

The capital needs of public schools in North Carolina greatly exceed the local and state resources required to meet them.

The North Carolina Department of Public Instruction (DPI) has completed statewide facility needs surveys every five years since 1988. Their survey from 2015 to 2016 indicated 115 school districts' combined five-year construction needs exceeded \$8.1 billion. When the survey was completed from 2020 to 2021, the needs totaled \$12.8 billion—a 59% increase in only five years. The sum does not reflect the increases in construction costs following the pandemic.

The North Carolina Education Lottery funds grant programs to help meet these growing capital needs. For needs-based grants, counties and school districts must submit applications to the DPI. After reviewing all the submissions, the DPI selects which applicants will receive funding.

"Last year, more than 160 applications competed for those dollars. It's not luck, but it's the quality of your application that will win in the end," said Van Denton, director of communications of the North Carolina Education Lottery.

Engaged early in the process, architects can help school districts strengthen their grant applications through needs assessments and advanced planning. For Halifax County Schools, the process resulted in a \$31.7 million grant from the lottery's Need-Based Public School Capital Fund to build a new school that accommodates students from pre-kindergarten through the eighth grade.

North Carolina Education Lottery Funding

North Carolina, South Carolina, and Virginia are among the 23 states to date that earmark lottery profits to fund public education. North Carolina established an education lottery in 2006, making its program the newest among states on the East Coast.

Over the past 17 years, the North Carolina state lottery has raised more than \$3 billion to help counties build and repair schools. Almost half of the \$1 billion in lottery funds distributed last year went to school construction.

The DPI currently administers three capital funds: the Public School Building Capital Fund (PSBCF), the Public School Building Repair and Renovation Fund (PSBRRF), and the Need-Based Public School Capital Fund (NBPSCF). For the most comprehensive, up-to-date information about the program, visit the North Carolina Department of Public Instruction's [capital funding website](#).

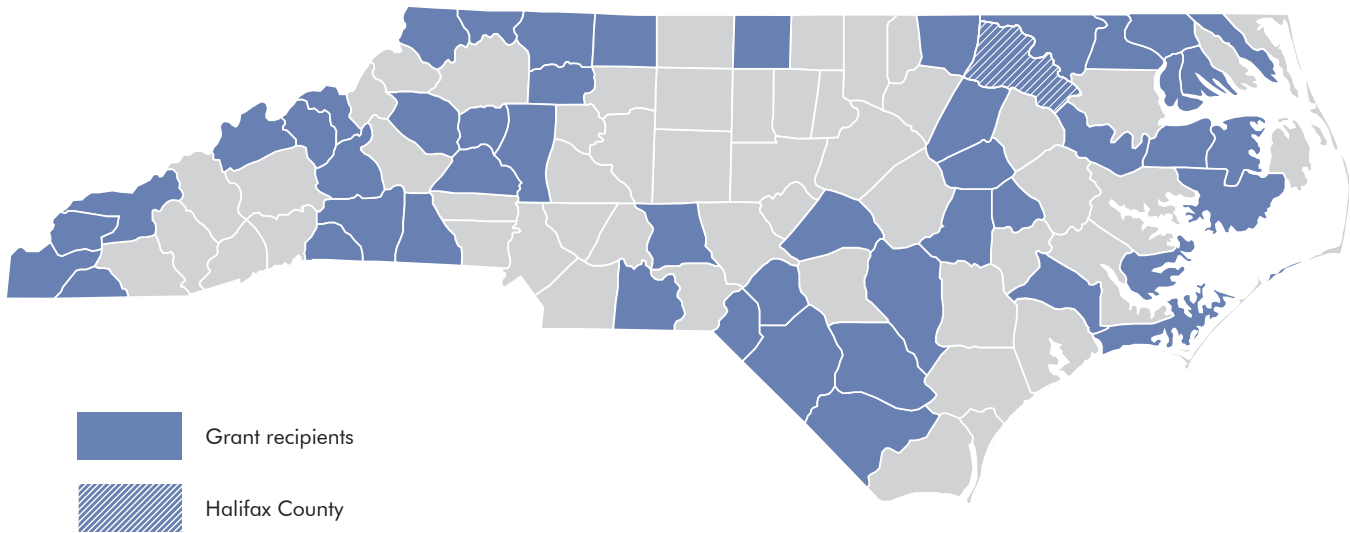
	Public School Building Capital Fund (PSBCF)	Public School Building Repair & Renovation Fund (PSBRRF)	Need-Based Public School Capital Fund (NBPSCF)
Total Amount	\$98 M	\$50 M	Varies (\$437,068,261 in FY 22-23)
Eligibility	All 115 school districts	All 100 counties	Any county with an adjusted market value below \$40 billion (94 of 100 counties in FY 22-23)
Distribution	Amount based on school district's average daily membership (ADM)	\$500,000*	Maximums: <ul style="list-style-type: none"> • \$42 M for an elementary school • \$52 M for a middle school • \$62 M for a high school
Matching Requirements	Varies based on revenue source; no match required for lottery funding	No	0–35%
Spending Deadline	No	No	No
Uses	<ul style="list-style-type: none"> • Purchase of land for public school buildings • Project planning/design fees • Construction of new public school buildings • School building renovations • School building expansions • Repair of existing public school building components and systems • Purchases of equipment that is an integral part of a building, such as HVAC, plumbing, electrical and security • School technology • Certain exterior improvements (parking lots, athletic fields, playgrounds, etc.) • Debt service (retirement of indebtedness incurred for public school facilities) 	<ul style="list-style-type: none"> • Enlargement (expansion of classroom facilities) • Improvements to classroom facilities • Repair of existing building components and systems of classroom facilities • Renovation of existing classroom facilities • Equipment purchases for classroom facilities • Project planning/design fees 	<ul style="list-style-type: none"> • School building construction • School building renovations • School building expansions • Repair of existing school building components and systems

* For counties with multiple school districts, the \$500,000 is distributed to each school district based upon its ADM.

Need-Based Public School Capital Fund

Created in 2017, the North Carolina State Lottery's Need-Based Public School Capital Fund (NBPSCF) provides grants for critical facility needs in economically distressed counties. As of 2022, 94 of the 100 counties across the state were eligible to apply for NBPSCF grants. Forty-nine have received need-based grants since 2017.

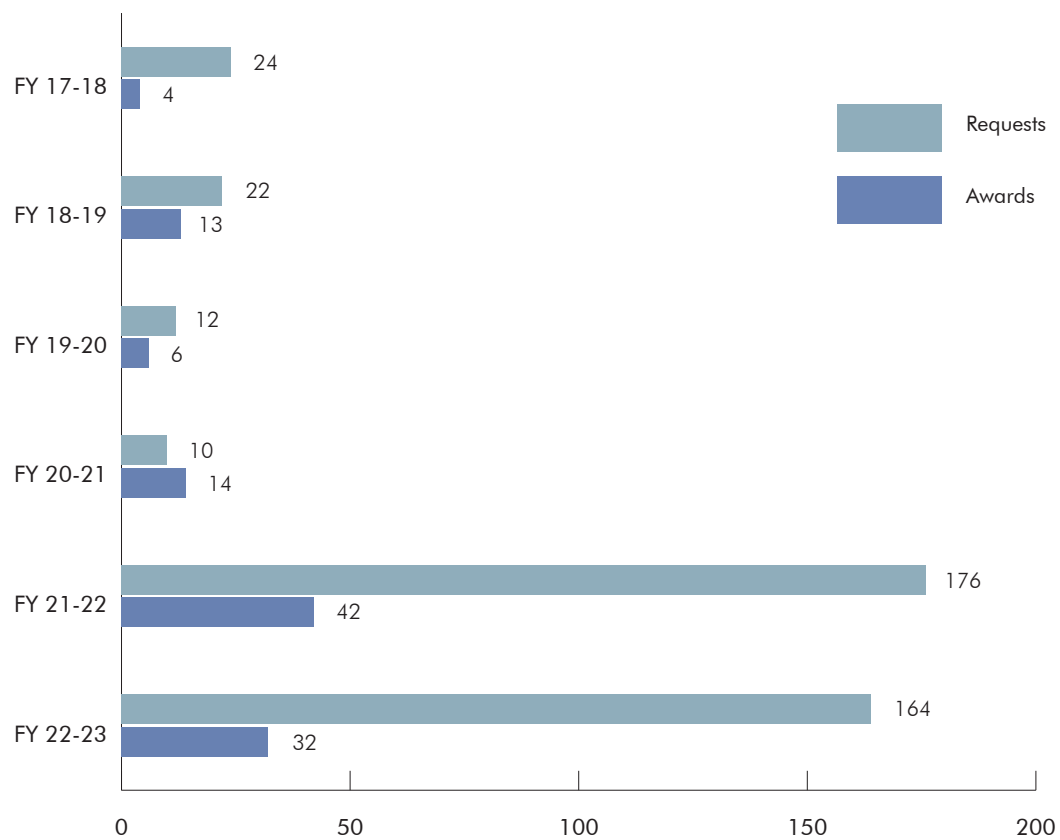
NBPSCF grants cover the planning, design, and construction of new school buildings, as well as repairs, renovations, and additions to existing school buildings. Recipients can receive as much as \$42 million for an elementary school, \$52 million for a middle school, and \$62 million for a high school.



North Carolina is composed of 100 counties and 115 school districts. Divided into Halifax County Schools, Roanoke Rapids Graded School District, and Weldon City Schools, Halifax County is one of several counties that comprises multiple school districts.

The exponential increase in the number of need-based grant requests has made the selection process more competitive.

The Number of Need-Based Grant Requests and Awards



Source: The Department of Public Instruction, March 2023

2022 NBPSCF in Numbers

164

requests were submitted

72

school districts submitted requests

28

school districts received grants

42

individual projects received funding

\$400 million

in total was awarded

8 of 8

educational regions will benefit from the funds

"We were able to support districts in desperate need of replacing entire buildings, but did not have the funding to do so. We were also able to support several smaller projects that, while not costing millions such as a building replacement, proved to be equally important in the funding structure for districts. A \$2 million renovation is a significant undertaking for a small, low-wealth district."

—Robert Taylor
Former Deputy State
Superintendent for School and
Student Advancement

Eligibility

The DPI awards grants based on rankings of economic factors and facility needs. By law, they must prioritize applicants based on their ability to generate revenue, high debt-to-tax revenue ratio, consolidation and replacement of multiple existing facilities, and the extent to which a project will address critical deficiencies in adequately serving the current and future student population.

Recent changes to the NBPSCF terms have expanded applicant eligibility:

- The five-year ineligibility for grant-winners to receive additional grants has been abolished
- The five-year restriction to reapply for grants has been eliminated, though the DPI prioritizes applicants that have not received grants in the past three years.
- Prior recipients can also apply for increases in projects not yet under construction.

Visit the DPI's [capital funding website](#) for a comprehensive guide to eligibility, matching requirements, and a list of frequently asked questions.

Advanced Planning

Through advanced planning, architects can provide a range of services that school districts can use to bolster applications for funding.



Site Analysis

Studying the site conditions and context, including geography, climate, existing structures, vegetation, views, and access points, to help inform the design



Programming

Determining the spatial requirements, intended uses, and project goals to establish the functional needs for the building



Budgeting

Estimating project costs, developing a budget, and identifying opportunities to lower costs through value engineering analysis



Materials Selection

Choosing durable, sustainable materials that will meet project goals for aesthetics, performance, and budget



Code and Zoning Analysis

Reviewing all applicable building codes, zoning ordinances, and regulations that will impact the design



Building Systems

Researching and selecting the structural, mechanical, electrical, plumbing, and other systems that will be integrated into the design



Schedule

Mapping out a schedule for design and construction, including milestones, deliverables, and phasing



Sustainability

Setting sustainability goals and developing strategies like passive heating and cooling, renewable energy, and water efficiency



Visioning

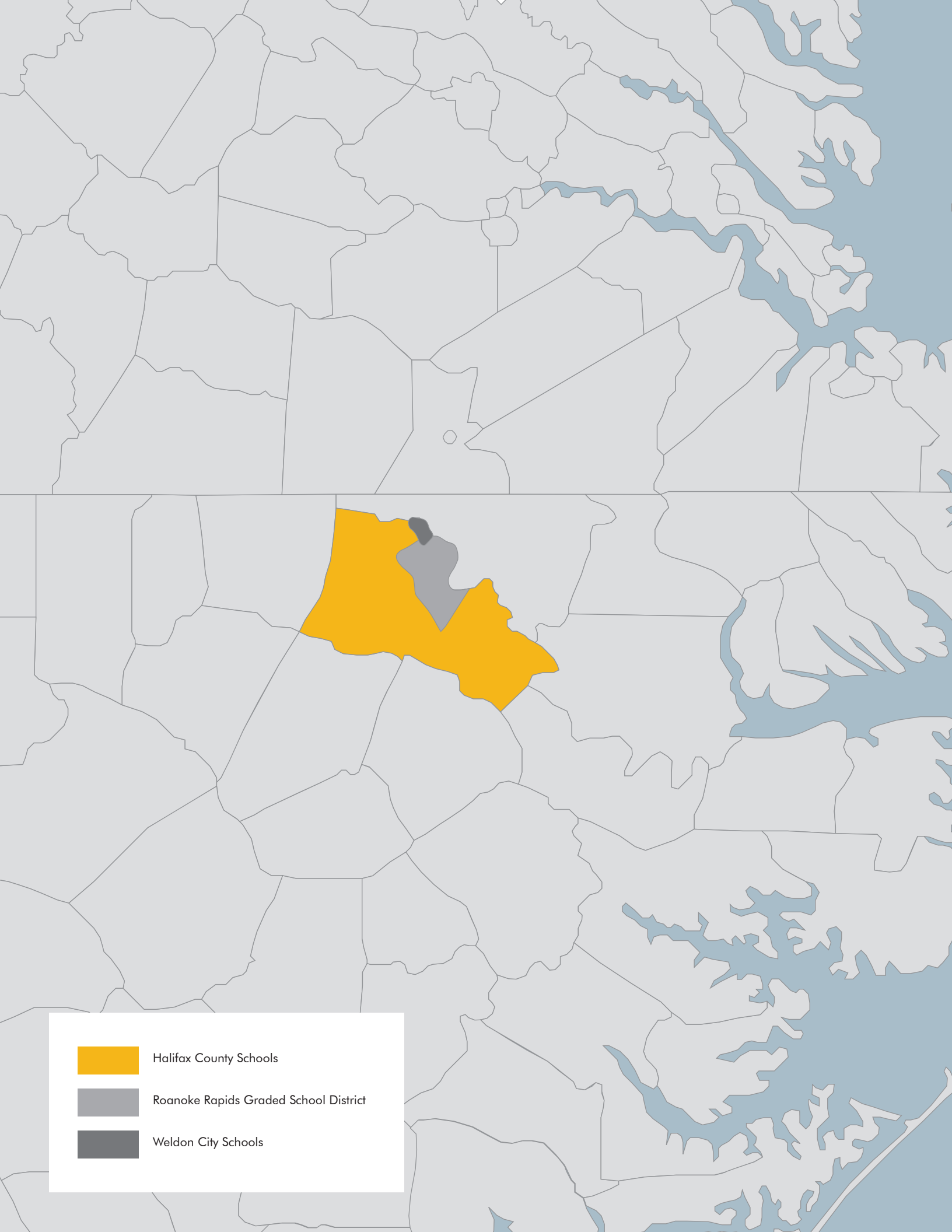
Establishing a strong guiding vision and conceptual direction that is informed and supported by the community





CASE STUDY

Halifax County Schools




Halifax County Schools



Roanoke Rapids Graded School District



Weldon City Schools



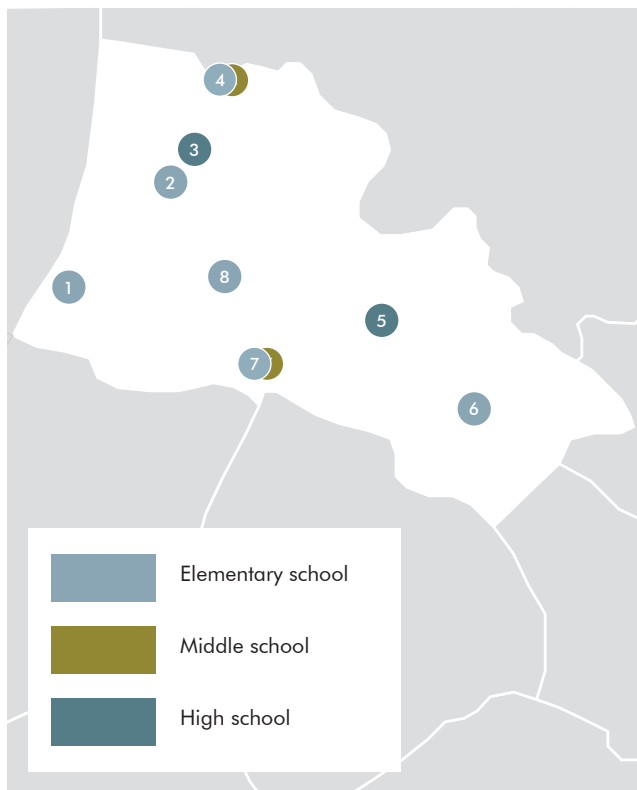
In August 2016, Dr. Eric Cunningham, the newly appointed superintendent of Halifax County Schools, boarded a school bus in the western part of the district. He was eager to immerse himself in the day-to-day experiences of the students whose lives were impacted by the school system. To understand their perspectives, he wanted to experience what they experienced.

Dr. Cunningham realized that the school days for the students of William R. Davie Middle School were astoundingly long. Students in the western part of the district often had to ride the bus more than an hour each way to the middle school in the northwest area.

The lengthy commutes were largely a result of the void created when Eastman Middle School closed in 2010. Some families were switching to nearer charter schools in neighboring counties.

Dr. Cunningham recognized the need for change. "I began to see that students had to travel great distances to get to school. We couldn't consolidate these grades into aging facilities. The students deserved better. We needed a new school," he said.

Halifax County Schools' mission is to empower all students to be successful global citizens. Dr. Cunningham envisioned 21st century learning environments that could help make this possible for generations of students in the western part of the county.



Site	School	Grades
1	Hollister Elementary Leadership Academy	K–5
2	Aurelian Springs Institute of Global Learning	PreK–5
3	Northwest Collegiate and Technical Academy	9–12
4	Everetts Elementary School	PreK–5
	William R. Davie Middle School	6–8
5	Southeast Collegiate Prep Academy	9–12
6	Scotland Neck Elementary School	PreK–5
7	Inborden Elementary School	PreK–5
	Enfield Middle School	6–8
8	Pittman Elementary Leadership Academy	PreK–5

Assessing Needs

In 2019, Halifax County Schools engaged Moseley Architects to provide a capital needs assessment and a district master plan. Prior to 2023, if a school district won a need-based grant, they would then be ineligible to receive annual lottery funding for five years. The district had to be certain they could sustain the needs of the other schools during the years they could not apply for lottery funds, so they engaged Moseley Architects to provide a capital needs assessment and a district master plan.

Ashley Dennis, managing principal at Moseley Architects, and her team of architects and engineers visited eight campuses throughout Halifax County, where they evaluated the physical conditions of the buildings and sites.

They identified critical improvements required for each facility's exterior; interior flooring, ceilings, and walls; mechanical system; electrical system; plumbing system; and fire protection system. Their reports concluded with cost estimates for the repairs over the subsequent six years.

Hollister Elementary Leadership Academy and Pittman Elementary Leadership Academy

During the needs assessment, two small, aging elementary schools serving the western side of the Halifax County School district stood out.

Built more than 60 years ago, Hollister Elementary Leadership Academy had 162 students in pre-kindergarten through the fifth grade, with 11 classroom teachers.¹

The slightly older Pittman Elementary Leadership Academy had 127 students² in pre-kindergarten through the fifth grade, with 10 classroom teachers.

Students at both schools had limited access to resources, like a school counselor, a media center specialist, and a school nurse. Additionally, the small school sizes compelled the district to allocate core staff members to each school to avoid combination classes. As a result, increased staffing costs limited the school district's resources to devote to educational programming.

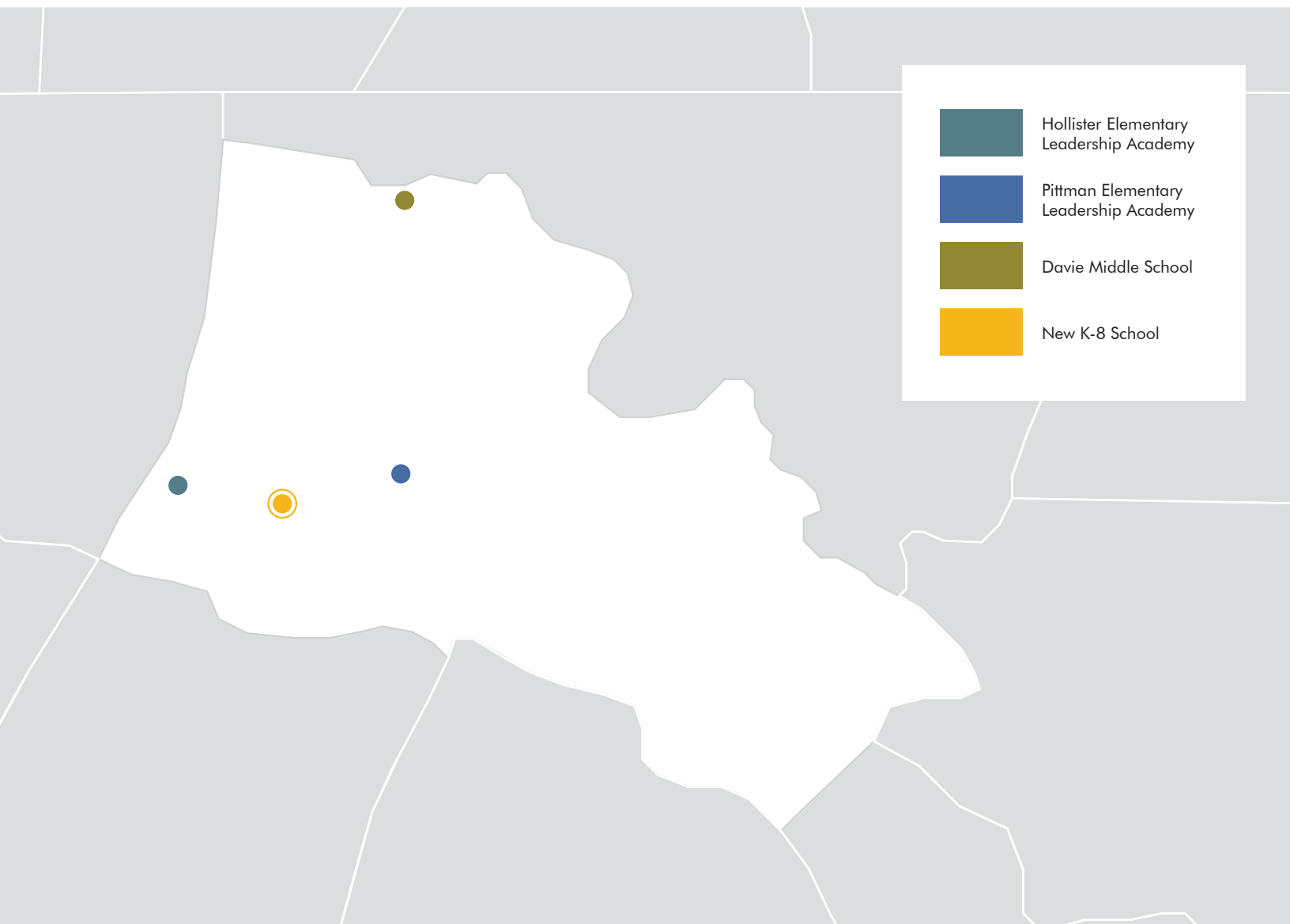
¹ Source: National Center for Education Statistics, [Hollister Elementary Leadership Academy](#)

² Source: National Center for Education Statistics, [Pittman Elementary Leadership Academy](#)

Identifying a Solution

After reviewing the conditions of the two existing elementary schools and factoring in the need for a middle school closer to students in the southwestern part of the county, Moseley Architects and Halifax County Schools concluded that a new PK-8 facility could meet multiple needs.

The school district already had a location in mind: the site of the former Eastman School. The address is nearly equidistant from the two elementary schools, and it would accommodate 300 nearby students who had endured lengthy bus rides from one end of the district to the other to attend Davie Middle School.





Advanced Planning

The design team and the school district staff collaborated to establish a program that would best accommodate the students attending the new PK-8 school. Upon receiving approval of the program from the county, community members, parents, grandparents, teachers, and school board members gathered for a design workshop to learn about needs, share perspectives, and unite participants in their vision for the new school.

Idea Mining

Ashley posed four questions to the committee:

- What activities will students at the new Halifax PK-8 be doing?
- What about the new school will the citizens be most proud of?
- How will the new school be described once it's completed?
- When will we know the new school is a success?

ABOVE Through idea mining, Ashley invited each participant to reflect on the qualities that they identify as most important for the new school.



The committee's answers centered on common themes:

- Learning
- Students
- Collaboration
- Community
- Diversity

Pre-Kindergarten

The inclusion of pre-kindergarten (PK) in the new school will serve a critical need for the community.

PK programs build important cognitive, social, emotional, and physical skills at a crucial developmental stage that prepares children for kindergarten. Establishing this foundational learning can help narrow school readiness gaps between children from low-income and high-income households, setting up students from all backgrounds for greater academic success.

The affordable, structured childcare services also support parents' availability for day-time employment, which is especially beneficial for single parents or families where both parents work.



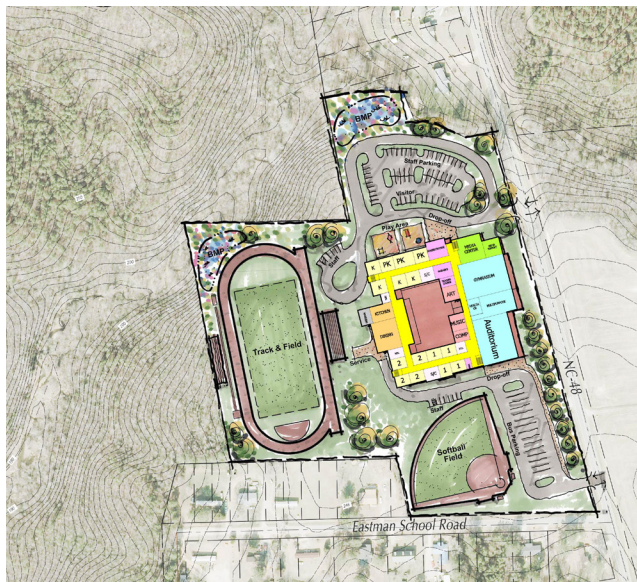
ABOVE To prioritize goals for the project, workshop participants placed stickers on note cards they felt best described the school they envisioned.



Design Workshop

Then participants divided into three small groups, each with an architect who listened to their discussion and shaped concepts based on their input. They identified priorities for programmatic adjacencies and considered how to plan the space in ways that met the users' needs. The following day, each of the three small groups presented the architectural program developed the day before.

ABOVE Ashley worked with a small group to discuss programmatic agencies and explore planning options.



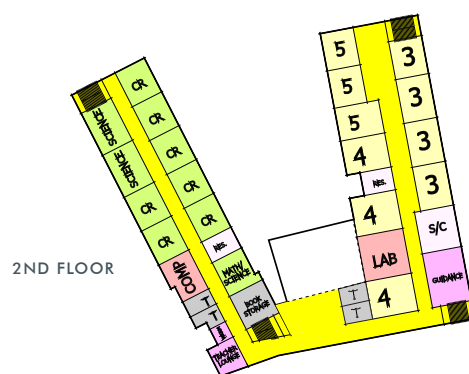
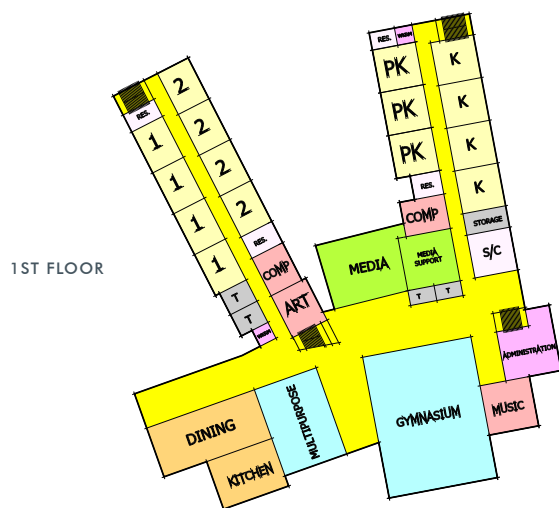
After the presentations, the committee came to a consensus on which option the designers should move forward with and present to the school board and county commissioners.

Designers helped the committee come to a consensus by creating a hybrid design that combined concepts from the first and second small groups.

Workshop participants also discussed exploring the option of a K-12 facility on the site. Although this option was not the district's immediate need, a site plan showed how the PK-8 could be expanded in the future to house grades nine through 12. While the district would need to purchase land for this future phase, the master plan would be a resource they can use to bolster requests for funding.

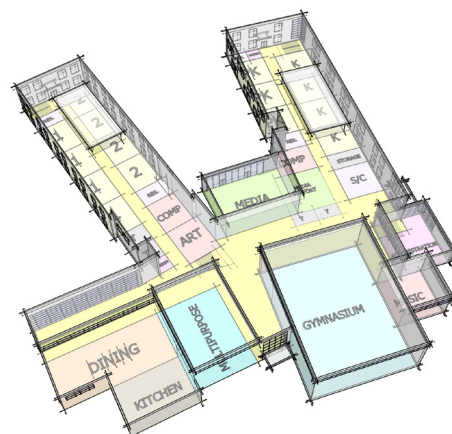


LEFT Final design concept; two concepts created in small groups



After the workshop, the designers used the hybrid concept to generate a preliminary floor plan, axonometric rendering, and conceptual renderings that accompanied the grant application.

It was unanimously approved by the Halifax County Board of Commissioners on March 14, 2022.



FROM TOP Conceptual rendering of front entry, floor plans, and axonometric view



Winning

On April 26, 2022, Halifax County Schools learned it was [among 28 school districts](#) selected for a \$31.27 million grant from the NBPSCF. During fiscal year 2022-2023, the North Carolina General Assembly awarded the project an additional \$7.81 million of NC Education Lottery funds. Together, the awards provide a total of \$39 million to pay for the design and construction of the new 540-student PK-8 school.

The facility will allow each student to have access to a full continuum of services that will increase academic and social outcomes as well as increase community engagement in the western side of the Halifax County School district.

"This state-of-the-art building will serve as a beacon of hope and high expectations for generations to come. We are grateful to receive the necessary funds to build a better school system," Dr. Cunningham said.

When State Representative Michael Wray presented the check to local officials on August 4, Halifax County Commissioner Carolyn Johnson praised the school district's compelling application and presentation.

"This is phenomenal for this community. When Dr. Cunningham and his team made their presentation concerning the application, we knew that this was a

good application. We knew it was an application worthy of funding, so it was no surprise that Halifax County Schools received the North Carolina public schools need-based grant. The leadership there is phenomenal, and we look forward to greater and better things," she said.

Breaking Ground

On December 5, 2022, the community gathered to celebrate the groundbreaking. Halifax County Board of Commissioners Chairman Vernon Bryant commended the team for their years-long effort and the speed with which the project progressed after funding was awarded.

"As soon as the opportunity came available, Halifax County and Halifax County Schools worked together to successfully apply...Isn't it amazing that we are breaking ground on this project in just one year's time?" she said.

ABOVE Conceptual rendering of media center

Advice to Future Applicants

Based on her experience providing needs assessments that led to grant-winning projects for additional public school system clients, including Greene, Camden, and Tyrell counties, Ashley understands the application process must be approached strategically. She advises future applicants to use the following tactics to craft a compelling narrative that captures the project's vision, impact, and feasibility.

Clearly articulate the need

“When the DPI is reviewing more than 100 applications, you have to do more than simply say ‘the building is old.’ Outlining and pinpointing how the deficits affect students and staff teaching in the space can make your application stand out,” Ashley said.

Clearly communicate the need for a new school in your community or district. Provide evidence-based data, such as increasing student population, overcrowding in existing schools, or outdated facilities. Demonstrate how a new school will address these challenges and improve educational outcomes.

Five-year needs assessment surveys can be a valuable resource as you draft your application. If an architecture firm has conducted a needs assessment survey for your school district in the past, refer back to it and cite how the findings support your request.

Delineate a strong project plan

Create a comprehensive and well-thought-out project plan that outlines the objectives, scope, and timeline of the new school construction. Include details about the educational programs, infrastructure requirements, and any unique features that set your project apart. Show how the new school aligns with educational goals and addresses current and future needs.

Collaborating with an architecture firm on advanced planning demonstrates careful consideration, thoughtful design, and a commitment to creating a conducive learning environment.

“With advanced planning, you can show that you’re not just asking for \$40 million or \$50 million; you can show that what you are asking for addresses critical deficiencies for students,” Dennis said.

Demonstrate impact

Show how a new school will positively impact the community beyond the immediate educational benefits. Highlight potential economic, social, or cultural impacts of the new school on the community.

Consider how this project will impact the environment as well. Emphasize any building features that support environmental stewardship and offer long-term cost savings.

Engage stakeholders

Throughout the planning process, engage parents, teachers, administrators, community leaders, and local businesses. Solicit their input, gather letters of support, and involve them in community outreach activities. The involvement and support of stakeholders can strengthen your case for funding.

During advanced planning, an architecture firm can host a design workshop in which stakeholders can convene, express a range of perspectives on needs, identify priorities, and delineate goals. They can also develop and refine design concepts using the input of the workshop participants. The community will have a greater sense of buy-in and pride knowing the school's design has been shaped by the residents who will learn, work, and gather there for generations to come.

Develop a realistic budget

Consult with an architect to create a realistic budget that accounts for construction-related expenses, including design fees, materials, and permits—and confirm that the estimate factors in construction cost escalations. Ensure your budget is well organized, transparent, and justifies the funding amount you are requesting.

Include compelling visual aids

Photographs are essential for communicating specific needs. Issues like asbestos, ADA compliance, and deterioration can be easily photographed to show current conditions. If you engaged an architecture firm to provide a needs assessment survey in the past, relevant photos will be included as a part of their formal report.

Deliverables, such as conceptual designs, floor plans, renderings, and site plans, can be attached to your application to indicate that the project has been thoroughly examined and the school district is fully prepared to start the project as soon as funding is received.

Collaborate as a team

In North Carolina, NBPSCF grant applications are a joint effort between the county and the school district: after the school board completes the application, county commissioners are responsible for signing and submitting it to the DPI.

“Halifax County and Halifax County Schools did a great job of working together so that no one was surprised the day the application was delivered to the county for them to sign and submit. From the very beginning, the effort has to be partnership,” Ashley said.

Endnotes

This whitepaper was informed by the following sources.

Presentation

Eric Cunningham, Ashley Dennis, Van Denton, and Dennis Hilton. "How to Win \$50 Million to Build a New School" (presentation, North Carolina Association of School Administrators Conference on Educational Leadership, Concord, NC, March 23, 2023).

Websites

North Carolina Department of Public Instruction

North Carolina Education Lottery

Halifax County Schools

National Center for Education Statistics

North Carolina School Report Cards

EdNC.org

MyFutureNC

Peer Review

Dennis Hilton, Consulting Structural Engineer at the North Carolina Department of Public Instruction



About the Expert

Ashley Dennis, AIA, is passionate about the advancement of education through innovative space designs. As a K-12 principal, she draws a deep sense of pride in watching communities be transformed through well designed learning environments, from renovations and additions to entirely new schools. She also manages the operations of the K-12 sector, leads the firm's Raleigh office, and serves on the firm's Board of Directors.

In 2022, Ashley served as president of the [North Carolina chapter of the Association of Learning Environments](#). She currently serves on the [AIA NC/ Carolinas AGC Joint Cooperative Committee](#).

