

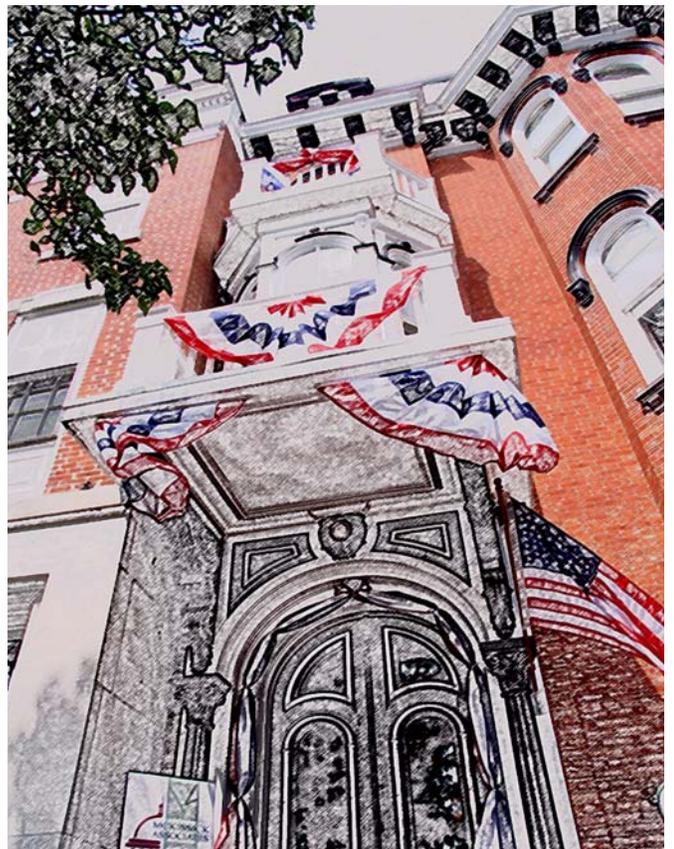


Cleveland Heights-
 University Heights
 City School District
 Request for Qualifications
 for Professional Services,
 Master Planning Consultant

August 19, 2011

MCKISSICK
 ASSOCIATES
 INSIGHTS

317 North Front Street
 Harrisburg, PA 17101
 (717) 238-6810





Reading Citadel



New Manoa Elementary



Cochran Elementary School



New Chestnutwold Elementary



Mount Union High School



Hazleton Castle

McKissick Associates Quick-Start Qualifications Summary

Regional Experience/Local Teaming

- Mr. McKissick's has worked for a number of School Districts in the larger Ohio, New York, Pennsylvania region including **Corry Area (PA), Warren County (PA), Clymer Central (NY), Pine Valley Central (NY), and Chautauqua Central (NY)**.
- We have recently been retained by the Erie City School District to provide a Strategic Master Plan. All 24 buildings will be reviewed and educational programming operations optimized to free monies to support facility upgrades and maintain or enhance district curriculum programs.
- The H.F. Lenz Company, whom we have worked with for more than 22 years and have completed \$550,000,000 million in school construction, will provide support as MEP, Structural and Civil Engineering. Their office is located in Conneaut, Ohio a short drive from Cleveland along Lake Erie.

Urban School Experience

- Master Plans prepared for districts in that are similar in size and demographics to Cleveland Heights-University Heights Public Schools including:
 - o **Reading School District..... 21,000 Pupils**
 - o **Erie City School District..... 13,100 Pupils**
 - o **Neshaminy School District9,800 Pupils**
 - o **Scranton School District9,600 Pupils**
 - o **Hazleton Area School District9,400 Pupils**
 - o **Groton Public Schools (CT).....6,200 Pupils**
 - o **Mifflin County School District5,700 Pupils**
 - o **Williamsport Area School District5,600 Pupils**
- Working with larger educational systems such as Guilford County Schools in Greensboro, NC (114,000 Pupils) and Winston-Salem/Forsyth County School in Winston-Salem, NC (56,000 Pupils).

McKissick Associates InSights Study Experience

- Have completed studies for more than 60 school districts in the Mid-Atlantic region, including Master Plans, Demographic and Enrollment Projections, GIS (Geographical Information mapping Systems) and Risk Analysis. **In the past 12 months** completed District Wide Feasibility Studies for **Mifflin County School District** in Lewistown, PA (**merging four middle schools to two/ 5,700 pupils in district**), **Groton Public Schools** in Mystic, CT (**merging three middle schools to one/ 6,200 pupils in district**) and **Williamsport Area School District** in Williamsport, PA (**merging three middle schools to one/ 5,600 pupils in district**).

Assistance in Deciding to Renovate or Replace

We are experts in determining whether a building can be renovated to properly serve the needs of your district. Mr. McKissick assisted Pennsylvania Department of Education in preparing the department's **2008 Renovate or Replace booklet** and there are eight of his projects featured within its pages.



Summerfield Elementary



Pottstown Middle School



New East Lycoming Career & Technology Center



New Wellsboro High School



Roosevelt Middle School

Proven Community Input Process

- Example 1 – Feasibility Master Plan: Williamsport Area School District included a McKissick Associates designed booklet distributed to all members of the community, the entire study presentation available for view on the School District website and an interactive survey involving all option selections for the community to vote online.
- Example 2 – Feasibility Master Plan: Mifflin County School District included a 3-phase study with presentations to the public (2 on option development and 2 on option refinement), a focus group of key business leaders, county planning commission, county commissioners and representatives of the chamber of commerce as well as the establishment of a website for the community to review all options online.

Construction Management Teaming Experience

- McKissick Associates has worked with the national firms of Gilbane Building Management and Turner Construction Management as well as Reynolds Construction Management and smaller regional firms. We are currently working with Samet, (Greensboro, NC) and their partner SRS (Raleigh, NC), on a CM at Risk educational project and are working with LP Ciminelli’s Program Management team from Buffalo, New York, on the Strategic Master Plan for the Erie City School District.

Educational Planning and Design Expertise

- \$950,000,000 in Educational Construction Experience.**
- Recognized Expert** - Vern L. McKissick, III, AIA with invited presentations including;
 - o **“Make the Past our Future: Rebuilding Communities Through Adaptive Reuse”, International CEFPI Conference, 2011**
 - o **“Lessons Learned a 5-Year review of a Green School”, Green Building Association of Central PA, April 2011**
 - o **“Adaptive Re-use of Historic Structures for Schools”, National School Building Expo in Pittsburgh, June 2009**
 - o **“Hazleton Castle” at the National Preservation Trust Conference in St. Paul, Minnesota, October 2007**

Well Versed in Sustainable Design Practices

- Currently designing a LEED™ Gold Middle School and completing a Middle School addition with a Green Globes rating of 2 Globes.
- 2009 Investing in Nature Award for Building/Design/Construction from the Nature Conservancy, Pennsylvania Chapter.
- LEED™ Silver St. Stephen’s K-8 School - 2009 Learning by Design Honorable Mention for Green Design and 2007 Best Building Awards from GBACPA.
- Over a dozen Geothermal schools have been completed or are currently in design.

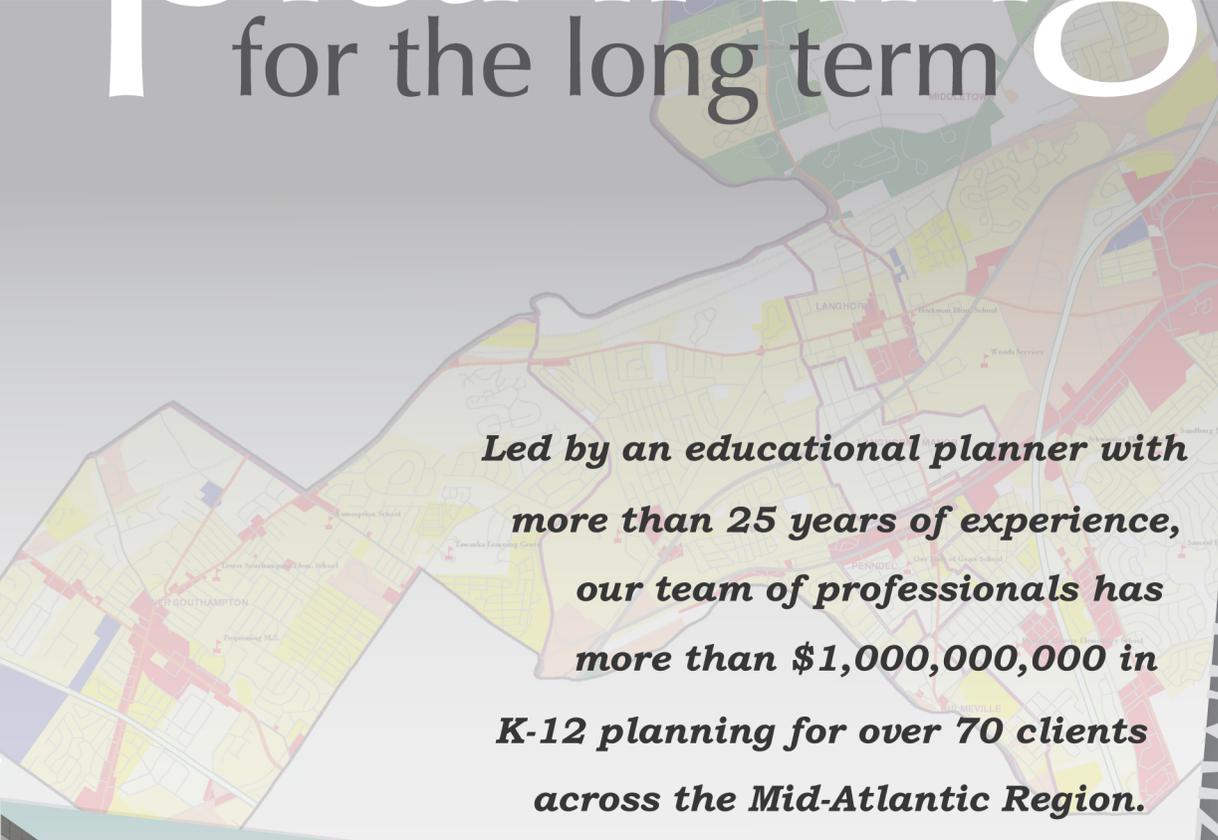
Success with Alternative Financing

- Federal funding source - \$68 million in Qualified School Construction Bonds which was obtained for the current project with the Williamsport Area School District.
- Design-Led Energy Service Contracting Organization integration (through a state or local program). Many of our projects have maximized aid as Design-Led ESCO.

America's Public Schools

planning

for the long term

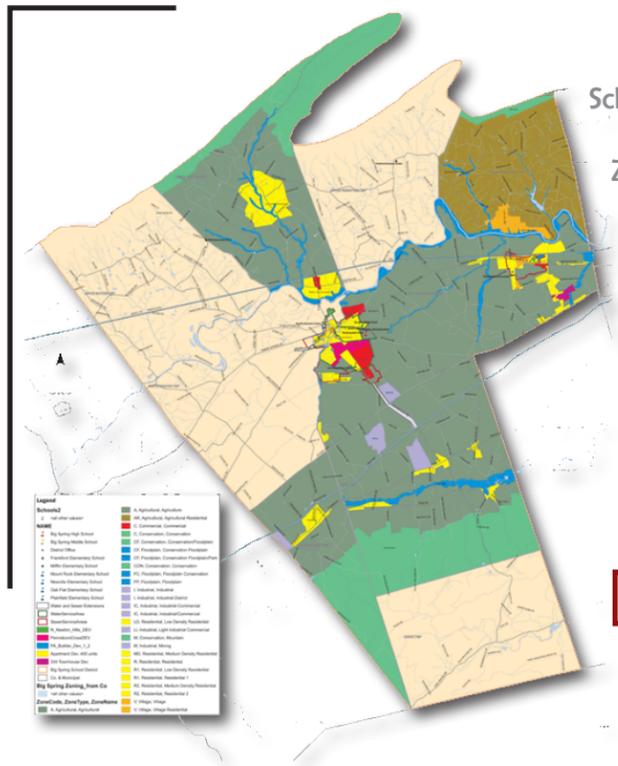


Led by an educational planner with more than 25 years of experience, our team of professionals has more than \$1,000,000,000 in K-12 planning for over 70 clients across the Mid-Atlantic Region.

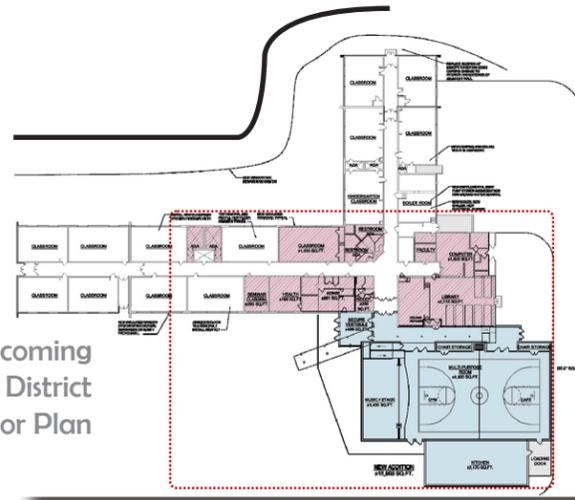


Our data driven, independent analysis can show you the way to maintain and enhance programs while cutting costs.

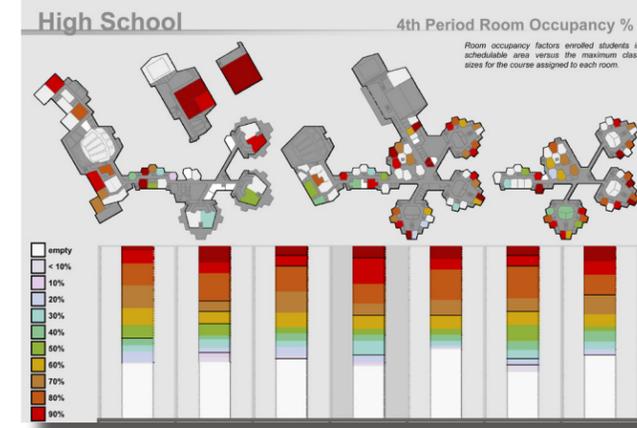
DISTRICT OPTIMIZATION STUDIES



Big Spring School District Township Zoning Map



East Lycoming School District Option Floor Plan



Williamsport Area School District Room Occupancy Diagram

Geographic Information Systems (GIS)

- Enrollment Projections
- Attendance Areas
- Bussing
- Socio-Economic Balancing
- Residential & Commercial Development Projections
- Zoning & Maximum Buildout

Master Action Plan

- Timeline Implementation Phasing
- Financing Drawdowns
- Tax Strategies

Indirect Cost Savings

- Staff Efficiency
- Co-Curricular Costs
- Energy Conservation
- Reduction of Building Maintenance
- Transportation

Physical Building & Usage Site & Spatial Efficiency

- Conditions Assessment
- Energy Conservation
- Capacities
- Security
- Concerns Regarding Historic Structures
- Adaptive Re-use of Non-School Structures
- Site Assessment

Let McKissick Associates help you find Savings for your next Project!

Educational Programming

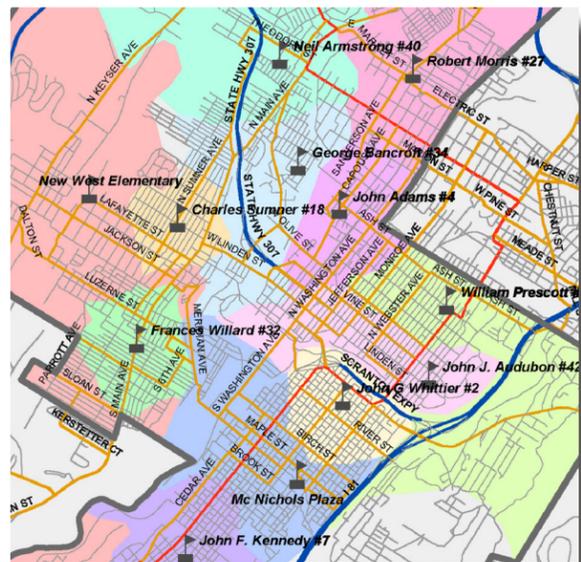
- Class Size (PDE vs Practical)
- Grade Realignment
- Enhancing Educational Programs
- Technology Support
- Teaming
- School-Within-a-School Clusters
- Appropriate Adjacencies & Internal Configurations

Public Relations

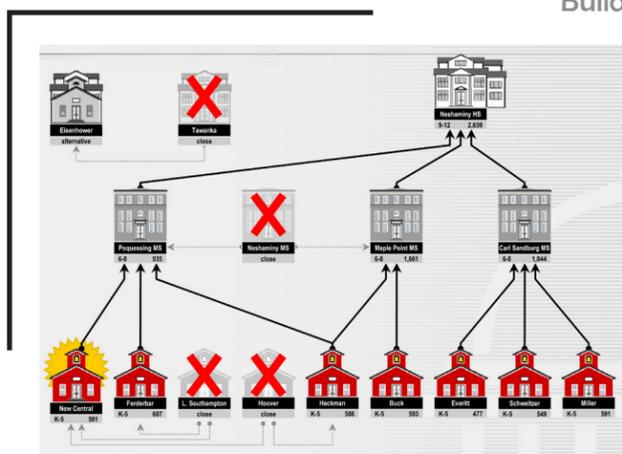
- Public Hearing Facilitation
- Web Site Postings
- Information Booklets
- TV/Radio Production

Funding Sources

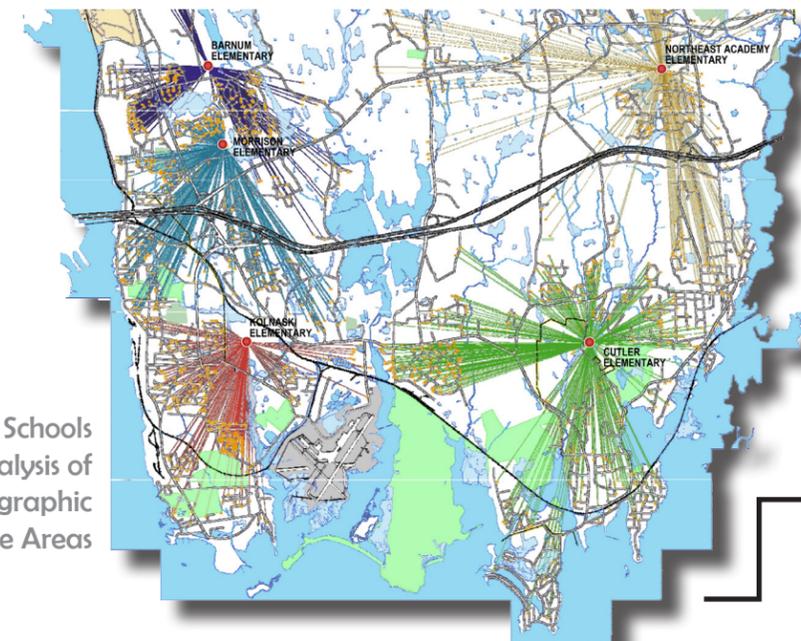
- PlanCon
- Stimulus Funds
- Grant Sources
- Debt Analysis
- Wrap Around
- Energy Services Contracting Organizations (ESCO) Proposal Development
- Property Sales and Rental



Scranton School District GIS Analysis of Proposed School Sites



Neshaminy School District Building Master Action Plan Diagram



Groton Public Schools GIS Analysis of Geographic Attendance Areas

What are...

District Optimization Studies & how can it benefit our schools?

Master Action Plans. Answer to *“What are we going to do next (now, in 5 years, in 10 years and in 20 years)?”* Showing the longterm plans and goals and a timeline for when each part of the developed building program happens. A phasing plan for adapting facilities to a District’s long term goals and needs.

Educational Programming. Answer to *“What curriculum does the District have (and will have) and how does each building serve or hamper those educational goals?”* Showing any building deficiencies that would be contributing as challenges to achieving a District’s goals. A District’s overlay tool in conjunction with the building usage analysis to determine the best use for each facility.

Indirect Cost Analysis. Answer to *“What savings will come from staff & maintenance optimization?”* Showing the potential \$ savings that can be used to offset construction and borrowing costs for building upgrades as well as educational program enhancements. Longterm budget implications.

Geographic Information Systems (GIS). Answer to *“Where are the district’s challenges and how do they relate to each other?”* Showing a comprehensive snap shot of your school population demographics, now and under a variety of possible future scenarios. A guide for how the population trends and economic conditions affect where current challenges exist and future issues may arise in a District.

Building Usage and Spatial Efficiency. Answer to *“What do we have and how is it used, in depth?”* Showing if a District is taking advantage of the spaces they have by calculating the real capacity of existing buildings based upon the District’s own class size policies. An evaluation tool for determining how efficiently a District uses each facility.

Physical Building and Site Conditions. Answer to *“What are our buildings best and worst features?”* Showing each building’s best use within a District and what would be required to adapt each building to best suit District needs. A list of what a District’s ideal conditions are for each building and site location.

Funding Sources. Answer to *“How can we make a building program possible and affordable?”* Showing how to develop creative alternative funding solutions and aligning them with traditional state financing. Maximizing a District’s dollars.

Public Relations. Answer to *“How can we build community support for our District’s facilities decisions?”* Showing a clear description of a District’s options and decision making process. A District’s connection to input and support from the community.



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info@mckissickassociates.com

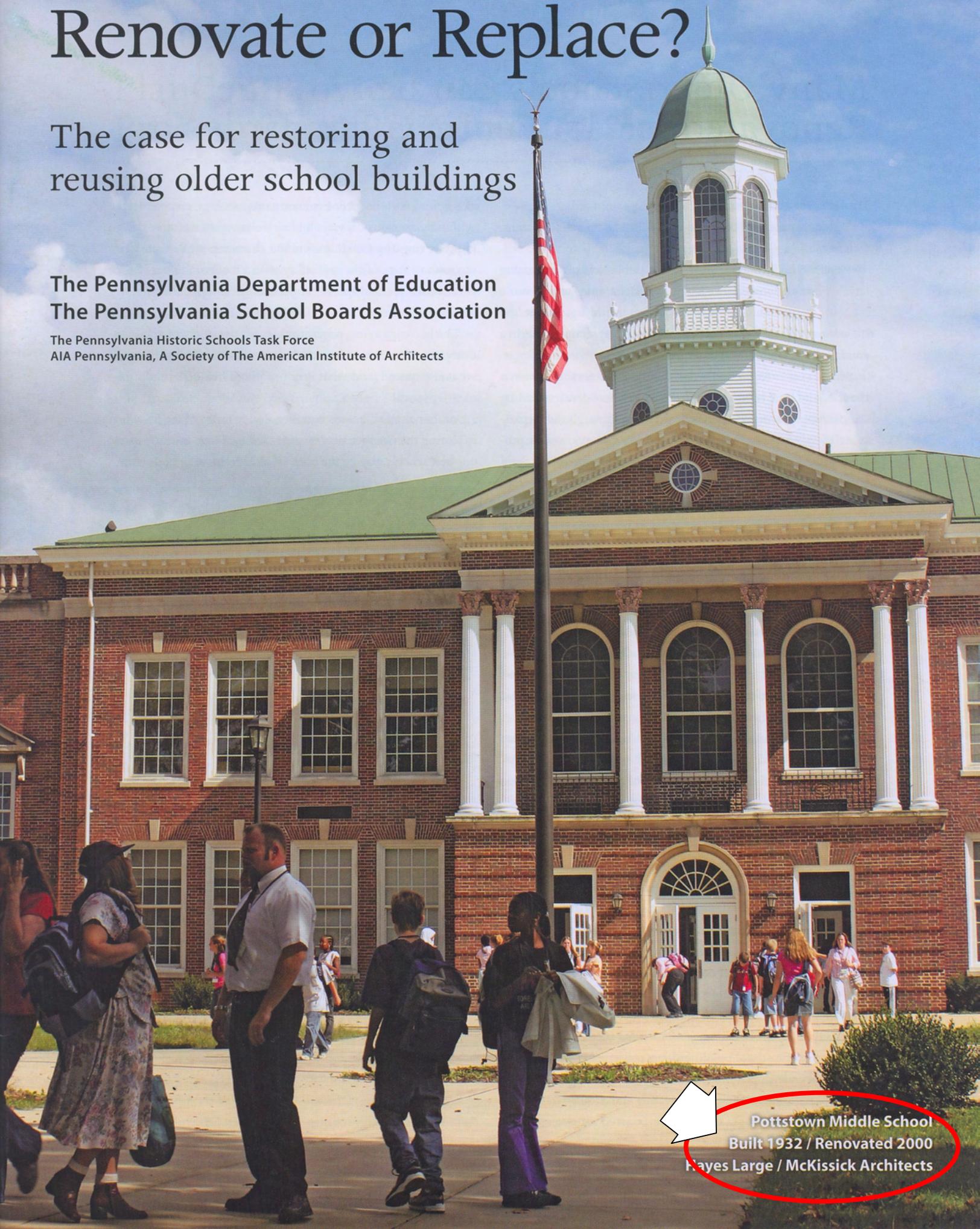
affiliated with
McKissick Associates InSights
Winston-Salem, North Carolina

Renovate or Replace?

The case for restoring and reusing older school buildings

**The Pennsylvania Department of Education
The Pennsylvania School Boards Association**

The Pennsylvania Historic Schools Task Force
AIA Pennsylvania, A Society of The American Institute of Architects



Pottstown Middle School
Built 1932 / Renovated 2000
Hayes Large / McKissick Architects

Old Buildings Can Be 'Green' Buildings

By Kathleen McGinty
Secretary of Environmental Protection

Earlier this year, Gov. Rendell announced an ambitious plan – the Energy Independence Strategy – to save Pennsylvanians \$10 billion over ten years by reducing energy consumption and seeking alternative forms of energy. Because heating and cooling buildings accounts for 39 percent of the energy used in the United States, school districts can save tax dollars and help the environment by reducing energy consumption in their buildings.

A recent amendment to the school code gives an extra state subsidy to school districts for “green” buildings – those that receive a silver, gold, or platinum certification from the United States Green Building Council’s rating system, called Leadership in Energy and Environmental Design (LEED). In addition, High Performance Green Schools Planning Grants help defray costs associated with “green” design and are awarded to schools built to a minimum silver LEED standard. Last year, eight school districts were awarded \$200,000 in planning and design grants.

But a “green” school doesn’t have to be a new school. In fact, the No. 1 principle of green building design is to renovate and recycle existing buildings. A “green” building is one whose construction and operation ensures the healthiest possible environment and makes the most efficient and least disruptive use of land, water, energy and resources. Older schools usually boast numerous features that can help them meet the five principles of building “green”:

1. **Sustainable site design.** Make the most efficient use of existing buildings and associated infrastructure. Utilize existing mass transit systems and make schools pedestrian and bike friendly.
2. **Water Quality and Conservation.** Reduce impervious services by keeping the building footprint and parking areas as small as possible. Because average buildings account for 12 percent of the nation’s potable water systems, designs that minimize the use of water by using low-flow plumbing fixtures can have a major environmental impact.
3. **Energy and Environment.** Design buildings and windows to maximize use of controlled daylighting and solar gains. Maximize insulation. Older schools with big windows were usually designed to capture maximum daylight, and their high ceilings provide ample space for insulation.
4. **Indoor Environmental Quality.** Maximize the use of operable windows and natural ventilation. High performance windows and state-of-the-art heating, ventilating and air



Architect: Vern McKissick



Photo: Tom Fyrlon

St. Stephen’s Episcopal School, a K-8 private school in downtown Harrisburg, more than doubled its classroom space by converting a 1928 parking garage behind the church, above, into an addition with classrooms, restrooms, cafeteria, and administrative offices. With recycled building materials, energy-efficient lights, and an innovative heat-exchange system, the school and adjacent 1826 church became the first of its kind in the nation to receive a silver LEED rating from the U.S. Green Building Council.

conditioning systems provide year-round energy savings while helping to provide better indoor air quality.

5. **Materials and Resources.** Reduce the amount of waste generated during construction. Demolishing a building can produce 20 to 30 times as much debris as new construction. New construction accounts for 136 million tons of construction and demolition waste per year in the U.S. and 40 percent of raw material usage globally. Renovating makes maximum use of existing materials. Renovations require more ingenuity and labor than new construction, but human creativity and our abundant labor force is perhaps Pennsylvania’s most valuable renewable resource.

School boards do more than provide a formal education for children and adults. They influence the way their community thinks and how it grows. Renovating and reusing existing schools, building to LEED Existing Building Standards, and reducing urban sprawl whenever possible can help set an outstanding example of resource conservation and sustainable development.

McKissick Associates started planning for this project in 1999 and not only provided architectural services, but assisted in the school’s fundraising efforts.



Design Professionals Can Help School Boards Meet Educational and Community Needs

By John R. Hill, AIA, 2007 President, AIA Pennsylvania, and Vern McKissick, AIA
AIA Pennsylvania, A Society of The American Institute of Architects

When considering the need for a new or renovated facility, school boards would be well-served to look beyond the physical appearance and condition of their existing buildings. Investing valuable time in the search for new building sites may prematurely focus the board's attention on "bricks-and-mortar" issues which may be better addressed at a later time with a design professional.

Instead, board members and administrators should start by considering their educational programming needs. How do they want their school buildings to function? A design professional can help a school district make that determination by interviewing the staff, parent-teacher associations, and community members.

Next, school boards should consider their facilities in the context of the larger community. They should work with local planning commissions to assess demographic trends and the community's plan for growth. In urban areas, a school can often help stabilize a neighborhood or contribute to revitalization efforts. In rural areas, where school districts often comprise several municipalities, the district may be the only entity that can bring these municipalities together to reach common goals. School boards should keep in mind that the location of a school powerfully influences where development will occur.

Once educational programming needs and community development objectives are determined, a design professional should apply those objectives to existing facilities and help the board determine if new ones are needed. It is generally more cost-effective to renovate existing buildings than build new, but doing so will require creative thinking and flexible approaches. For example, many historic elementary schools have been needlessly discarded because the cafeteria was in the basement or the gymnasium was too small. But these existing spaces can be wonderful for other uses like libraries or art rooms. New cafeterias and gymnasiums can be incorporated in an addition to the existing building.

Likewise, retaining the best features of older buildings, like classrooms with ample natural daylight, can be achieved by using creative solutions to keep big windows and high ceilings. Because of security issues, the original entrance to a school may



Photo: Vern McKissick; Architect: Hayes Large/Vern McKissick

When Bedford High School was renovated in 1996, a "farm" of 32 rented modulares was placed on the parking lot for seven months. Students returned to the 1931 building in phases, as work on various sections of the building was completed.

Vern McKissick was the project architect for the Bedford Area High School which included the incorporation of a complete technical education program.





Although the original entrance to the Media Elementary School, top, is no longer used, it remains an integral part of the historic integrity of the school, parts of which were built in 1915, 1929 and 1951. The main entrance was moved to the side during major renovations in 1994.

need to become a ceremonial entrance. A new entrance can ensure visitors go through the main office to enter the building.

Although existing schools are usually located in well-established sites with existing utilities and infrastructure, it is likely there will be considerable car traffic for a short period in the mornings and afternoons, especially on bad-weather days. School districts and local municipalities need to recognize some traffic congestion is inevitable. Non-conventional solutions such as an internal circulation loop may be needed. But creative solutions are more likely to succeed than trying to impose a suburban solution in an older neighborhood by clearing a large site or moving a school out of town altogether.

Even school directors who favor new construction may find it is easier to garner community support for renovating older buildings. For example, Hazleton recently considered building a new middle school against considerable community opposition. But when converting Hazleton's abandoned old high school into an elementary/middle school was proposed, everyone came together to support restoring a community landmark. Recently, a thousand people packed the gymnasium for a rededication of the building, which locals proudly call the "Castle."

Although renovations are more difficult for staff than new construction, school districts can spare themselves many headaches by hiring additional staff and reassigning job responsibilities to ensure problems can be handled as they arise. School boards,

administration and staff will need to be flexible, especially if the building is going to remain open during renovations.

When the 700-student Bedford High School was recently renovated, a "farm" of 32 modulators was created on the parking lot for seven months, gradually opening up pieces of the renovated building during the school year: the gymnasium first, then the cafeteria, and finally the library. In Bedford's case, it was less expensive to compress the schedule and move the kids completely out. Other districts have scheduled critical activities and work in common areas during summer breaks and then isolated portions of the building undergoing renovations during the school year. Of course, it is critical to maintain a safe environment for students and staff throughout the construction process.

School boards should be prepared to pay design professionals more for renovating an existing building than constructing a new school, because renovations involve more planning, research, and coordination. Boards should budget more for contingencies. In the end, experience has shown, it's still likely to cost less for renovations than new construction.

The Pennsylvania chapter of the American Institute of Architects provides a directory of architects in different parts of the state on its website, www.aiapa.org. School board members should also visit older schools that have been renovated. They may be surprised to learn how well a 1920s school can function in the 21st century, and how much value it can add to the community.

Hazleton Area School District Saves Its 'Castle' From The Wrecking Ball

McKissick Associates completed this school for the 2007 school year and continues to work on the restoration of its auditorium.



Passionate community involvement has saved the former Hazleton High School from the wrecking ball and paved the way for its reincarnation earlier this year as the Hazle Elementary/Middle School.

The 1926 school, known as “the Castle on the Hill” because of its turrets and other Collegiate Gothic elements, was closed in June 1998 and slated to be demolished for a new school. An auction was conducted in which its oak doors, built-in cabinets, brass chandeliers and other fixtures were extracted and carted away.

But after a rally called by citizens determined to save the school, then-Hazleton Mayor Michael Marsicano refused to issue a demolition permit. “A lot of people loved that school,” said Gilbert Degenhart, a 1947 graduate who championed keeping the building during his four years on the Hazleton Area School Board. “After the mayor held up demolition, we had volunteers – we called them the Castle keepers – who patched the roof, cleaned up trash, and checked the building every day to make

sure it was secure.” One Castle keeper even obtained the original auditorium doors and chandeliers so they could eventually be reinstalled.

In 2003, the school board hired architect Vern McKissick, AIA, to evaluate the building. “It was a fantastic structure,” McKissick said. “It was more substantial than anything we would build today. I told the board, I might not be able to renovate the building for less cost than new construction, but I could do it a year faster.”

As it turns out, the project cost about \$3.5 million less than a new school of comparable size, even with the cost of rebuilding the turrets that had been removed from the towers flanking the main entrance.

Some 1,000 people packed the newly refurbished gymnasium for the rededication of the school in January. “This is unbelievable. Every brush of paint was worth it,” one 1948 graduate told the Hazleton Standard-Speaker. Said another, “I think it’s a beautiful monument to the people who graduated here. It’s going to be a step forward for the children who follow.”



After

Thanks to volunteers who loved their alma mater, the original doors and lights were recovered and reinstalled in the main hallway as the building was renovated.



Before

Light fixtures, doors, and cabinets were stripped from the main hallway when the building was slated for demolition.



Photo: Standard Speaker/Blaine Falkena



Photo: Seward Spicker/Mark Graham

The former Hazleton High School, recently renovated as an elementary/middle school, stands proudly on a hill overlooking the city.



The former cafeteria was remodeled into a new library.

One of the many picturesque classrooms of the refurbished 1926 "Castle."



Photo: Phil Tanella



Some 1,000 people packed the newly renovated gymnasium for rededication ceremonies.

Renovating Older Schools Can Help Conserve Resources, Revitalize Older Communities

By Dennis Yablonsky

Secretary of Community and Economic Development
Chairman, Governor's Economic Development Cabinet

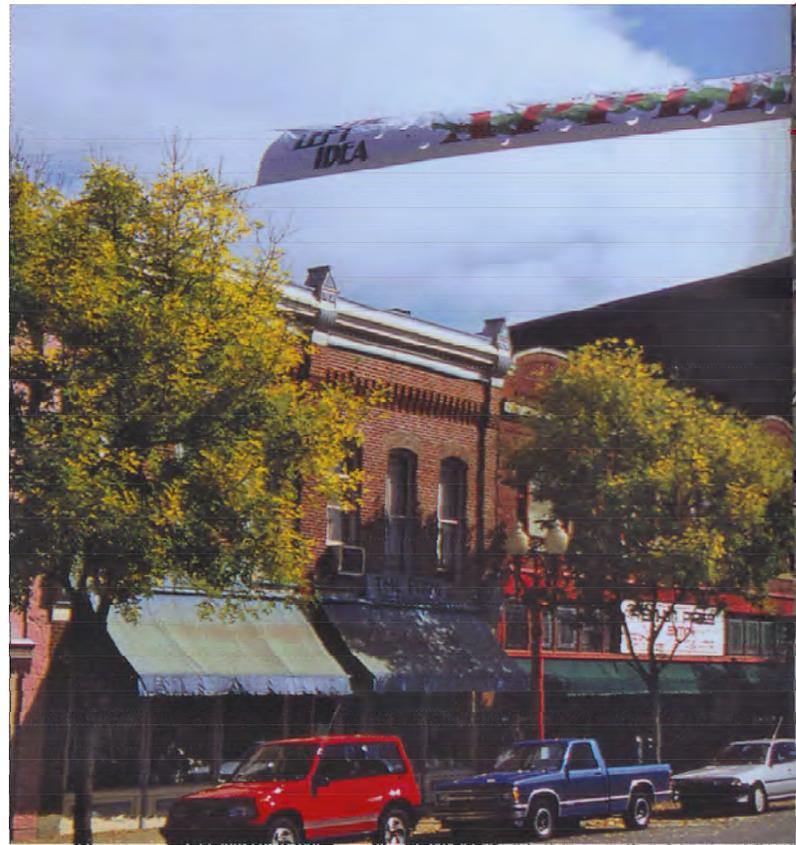
Successful businesses know that a quality workforce is easier to attract and retain when employees are happy with the quality of their lives outside of work. A vital part of Pennsylvania's strategy to make the commonwealth the perfect place to live and work involves making our cities and towns more livable, while conserving farmland and open space.

For several decades, both the public and private sectors have invested more on developing and promoting growth on the urban fringe rather than reinvesting in our existing cities and towns. While creating some new jobs and assets, these investments often transfer jobs and residents from established communities to sprawling new ones. The result—Pennsylvania's many historic cities and towns have lost population, as hundreds of thousands of acres of farmland and open space have been converted to new development.

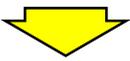
Believing that in order to attract businesses and residents, Pennsylvania needs healthy cities and towns as well as thriving suburban and rural areas, Governor Rendell has launched a number of interagency initiatives to help reverse these trends. The Community Action Team led by the Department of Community and Economic Development is an interagency effort to make community-changing investments on a significant scale in our smaller cities and core communities.

Part of this overall strategy and partnership with local government leaders entails maintaining a strong foundation for education. The importance of well performing neighborhood schools to the development potential and quality of life in core communities cannot be overstated.

In an era of intense global competition, Pennsylvania needs to foster sustainable development and make maximum use of our unique resources—our older, often historic, cities and towns and our exceptional natural resources. The creative use of our older school buildings, and the integration of school construction and renovation decisions with communities' economic and community development goals, can help preserve and enhance the quality of our communities, stimulate educational excellence, and provide an anchor for revitalization and economic development.



Architect: Crabtree Robinson



Vern McKissick was the project architect for the last renovation of the Cochran Elementary School (originally slated for demolition) in Williamsport Area School District.



Architect: Hayes Large/Vern McKissick



Photo: Blair Seitz

TOP: Since 1928, neighborhood children have walked to Williamsport's Cochran Elementary School, which was renovated and expanded in 2001.

ABOVE: Neighborhood schools help keep Pennsylvania towns healthy and vibrant. Franklin has two small elementary schools within walking distance of its charming main street.

LEFT: Troy Area High School has been a Bradford County landmark since its construction in 1924. The school, which was placed on the National Register of Historic Places in 2001, is currently undergoing major renovations that include replacing 1970s windows and doors with new ones that will match the originals.

Keystone Principles

An important interagency initiative is the adoption by Governor Rendell's Economic Development Cabinet of the Keystone Principles and Criteria for Growth, Investment and Resource Conservation. The Principles are goal statements that reflect the cooperating state agencies' aims for sustainable development. The specific criteria are designed to be used across state agencies to guide the investment of agency funds and to evaluate applications for grants and loans to municipal and private applicants. A number of the Principles and their specific implementing criteria apply to decisions about neighborhood schools, such as:

- **PRINCIPLE:** Redevelop first. **CRITERIA:** Project is located in a core community; Project supports the rehabilitation and use of existing buildings, including schools and historic buildings.
- **PRINCIPLE:** Use existing infrastructure—roads, water and sewer lines. **CRITERIA:** Project is located within ½ mile of existing or planned public transit. Project uses/improves existing water and sewer service. Renovation and reuse of neighborhood schools frequently meets these objectives.
- **PRINCIPLE:** Concentrate development. Foster creation of well-designed development and walkable, bikeable neighborhoods that offer healthy life style opportunities. **CRITERIA:** Project serves mixed use development; project takes advantage of sidewalks or connected walkways, bikeways and greenways that make walking or biking to school a healthy and safe choice.
- **PRINCIPLE:** Increase job opportunities. **CRITERIA:** Renovating schools and historic buildings creates local jobs in urban communities.
- **PRINCIPLE:** Foster sustainable businesses. **CRITERIA:** Construct and promote green buildings and infrastructure that use land, energy, water and materials efficiently. Existing buildings are often excellent candidates for renovation as "green" buildings. Using an existing building avoids the need to consume energy and natural resources to fabricate new materials and put them in place.
- **PRINCIPLE:** Plan regionally and implement locally. Locating schools in or close to population centers contributes to the health of core communities, reduces the need for busing, and conserves rural lands for rural uses.

Scranton School District relied on a comprehensive GIS study by McKissick Associates to determine which buildings to maintain and which to replace.



Points to Remember



Acreage

The Pennsylvania Department of Education has no acreage requirements. The amount of land needed to support a district's educational and athletic programs is a local school board decision. For example, many Scranton School District buildings are sited on small parcels. West Scranton High School and its athletic fields, left, cover just 5.3 acres of land, and many Scranton neighborhood elementary schools are located on an acre or less. Walkability is considered more important than spacious grounds.

Vern McKissick performed this renovation and addition for the Pottstown Middle School.



Cost

PDE's experience has shown it is generally less expensive to renovate an existing school than build a new one, especially considering the cost of land acquisition and development. Renovations in 2000 to Pottstown's 1932 middle school, right, cost \$108 per square foot, while an addition cost \$136 per square foot.



New addition \$136 sq. ft.

Renovations \$108 sq. ft.



Photos: Tom Hjilom

Lifespan

A well-constructed building can last indefinitely with periodic renovations. Often, a building constructed in the early 1900s may be more solid than those built in the 1950s and 1960s, when inferior materials and construction techniques were common. Renovations and new construction are planned for next year at Allentown's 1916 William Allen High School, left, which will continue its service well into the 21st century.

McKissick Associates is the architect for this \$78 million conversion of the St. Joe's to an intermediate high school for grades 9 & 10. Arranged as 4 magnet schools, it will house 2400 pupils.



Environment

The "greenest" building is the one you don't have to build. Reusing existing structures makes the most efficient use of land and conserves resources. Their strategic location in established communities makes them more accessible to students and parents. The Reading School District will renovate and rebuild the former St. Joseph's Hospital, right, into a second high school to relieve overcrowding at its 1926 high school. Landmark elements like the 1884 bell tower and chapel will be retained and renovated for new uses.



Photo: Vern McKissick; Architect: Vern McKissick