	286	267	279	272	281	292
Total: 6-8	464	446	407	382	348	338	315	300	286	267	279	272	281	292
Change		-18	-39	-25	-34	-10	-23	-15	-14	-19	12	-7	9	11
% Change		-3.9%	-8.7%	-6.1%	-8.9%	-2.9%	-6.8%	-4.8%	-4.7%	-6.6%	4.5%	-2.5%	3.3%	3.9%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

#### **Horace Mann Middle School: Total Enrollment**

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
6	153	152	164	133	120	110	134	143	117	105	107	112	115	118
7	157	151	149	167	134	121	111	135	144	119	107	109	114	117
8	156	161	155	150	169	135	122	112	136	147	121	109	111	116
Total: 6-8	466	464	468	450	423	366	367	390	397	371	335	330	340	351
Total: 6-8	466	464	468	450	423	366	367	390	397	371	335	330	340	351
Change		-2	4	-18	-27	-57	1	23	7	-26	-36	-5	10	11
% Change		-0.4%	0.9%	-3.8%	-6.0%	-13.5%	0.3%	6.3%	1.8%	-6.5%	-9.7%	-1.5%	3.0%	3.2%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

#### **Remington Middle School: Total Enrollment**

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
6	137	153	121	122	143	115	115	128	119	112	119	122	125	128
7	157	136	155	126	123	144	116	116	129	121	114	121	124	128
8	166	152	138	153	127	124	145	117	117	131	123	116	123	126
Total: 6-8	460	441	414	401	393	383	376	361	365	364	356	359	372	382
Total: 6-8	460	441	414	401	393	383	376	361	365	364	356	359	372	382
Change		-19	-27	-13	-8	-10	-7	-15	4	-1	-8	3	13	10
% Change		-4.1%	-6.1%	-3.1%	-2.0%	-2.5%	-1.8%	-4.0%	1.1%	-0.3%	-2.2%	0.8%	3.6%	2.7%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

## Franklin High School: Total Enrollment

	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26-	2026- 27	2027- 28	2028- 29	2029- 30
9	436	452	445	435	420	406	379	351	333	355	351	340	309	319
10	424	437	438	432	428	414	400	373	346	328	350	346	335	304
11	470	423	437	447	434	430	416	402	375	348	330	352	348	337
12	404	467	424	429	445	432	428	414	400	373	346	328	350	346
Total: 9-12	1734	1779	1744	1743	1727	1682	1623	1540	1454	1404	1377	1366	1342	1306
Total: 9-12	1734	1779	1744	1743	1727	1682	1623	1540	1454	1404	1377	1366	1342	1306
Change		45	-35	-1	-16	-45	-59	-83	-86	-50	-27	-11	-24	-36
% Change		2.6%	-2.0%	-0.1%	-0.9%	-2.6%	-3.5%	-5.1%	-5.6%	-3.4%	-1.9%	-0.8%	-1.8%	-2.7%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment



# **NEXT STEPS**

It is important to note that an assessment in and of itself is not a scope of work. It is a tool to assist the District in understanding its current conditions to determining its next steps. Identifying every specialized circumstance was beyond the scope of this report. It will ultimately be determined by Franklin Public School District's School Improvement and Facilities Master Plan the next steps as it relates to the addressing the capacity and educational adequacy of the District.

Kaestle Boos Associates is pleased to have had the opportunity to provide Franklin Public Schools with this Comprehensive Facilities Assessment Report. We hope this document will provide the necessary information to make informed decisions about the future of the Franklin Public Schools.