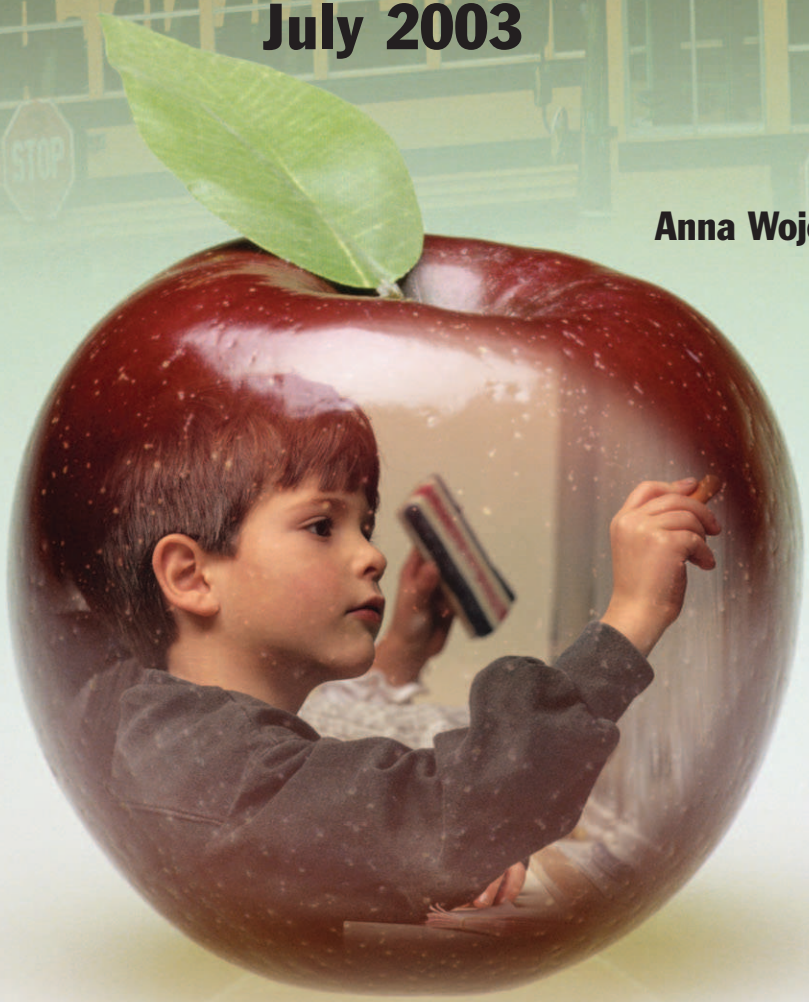
The Future of School Siting, Design and Construction in Delaware

Summit • March 20–21, 2003

REPORT AND RECOMMENDATIONS

July 2003



report prepared by
Anna Wojewodzki Hunter
Camille Sawak
project managed by
Peter M. Ross
report edited by
Lisa Moreland

co-sponsored by
Institute for Public Administration
College of Human Services, Education & Public Policy
University of Delaware
and the
Office of Governor Ruth Ann Minner

www.ipa.udel.edu

The Future of School Siting, Design and Construction in Delaware

Summit ● March 2003

Report and Recommendations

July 2003

Anna Wojewodzki Hunter
Camille Sawak

Project managed by
Peter M. Ross

Edited by
Lisa Moreland

Institute for Public Administration
College of Human Services, Education & Public Policy
University of Delaware
and the
Office of Governor Ruth Ann Minner

"All things are created twice. There's a mental or first creation, and a physical or second creation of all things. You have to make sure that the blueprint, the first creation, is really what you want, that you've thought everything through. Then you put it into bricks and mortar. Each day you go to the construction shed and pull out the blueprint to get marching orders for the day. You begin with the end in mind." – Stephen Covey

Contents

List of Figures, Tables, and Charts

Preface and Acknowledgements

Jerome R. Lewis, Ph.D.
Director
Institute for Public Administration
University of Delaware

As the director of the Institute for Public Administration (IPA), I am pleased to provide this report on "The Future of School Siting, Design and Construction in Delaware" summit which was held on March 20-21, 2003. At the Virden Center in Lewes, Delaware, IPA sponsored the event with the Delaware Department of Transportation (DelDOT) and the Governor's Office. The event brought together state and private agencies. State agencies represented include the Delaware Department of Natural Resources and Environmental Control, State Budget Office, Office of State Planning Coordination, Department of Technology and Information, Delaware House of Representatives, Delaware State Senate, Office of the Controller General, Division of Libraries, Department of Education, and the Office of Governor Ruth Ann Minner. Representatives from local planning departments, architects, and builders also participated. Two universities were represented through a keynote speaker from the Department of Educational Leadership and Policies of the College of Education at the University of South Carolina, and faculty and staff members from the University of Delaware's Institute for Public Administration (including staff from IPA's Planning Services Group and Conflict Resolution Program) and Center for Applied Demography and Survey Research. Participants also included teachers, school board members, district personnel, Department of Education (DOE) employees, and superintendents. A complete list of attendees can be found in Appendix A.

The goal of the forum was to discuss the future of school siting, design, and construction in Delaware and focus on the following topics:

- How can school siting, statewide planning, and infrastructure investments be aligned?
- What data is available to help us select optimal school sites?
- What cost-effective design and construction methods are available?
- What financing innovations can we use?
- What will the school of the future look like?
- What is the potential for co-location of other public services in school buildings?

I would like to acknowledge those who contributed to this forum. My colleague, Peter Ross (Institute for Public Administration, University of Delaware), led the planning of this summit. The contribution made by Lee Ann Walling (Deputy Director and Special Advisor to Governor Minner) was invaluable – she co-hosted the event, supported the planning phase, and presented *Getting Smart about Schools: How School Sizing and Siting Affect our Quality of Life* at the summit. Anna Hunter (Institute for Public Administration) planned and organized the summit, researched issues relating to school siting, design and construction, and produced the final report.

I would also like to recognize Ralph Reeb (Department of Transportation) for providing the financial resources needed to research, prepare, host, and summarize the results of the day and a half summit. I want to acknowledge our guest speaker, Kenneth Stevenson from the Department of Educational Leadership and Policies of the College of Education at the University of South Carolina, for his keynote address on the *Future School Possibilities and Considerations: What Will Education Look Like During the 21st Century?* In addition, Nicolas Vacirca (School Planning and Maintenance, Department of Education) presented an overview of *The Delaware Department of Education's Certificate of Necessity.* Connie Holland (Office of State Planning Coordination) presented *The State Strategies and the LUPA Process for School Planning*, which was prepared with David L. Edgell (Office of State Planning Coordination). Edward Ratledge (Center for Applied Demography and Survey Research, University of Delaware) provided an overview of *Tools and Data for Enrollment Projections: 2003-2013 in Delaware*. Richard Moretti (Red Clay Consolidated School District) loaned a proposed program management plan for the Red Clay Consolidated School District. I would also like to acknowledge the moderator of the event, Kathy Wian (Institute for Public Administration's Conflict Resolution Program).

Finally, I would like to recognize the contributions of the following Institute for Public Administration staff members and graduate students involved in producing this report. Edward O'Donnell and Dennis Loftus provided their perspectives on how to design the summit. Stacy Savickas and William Clark provided research support. Stacy also provided notes that were essential to the written report. Camille Sawak assisted in the writing and editing of the final report. Nell Downer and Debbie Carr provided staff support on this project. Lisa Moreland oversaw the editing of the final report and Mark Deshon provided the graphic design.

Copies of this report can be found on IPA's website at www.ipa.udel.edu/research/publications.

Planning Committee

Lee Ann Walling
Deputy Director and Special Advisor to Governor Minner
Delaware Economic Development Office

Jennifer J. Davis
Director
State Budget Office

Valerie Woodruff
Secretary of Education
Department of Education

Constance Holland
Director
Office of State Planning Coordination

Jerome R. Lewis
Director
Institute for Public Administration
University of Delaware

Anna Wojewodzki Hunter
Policy Specialist II
Institute for Public Administration
University of Delaware

Dennis Loftus
Program Coordinator
Delaware Academy for School Leadership
Institute for Public Administration
University of Delaware

Lisa Kondraschow Moreland
Policy Specialist II
Institute for Public Administration
University of Delaware

Edward O'Donnell
Senior Policy Advisor
Institute for Public Administration
University of Delaware

Peter M. Ross
Senior Policy Scientist
Institute for Public Administration
University of Delaware

Stacy Savickas
Graduate Research Assistant
Institute for Public Administration
University of Delaware

Camille Sawak
Public Service Fellow
Institute for Public Administration
University of Delaware

Kathleen Wian
Assistant Policy Scientist and Coordinator
Conflict Resolution Program
Institute for Public Administration
University of Delaware

Executive Summary

For the 2001-2002 school year, there were sixteen regular public school districts, three vocational technical schools, and ten charter schools in Delaware. The pre-kindergarten to grade twelve population (including special education students) was 115,484. (An additional 27,299 children attended the 631 nonpublic schools in Delaware, and 2,288 were home-schooled. Delaware will need more schools due to a projected 30 percent increase in population (an additional 232,253 people) over the 2000-2030 time period. However, gauging this projection is difficult since many of Delaware's school-aged children are either home-schooled or enrolled in a private school.

A lack of land-use planning in the school-siting process contributes to inefficient housing development patterns. A developer-donated site may exacerbate sprawl if the land donated is not in a targeted growth area or within a town. The Delaware Office of State Planning Coordination and Governor Minner's Office encourage towns and counties to protect their rural areas. Governor Minner's Livable Delaware initiative helps the state adhere to smart growth through principles that include guiding growth to areas where the state, counties, and towns are most prepared (in terms of infrastructure and thoughtful planning).

Delaware needs to consider the changes in each school district's population and the infrastructure that will be needed. For example, the Appoquinimink School District's enrollment is expected to increase by roughly 2,000 students by 2013. In contrast, the Brandywine School District's enrollment over the same time period is expected to decrease by roughly 1,500 students. Consequently, there will be a surplus of school space in northern Delaware, where the Brandywine School District is located, and a shortage of school space in Appoquinimink, the southernmost part of New Castle County.

Academic success and school safety are two additional issues that need to be addressed. Academic success is influenced by student class size, changing technology needs, and the changing culture (ethnic and racial diversity) in the United States. School safety includes not only safer classrooms but school transportation patterns.

State department heads, University of Delaware representatives, public school educators, builders, contractors, and architects came together in March 2003 for a brainstorming summit on how Delaware should proceed with the building, designing, and siting of new schools. Sprawl, smart growth, and economies of scale were considered throughout the summit.

The state of Delaware has continued to experience increases in population, infrastructure, roadways, demand for public services, and school construction. The Institute for Public Administration (IPA) has been conducting an ongoing study on how schools select sites, what design standards are in place, and how construction-related concerns are addressed.

This analysis began in 2000 with a Delaware Policy Forum "Planning Delaware's School Needs: Issues of Location, Design, and Infrastructure." This forum produced suggestions for further research on funding, school building design, site pre-planning, and projections on population and technology.

After this initial forum, the Delaware Department of Education funded the creation of a school construction committee that met from fall 2000-spring 2001. The committee systematically reviewed the current School Construction Formula and the need for standards in school construction. The committee recommended a small increase in the size of classrooms and additional space to address programmatic needs. The committee gathered and evaluated data on the cost of new construction and the increases in labor and material costs. Subsequently, they reviewed the need for increased guidance in school site selection. A final report, "Building Quality Schools: Revisions to the School Construction Formula and Recommendations on Standards," was completed in August 2001.

Following the release of the August 2001 report, the Delaware Department of Transportation (DelDOT) funded IPA's efforts to conduct further research in preparation for the summit which was held in March 2003 that focused on the following six issues:

1) How can school siting, statewide planning, and infrastructure investments be aligned?
2) What data is available to help us select optimal school sites?
3) What cost-effective design and construction methods are available?
4) What financing innovations can we use?
5) What will the school of the future look like?
6) What is the potential for co-location of other public services in school buildings?

The summit concluded with suggestions for additional steps. First, a more in-depth research project should be undertaken to gather the information from the summit and solutions to synchronize DelDOT's and DOE's strategies related to school siting issues. An example of this synchronization might entail a more efficient usage of transportation services by ridding the system of overlapping services.

Second, research must be performed in order to create a standard design for the interior of school buildings. External designs, however, should be flexible and allow for variety. This second recommendation includes a standard planning system related to the utility of construction equipment and building materials. An analysis of the design methods should be conducted to encourage the use of cookie-cutter schools. Research should be done on the possibility of lease purchasing for financing schools, and how to create schools without legislation through a study on school capacity.

The third recommendation prompted study on how to design a new Certificate of Necessity (CN) process that includes sections on how to (1) define land acquisition and construction, (2) review and determine the compatibility with county and municipal comprehensive plans, (3) assess the suggestion to create a two-step system that addresses and includes the need for a school building in a specific area and the location of the building, (4) determine the school

site's applicability to other state investments, including roads, sewers, and water, and (5) clarify how the CN is a positive step towards school siting.

The third recommendation revolved around the research areas most critical to the CN process. This includes reviewing existing practices in other states, interviewing current stakeholders, and using the information attained at the summit. A determination will need to be made on whether the process and persons authorizing the CN are appropriate. A diagram should be created to clearly display the correlation between the CN and financial mechanisms.

The fourth recommendation encompassed research on how the state can become more aware of planned growth areas. A statement needs to be drafted that specifies how to define land acquisition and construction in the CN process and how to review the CN's relationship to LUPA and the new PLUS process. Analysis should be conducted on the relationship between school infrastructure and the needs of perceived enrollment growth. A study of the breakdown of infrastructure considerations pertinent to sewer, water, emergency services, libraries, roads, storm water, social services, transportation, and highways deemed significant to school siting would be required. Research should be done on how districts or the state could legally option property. This would include research on how to establish a "land bank" that would allow the state to purchase land earlier in growth areas and then allow for the subsequent allocation to school districts. Further research should explore how the K-12 Campus Approach would allow for separate and independent campuses for different grade levels. This would include a study on how the Campus Approach would utilize economies of scale and cost-effectiveness.

The fifth recommendation focused on participation from the summit attendees and school personnel. These participants would be involved in comprehensive conversations to gain an in-depth perspective that can be compiled and shared. IPA was asked to provide a follow-up meeting on best practices, identifying the priorities around the country.

The sixth recommendation centered on conducting research on government and/or not-for-profit agencies that are compatible with school building design and capacity. Sites should be identified that might lend themselves to multiple uses and incorporate community services. Examples include a state service center, public library, police station, or public meeting space. Existing unused/underutilized facilities could be retrofitted to accommodate school needs. A continued review on how shared services would be able to share costs (e.g., utilities, janitorial services, general maintenance, and long-term use and responsibility) is another topic for research on multi-use buildings *(See Appendix C)*.

The seventh recommendation called for an examination of how charter school siting is accomplished and how it should be addressed in future discussions and research.

The eighth recommendation revolved around financing options, including lease purchasing. This research would include long-term costs, energy efficient methods, the financial impact of busing, and an evaluation of district strategic planning, transportation issues, and impact fees.

As a follow-up to the summit, IPA, in collaboration with the State Budget Office, will begin an intense research project that will include meetings, interviews, and a literature review exclusively focused on the Certificate of Necessity process. This next phase will be completed in November 2003 and will include recommendations on action steps that the state may begin to take immediately.

The following report is a synopsis of the conference presentations and participant dialogue that occurred during the summit that was held on March 20-21, 2003, at the Virden Center in Lewes, Delaware.

The Future of School Siting, Design and Construction in Delaware

Summit

March 2003

Report and Recommendations

Future School Possibilities and Considerations: What Will Education Look Like During the 21st Century?

Kenneth Stevenson, Ed.D.
Professor
Department of Educational Leadership and Policies
College of Education
University of South Carolina

What Is Occurring in the United States that Is Driving Education Trends?

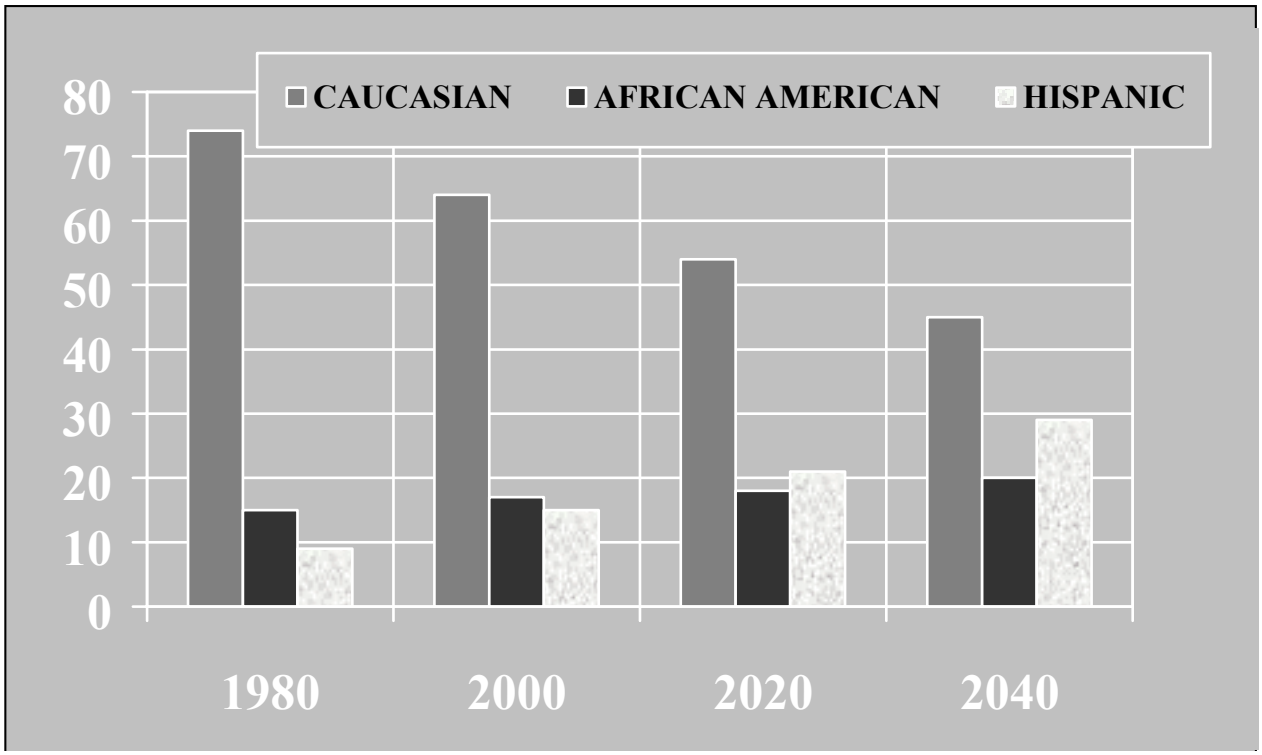
According to Stevenson, there are six factors that are driving thirteen educational trends occurring in the United States. These factors consist of: (1) Birth Patterns, (2) Aging Population, (3) Family Status, (4) Value of an Education, (5) Technology, and 6) Culture. The thirteen trends are discussed later in this report.

Birth Patterns

Stevenson stated that birth patterns are changing. Since the average American woman is now having 2.1 births, the population growth is zero. However, the diversity of the American population is changing. When the average birth per woman is broken down by race, the results show that Caucasian women are having an average of 1.7 births, women of African descent are having an average of 2.4 births, women of Hispanic descent are having an average of 2.9 births, and women of Puerto Rican descent are having an average of 2.4 births. As a result, the racial composition of the school-aged population in the United States is vastly changing. In the diagram that follows, Stevenson showed the changing face of the American child *(See Figure 1)*.

Due to the increasing racial diversity of children in the twenty-first century, Stevenson predicted that the minority population, as it is defined today, will become the "majority" population. Subsequently, future school-age children will: (a) be more diverse in values, culture, and priorities, (b) be poorer, (c) have a greater amount of health problems, (d) have a less stable home, (e) have fewer "pre-school" educational experiences, (f) be less prepared to learn, and (g) more likely will have parents who were not successful in school.

Figure 1. ***Percent of Children that Are Caucasian, African American, or Hispanic***



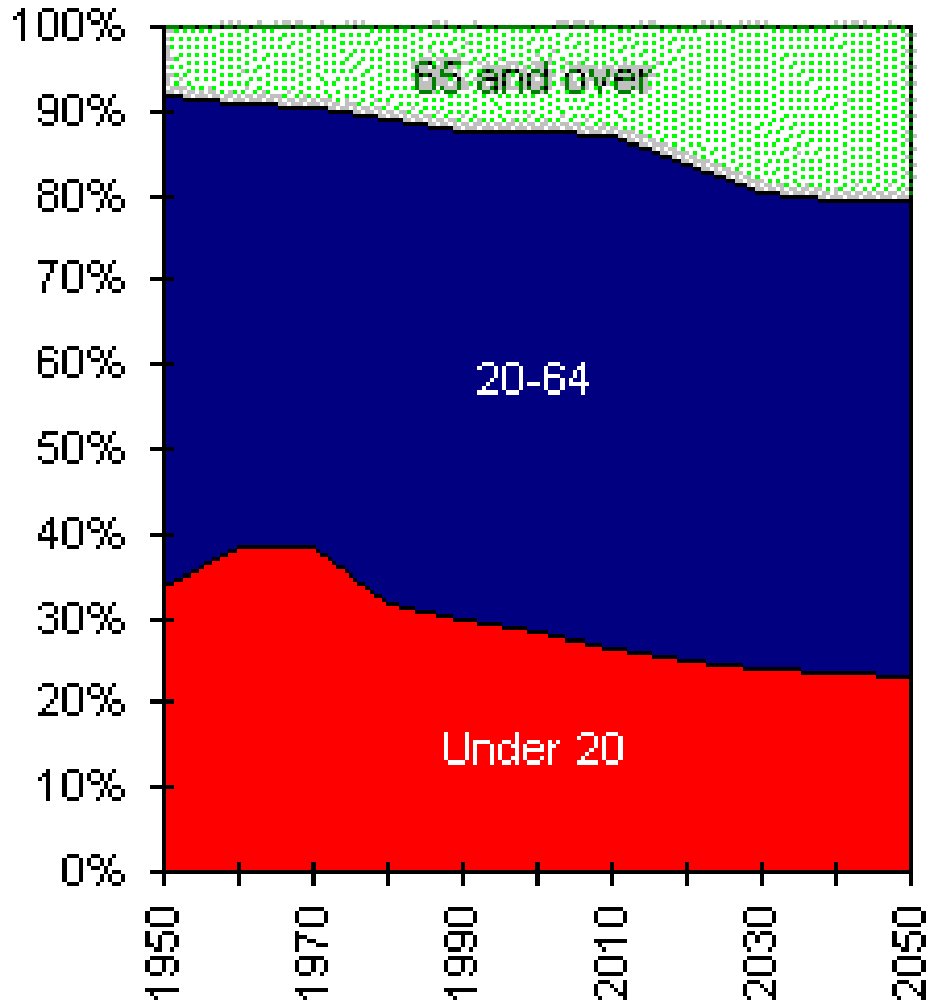
Aging Population

The United States House Committee on the Budget has stated that an aging population is a challenge of the twenty-first century. As evidence, the first baby boomers turned 50 in 1996 and only 34 percent of the population is 18 years of age or younger. By the next decade, the percentage of children 18 and under will decrease to 25 percent of the population. Furthermore, by 2025, 65 million people will be 65 or older. Stevenson noted that attention to the aging population is important since older generations are typically politically active and have more potential to be wealthier than younger generations. Also, this older generation may be more reluctant to pay tax dollars for educational purposes since they do not have a current stake in education system *(See Figure 2)*.

Family Status Continues to Change

In 1955, 60 percent of households included a stay-at-home mother or wife versus 7 percent in 2002. Currently, 60 percent of women are in the workforce, and this percentage continues to grow each year. In addition, 40 out of 100 children will live in a single parent home by the age of 18. Additionally, dual incomes are becoming necessary for a family to function at the level that they choose.

Figure 2. ***Relative Age of the U.S. Population, 1950-2050***

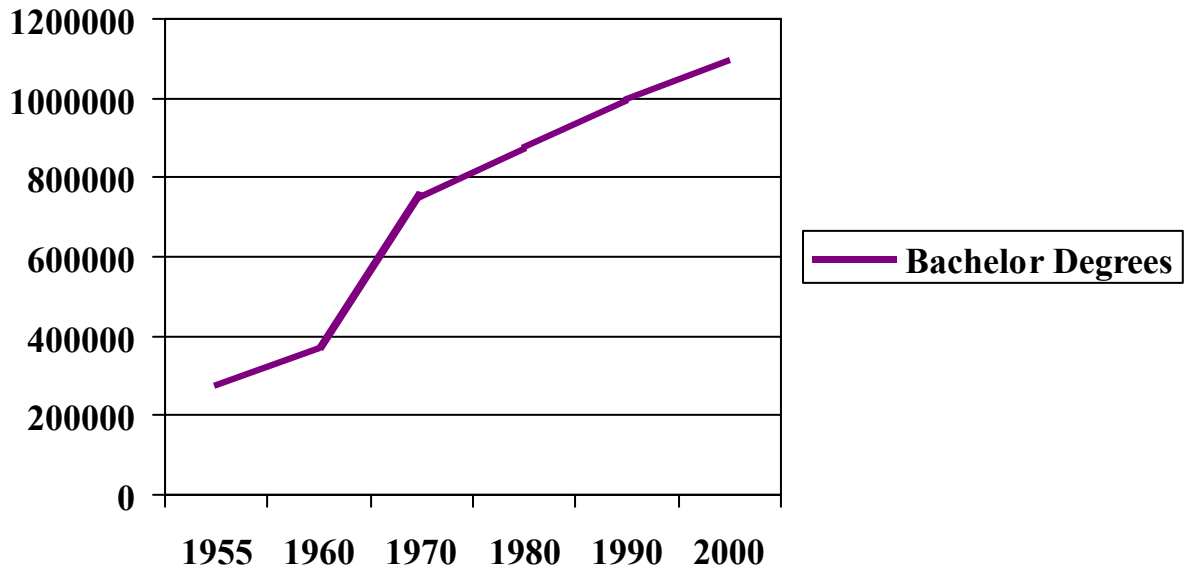


Value of an Education

Education continues to grow in importance. In today's job market, an individual's education level ensures their ability to be employed. Thirteen percent of people without a high school diploma are unemployed compared to less than a two percent unemployment rate for those with a college degree.

Additionally, education has been shown to have a direct correlation to an individual's quality of life. Eighty percent of single-parent females that have dropped out of school live in poverty. Conversely, less than one percent of childless married couples, with one college degree between the two, live in poverty.

Figure 3. ***Number of Bachelor Degrees in the United States***



Technology

Stevenson observed that statistics show an increasing use of technology in the classroom. For example, there is a declining usage of encyclopedias due to the Internet. United States Census Bureau Analyst Eric Newburger and author of *Home Computers and Internet Use in the United States* expressed the following in August 2000:

> "Since 1984, the country has experienced more than a five-fold increase in the proportion of households with computers.
>
> In addition, Internet use is rapidly becoming synonymous with computer availability (http://www.census.gov/prod/2001pubs/p23-207.pdf)."

Newburger stated, and the U.S. Census Bureau confirmed, that technology is now in the hands of American students. This is based on the following statistics:

- Nine-in-ten school-age children (six to seventeen years old) had access to a computer in 2000. Four-in-five used a computer at school and two-in-three used one at home.
- Approximately 77 percent of white non-Hispanic children and 72 percent of Asian and Pacific Islander children lived in households with computers, while only 43 percent of African American children and 37 percent of Hispanic children did.

This last point echoes the importance of Stevenson's first trend focusing on changing birth patterns. It is essential to remember that today's minority students are projected demographically to soon exceed the non-minority population.

A Changing Culture

The United States is experiencing a changing culture that has led to a society exemplified by pluralism and diversity. Stevenson referred to the "melting pot" idea as an outdated term and used the "salad bowl" analogy to identify today's culture. While there are an increasing number of people from diverse backgrounds, these people tend to hold onto their beliefs and ideas more as opposed to blending (or melting) into society, thus the "salad bowl" comparison. Stevenson expressed that the "I" generation exhibits an increase in fear and violence and a more conservative view towards government. He asked, "Are we cocooning ourselves from reality?"

The Impact of Educational Trends

Following Stevenson's presentation of the six factors that are driving thirteen identified educational trends, he addressed each trend in greater detail. These trends should not be viewed as definitive, but as pointers to the future.

Trend 1: Disappearance of Attendance Lines/Zones

According to Stevenson, there is an emerging trend of disappearing attendance lines/zones. States are allowing school choice, including charter and magnet schools. These alternatives often cross traditional school district boundaries.

Trend 2: Return to Smaller Neighborhood Schools

Neighborhood schools are re-emerging. A large number of states are opening more schools which have smaller capacities, or are opening numerous small schools within a large school complex. For example, Florida has a new law that limits the size of high schools. Stevenson stated that by returning to the neighborhood school model, we are in the midst of the "Balkanization of America." In other words, as the Balkans experienced geopolitical changes with the former Yugoslavia breaking into smaller, separate countries, the American school system could replicate this process thereby re-segregating our public schools.

Trend 3: Schools Develop Unique Personalities

With the growth in school options, schools are developing and advancing specific curriculum themes. This is evident in the implementation of curricula that focuses on one of the following: the three Rs (reading, writing, and arithmetic), art, or technology. But with these newly focused schools comes a new definition of fairness and debate over equality versus equity. Stevenson stated that in order for traditional public schools to survive, they will need to develop a reputation relating to some specific curriculum and move away from the "cookie-cutter" approach.

Trend 4: Continued Reduction of Teacher/Pupil Ratios

Stevenson determined that there is a possibility of a continued trend in reducing teacher/pupil ratios due to the: (1) emerging educational trends in birth patterns, (2) aging population, (3) changing family make-up, (4) diverging viewpoints on education, (5) increasing use of technology, and (6) growing diversity in cultural norms.

Trend 5: Technology Dominates Schooling
With the concurrent increase in use of and access to technology in schools and private households, Stevenson stated that this trend may soon dominate the method of schooling throughout the United States. He proposed that classrooms may change their appearance, exemplified in the use of virtual classmates where students could "talk with" and interact with virtual images of historic figures, such as Abraham Lincoln or Mother Teresa. Stevenson elaborated by speaking about the current opportunities that email provides to children – where the new "Outside to the Inside" approach to learning provides a valuable communication experience as children interact with others from around the world. Essentially, classrooms would be regarded as staging centers. Technology changes the role of the teacher – they become "Technical Team Managers," "Master Teachers," or even "Doctors" within a technical support team, with everyone supporting a "One Vision" concept.

Trend 6: Schools as Full Service Agencies
Schools may adopt an expansive approach as traditional schooling encompasses adult education and services. In the future, community schools will provide recreation, health, and other social services.

Trend 7: The Narrowly Defined Curriculum
It is possible that school curricula could become more narrowly defined, even eliminating programs in physical education, music, and art. This is especially pertinent with the recent move towards increased accountability in the education arena.

Trend 8: Schools Will Be About Learning and Teaching Styles
Schools may incorporate learning and teaching styles directly linked to the senses of sight, sound, taste, touch, and smell. Every person has a distinct learning style and it is essential that schools be built around this idea.

Trend 9: Student as Worker
Stevenson stated that the role of students may also change. In the past, teachers were revered as all-knowing. Teachers will now be considered facilitators of the education process. In the future, memorization of facts will be minimized along with the perception that children are capsules waiting to be filled with information.

Trend 10: School Time Expands: Extended and Year-Round Schools
According to Stevenson, the time children spend in the classroom will be extended to almost eight hours per day, 240 days per year. The impetus behind this idea is that students only begin to fully understand concepts by the end of the school year, only to forget what they have learned over the summer vacation months. This trend is vital because of the idea that minority students are often not afforded the same background and educational opportunities as their non-minority peers. This concept, coupled with the minority population's move towards the majority, makes this trend essential. Children will have more time to learn.

Trend 11: Paperless Schools
The trend of technology may result in paperless schools. The dominant use of computers, laptops, virtual classrooms, tapes, videos, and DVDs would then replace paper and pencils.

Trend 12: Grades Will Be Grouped Differently
Stevenson also suggested that school grades may be grouped differently, possibly introducing K-5, K-8, and K-12 grades. While a slight trend can be identified as having fewer grades in schools, the majority of schools will attempt to move towards K-12 schools.

Trend 13: No School? (At least as we now know it.)
Stevenson contended that it is possible for the emerging trends in education to lead to virtual schools and education as a commodity, instead of a civil right, to be sought at the will and ability of the purchaser.

Proposed Recommendations

Stevenson proposed that all decisions pertinent to the education system and future schools should be based on *hard* data whenever possible. Decision-makers and policymakers in education must be cognizant that you never arrive at a conclusion – accomplishments are merely building blocks for the "next" future.

Stevenson also pointed out that today's schools should be viewed as community centers for adults and children, thereby incorporating K-12 education, adult education, social services, health services, recreation, transportation services, food services, and contract business uses. Once again, this is especially important with regard to the aging population. This population must feel that it has a stake in education so that it will fully support new initiatives.

Stevenson also proposed that adapting to educational trends is crucial for future success. Therefore, school planning and construction should integrate these trends. He stated that it is imperative to build schools that (1) are highly flexible; (2) institute security and safety as high priorities; (3) support technology today – and tomorrow; (4) are durable; (5) make use of 16 hours of operation daily, year-round; and (6) are inviting and important to the community as a whole. Essentially, he believes that we must scan the environment continually, premised on his question, "Who really knows what's on the horizon?"

In closing, Stevenson asked the question, "Why not create your future?" He concluded his presentation with the following quotes:

> "Yesterday is not ours to recover, but tomorrow is ours to win or lose."
> – Lyndon B. Johnson
>
> "Morning comes whether you set the alarm or not." – Ursula K. Le Guin

Getting Smart About Schools:
How School Sizing and Siting Affect Our Quality of Life

Lee Ann Walling
Deputy Director and Special Advisor to Governor Minner
Delaware Economic Development Office

The following section is an edited summary of Lee Ann Walling's PowerPoint presentation that opened the summit's second day.

Walling began by stating that growth is inevitable and Delaware must plan accordingly. Delaware's population will increase 30 percent (by 232,253 people) between 2000 and 2030 (DE Population Consortium). When this growth is broken down by county, New Castle County will increase in size by 101,658 (with Wilmington shrinking in size by 3,567 people), Kent County will increase by 39,232 people, and Sussex County will increase by 91,363 people.

Coupled with Delaware's population growth is the problem of sprawl. Sprawl contributes to the loss of about 3,500 acres of farmland each year and the destruction of natural habitats. These two environmental impacts contribute to flooding and drought problems due to growth in impervious cover.

Urban sprawl also affects a variety of other services. Traffic congestion and air pollution are aggravated. Emergency response time is lengthened due to the increase in traffic congestion and the actual distance covered by public services. More people are commuting longer distances, which contributes to a sedentary and unhealthy lifestyle (Center for Disease Control Study 2001). Lastly, sprawl wastes the resources of Delaware taxpayers who are subsidizing it through infrastructure, public works, and services.

Addressing these concerns, Governor Minner's Livable Delaware initiative helps the state adhere to smart growth through the following principles:

- Guide growth to areas where the state, counties, and towns are most prepared for it in terms of infrastructure and thoughtful planning, which requires cooperation.
- Preserve farmland and open space.
- Promote infill and redevelopment.
- Facilitate attractive affordable housing.
- Spend taxpayers' money more efficiently while curtailing sprawl.

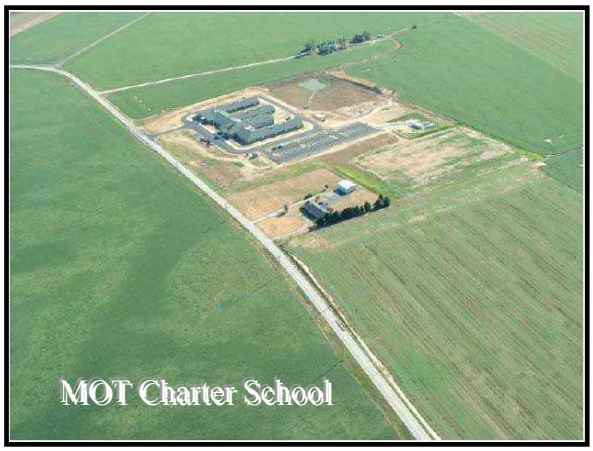
Delaware is also facing rising transportation costs. In Fiscal Year 2002, $54.5 million was spent on school transportation. This number continues to increase. In Fiscal Year 2003,

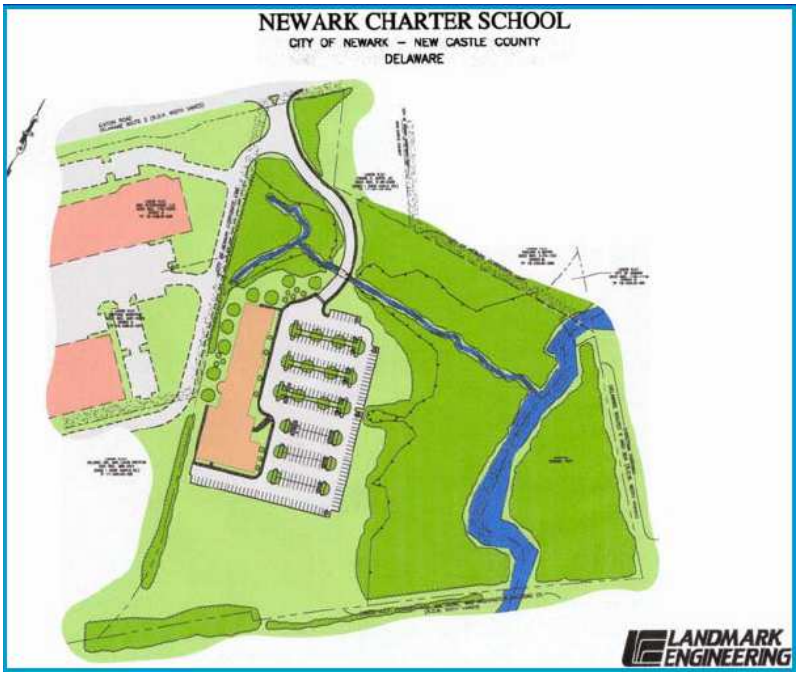
Delaware spent $55.4 million on school transportation, and $56.4 million will be spent in 2004.

> "The public school system is the most influential planning entity, public or private, promoting the sprawl pattern of development in America." – W. Cecil Steward, Nebraska School of Architecture

Contributing to sprawl are the locations chosen to build new schools. A developer-donated site may exacerbate sprawl if the land donated is not in a targeted growth area or within a town *(See Figure 4)*. Additionally, bargain sites may not be ideal for schools in terms of safety and environment. For example, Delaware, in contrast to Pennsylvania, Maryland, and New Jersey, is one of the least expensive states in which to retire. If a contractor gives a school district a piece of land in a new retirement village, there will be very few – if any – children in walking distance of this new location. Guidelines and zoning should make it easier to rehabilitate community schools and be creative about re-use. One example can be found in Pomona, California.

Figure 4. ***MOT Charter School and Newark Charter School***





Walling suggested that Delaware should continue to rethink their space criteria. Delaware guidelines for high schools require 30 acres plus one acre for every 100 students. Older schools typically occupy only two to eight acres. James F. Oyster Bilingual Elementary School is an example of a public-private partnership that generated funds by donating half its land to developers. The elementary school has been rebuilt on 1.67 acres in Washington, D.C. Walling posed the question, "Is newer better?" Newer schools are also less integrated with the community.

Delaware needs to rethink the rehabilitation formula. Currently, renovating an older school in Delaware is discouraged if the costs will exceed 50 percent of the replacement value. Delaware needs to start considering the effect new schools have on residential development, infrastructure expenses, busing costs, and land acquisition.

> "If an older building is equated with a poor education, why would anyone want to send a child to an Ivy League college? Or to Oxford or Cambridge Universities…?" – *Why Johnny Can't Walk to School*

Making public schools open to the public was the next issue Walling discussed. Voters are more likely to support schools if they are part of their community and offer other services, such as libraries or senior centers.

> *"*Rather than isolate the school from the community – which often has been our habit in the past – let's build the schools as the anchor and center of our community. Public schools are just that – public." – Richard Riley, Former Secretary of Education

> "When you think about it, the school is one of the few structures that really brings us together and gives us a sense of ownership over the neighborhood… It's the most cohesive element we have as a community." – Curtis Edelman, Worked to save a historical North Carolina school

Academic success and school safety must be considered. Students that attend smaller schools, on average, have lower dropout rates and score better on standardized tests. In addition, children in poverty appear to benefit the most from smaller schools (ERIC Digest, December 2000). In contrast, schools with one thousand or more students have an 825 percent higher amount of violent crime and 270 percent more vandalism than schools with fewer than 300 students ("Jack and the Giant School," New Rules, Summer 2000).

Delaware needs more walkable schools. Nationwide, only one out of eight children walk or ride their bikes to school. Parents with school-age children average more than five car trips per day. Currently, Delaware's busing costs are equal to Maine's. (Delaware is 2,396 square miles, the second smallest state; versus Maine which is 33,741 square miles, the 39th smallest state.) Delaware has reacted to this by passing Senate Bill 353, the "Safe Routes to School" act in 2002. This act amended Title 17 of the Delaware Code, by creating a program that administers the "Safe Routes to School" program and offers community grants to encourage biking and walking.

Creative solutions are needed in Delaware. For example, in downtown Chattanooga, Tennessee, two new magnet schools, Brown and Battle Academies, opened their doors in August 2002. They serve grades kindergarten through five. Each school has 450 students and each school is on two acres. These two magnet schools are open to suburban children of commuters to aid in decreasing car trips that parents must make each day. The new schools have been "adopted" by the university's downtown campus and funding comes through a public partnership.

The Delaware Department of Education's Certificate of Necessity

Nicolas Vacirca
Education Associate
School Plant Planning and Maintenance
Department of Education

The Certificate of Necessity Process

The Certificate of Necessity (CN) process begins when school districts submit major capital improvement requests to the Department of Education (DOE) each June. DOE reviews the requests and meets with each school district to evaluate prospective construction sites, collected data, and estimated project costs. DOE then approves or denies capital requests. Subsequently, DOE prepares a Capital Budget for submission to the Budget Office each October.

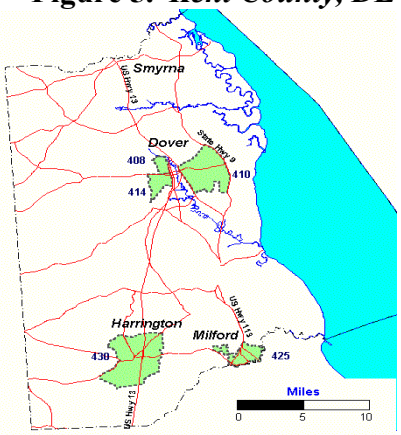
Once the Capital Budget is presented and approved, DOE prepares the CN. Certificates of Necessity are forwarded to each school district for approval. CNs are typically issued between January and March of each year, depending on the potential dates of the referenda. School districts hold local referenda on the CNs; and if passed, are included in the Bond Bill for funding approval.

New School Sites

Vacirca indicated that the locations of new school sites are not always known at the time of the capital request submissions. New school sites are designated after the district owns the location. In most cases, the districts may have only proposed locations for new schools, such as "Route 40 corridor" or "north of Middletown."

Vacirca pointed out that school sites are typically found and presented to DOE for review and approval after the local referenda have passed. When school districts submit estimated cost for new schools, the submissions exclude the site costs. The sites are considered separately.

Figure 5. ***Kent County, DE***



Vacirca noted that DOE sends all potential new school sites through the Land Use Planning Act (LUPA) process for comment as outlined in the Delaware Code, chapter 92 of Title 29, which was amended by House Bill 506 and signed by Governor Thomas Carper on July 18, 1996. The Land Use Planning Act provides state agencies an opportunity to give coordinated

feedback to school districts on potential sites. DOE reviews comments submitted through LUPA and issues letters to the school districts, which may include additional comments relative to the preferred school sites.

The State Strategies and the LUPA Process for School Planning

Presented by Connie Holland
Director
Delaware Office of State Planning Coordination
Prepared by David L. Edgell
Principal Planner
Delaware Office of State Planning Coordination

The Delaware Office of State Planning Coordination

The Delaware Office of State Planning Coordination (OSPC) oversees the strategies for state policies and spending and the Land Use Planning Act (LUPA) process. Strategies that help guide LUPA reviews include input from both OSPC and local governments *(See Figure 6)*.

Goals for the community include encouraging a wide range of uses/densities, promoting alternative transportation options, and fostering efficient usage of public and private investments.

Goals for future development in Delaware include orderly and efficient growth that promotes and expands the mix of housing types and options as wall as prudent expansion of existing infrastructure.

Additionally, environmentally sensitive development is being stressed. An area of particular concern includes the land surrounding the Inland Bays. Recognizing development pressures and balancing resource protection and support in sustainable growth will continue to grow in importance.

Secondary developing is designated for growth in the county plans. This supports future, phased growth and is timed to follow the growth in developing areas.

OSPC encourages towns and counties to protect their rural areas. These undeveloped pockets should promote and protect agriculture, preserve open spaces, protect critical natural habitat, and ensure the preservation of regional transportation systems.

The LUPA Process

The LUPA process was established under the Land Use Planning Act of 1978, and was amended in 1996. LUPA was set up to review and be a comment mechanism for (1) land use changes, (2) facility siting, (3) comprehensive plans, (4) annexations, and (5) regulatory or ordinance changes. There is current discussion about amending LUPA. This newly proposed revision and legislation is called the Preliminary Land Use Service (PLUS) process. PLUS would replace LUPA and the Quality of Life Act. The goal of PLUS is to streamline the process. It is designed to provide comments in the beginning of a review, rather than at the end. PLUS would serve an advisory role to local governments.

Figure 6. ***Strategies for State Policies and Spending, Approved 12/23/99***

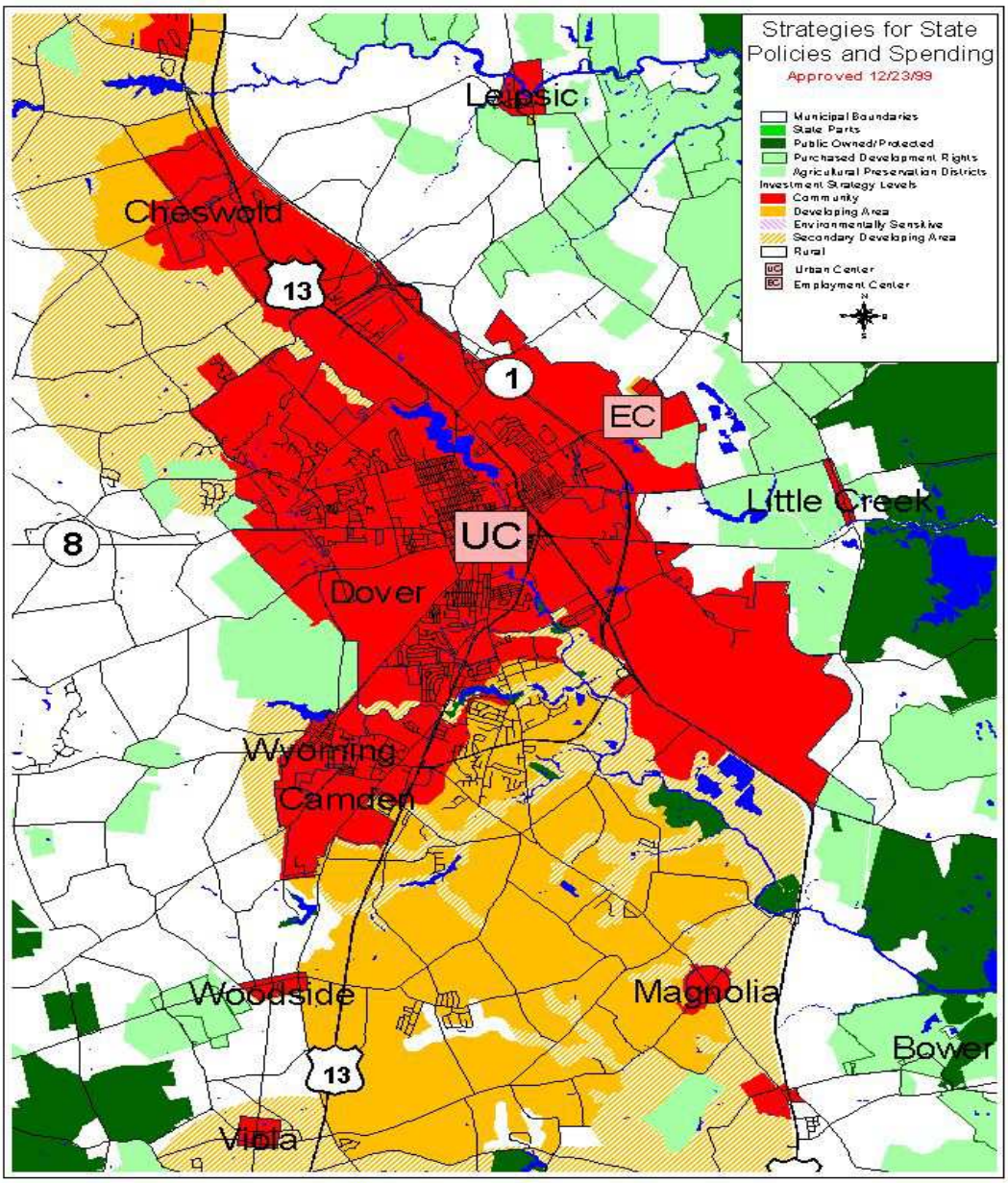


Figure 7. ***State Strategies***

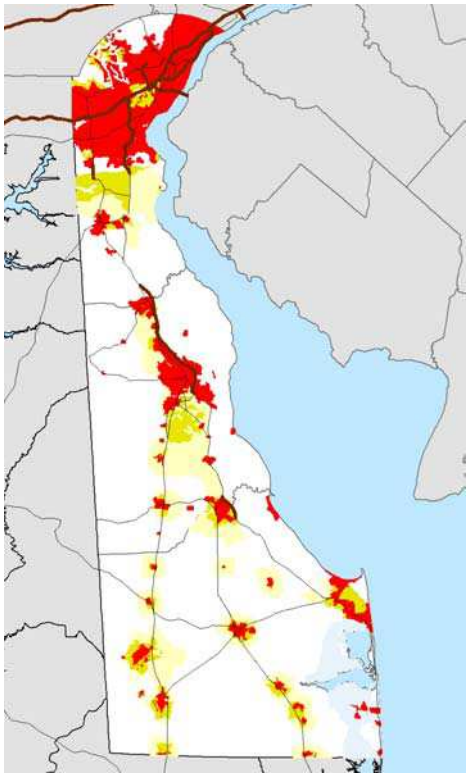


Figure 8. ***Strategies with Existing School Sites***

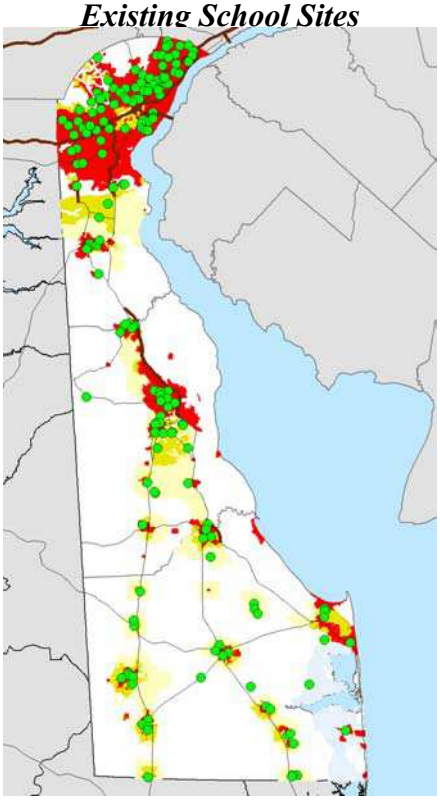
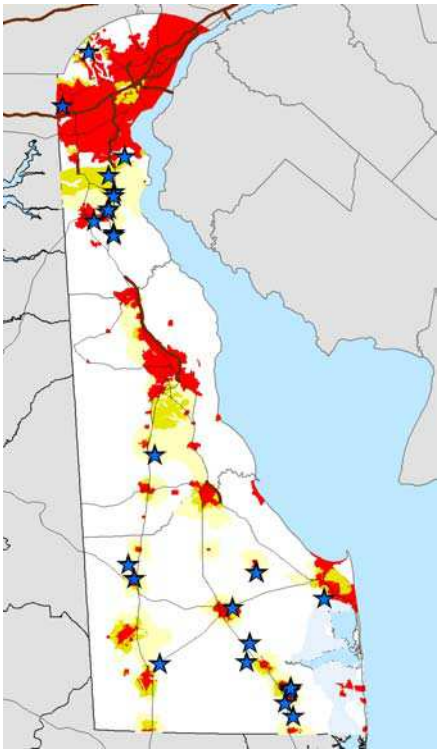


Figure 9. ***Strategies with School Sites Reviewed via LUPA***

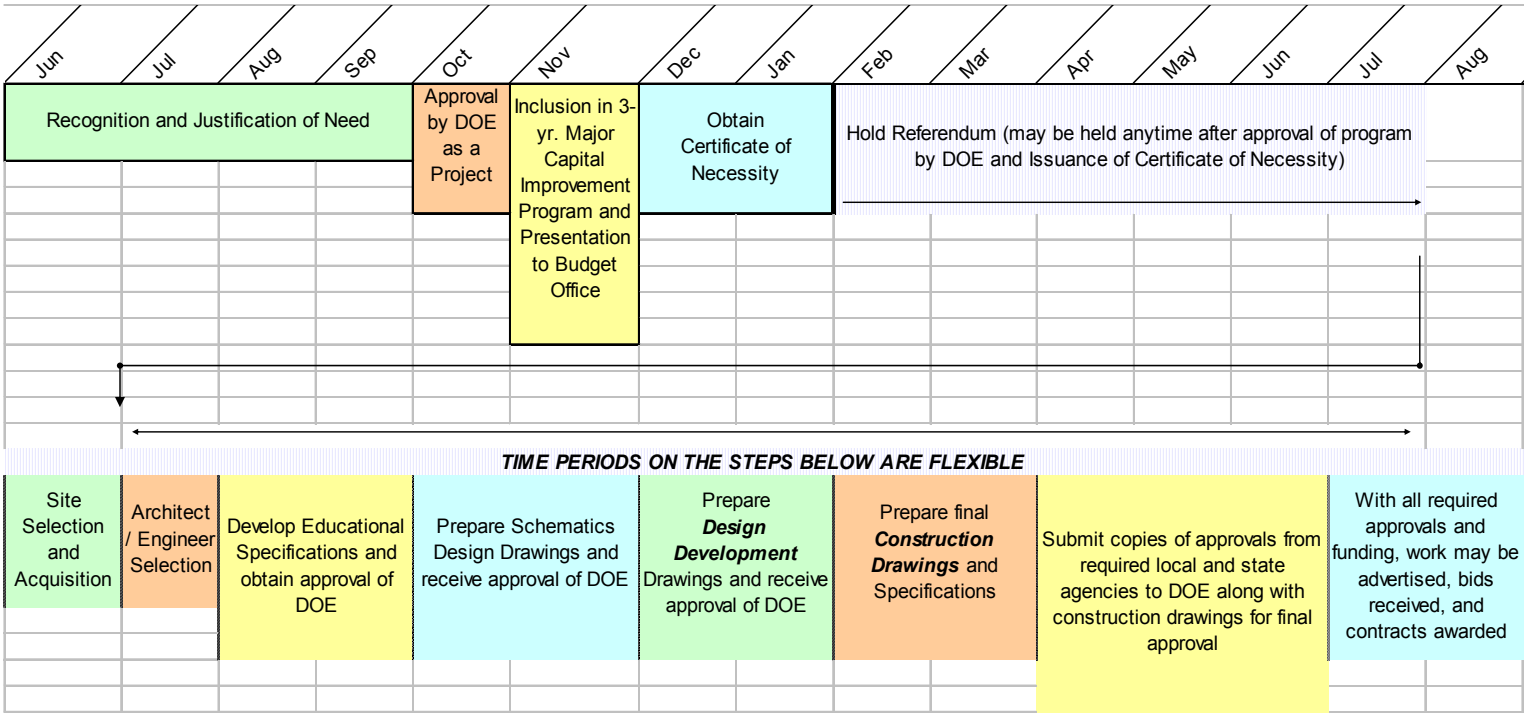


School Siting – The Strategies and LUPA

The majority of public schools are located in designated investment areas (three are not). Through LUPA, OSPC has recently seen school sites outside of those designated areas *(See Figures 7-9)*. However, issues pertinent to policy, infrastructure, transportation, and growth must still be considered when building future schools *(Table 1)*.

Holland spoke about the problems the state and school districts encounter when the LUPA process is not fully considered. She used the example of a new school that was built recently in the Indian River School District outside of Millsboro. When a new school was deemed necessary, the school district assumed it could build on already owned land at Ingrims Pond. Yet upon a second review, the site was deemed unsuitable. The school district then had to go to a second choice location which it did not yet own. In addition to the extra cost bestowed on the district due to having to purchase land, the second location, Stokely, was located outside of the town, was not in a state strategy area for projected growth and required much more money than expected to provide the school with sewer service. Although both Stokely and Ingrims Pond were outside of the state strategy areas for projected growth, in hindsight Stokely became the more costly option of the two, including over $5 million in sewer services and public works. In conclusion, more attention needs to be placed on infrastructure issues and the state strategy areas for projected growth in the future.

Table 1. Certificate of Necessity Time Line



Tools and Data for Enrollment Projections: 2003-2013

Edward Ratledge
Director
Center for Applied Demography and Survey Research
University of Delaware

Edward Ratledge presented data to summit participants on projected growth areas in Delaware. The state used to average 1.6 school-aged children per household. It has now decreased to approximately 0.6 school-aged children per household. However, the decrease of school-aged children in the entire state is not reflective of the school districts' population growth or decline. Ratledge did a comparative analysis between two school districts in New Castle County with which he had just completed work – the Appoquinimink and Brandywine School Districts *(See Figure 10)*. The comparison pushed participants to understand the direct correlation between placement of future schools, targeted growth areas, and population increases – specifically, the population aged 18 years and under.

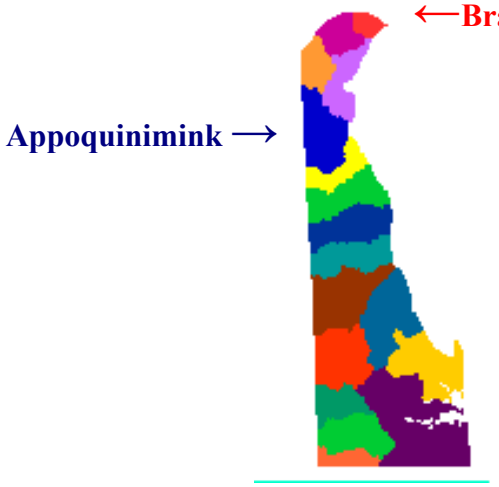


Figure 10. ***Brandywine and Appoquinimink School Districts***

The Appoquinimink School District's enrollment projections, between 2003 and 2013, are predicted to increase from 6,063 to 8,198 *(See Tables 2-3)*. This is an increase of over 2,000 students over a ten-year period. In direct contrast, the Brandywine School District's enrollment projections over the same time period are expected to decrease from 10,467 to 8,931 *(See Figures 14-15)*. As the population in the Brandywine School District continues to grow older and has less school-aged children, there will be a surplus of school space in the near future. In contrast, the Appoquinimink School District is going to need more school infrastructure in order to accommodate the increasing number of children enrolled in their district *(See Figure 11)*.

Table 2. ***Brandywine School District Enrollments: 1992-2002***

GRADE	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
PK	2	47	39	49	32	50	38	78	47	34	50
K	875	805	750	733	773	699	708	715	676	605	685
1	919	975	908	931	906	930	932	934	881	823	800
2	935	891	978	865	920	893	912	858	816	805	819
3	972	928	869	973	866	907	889	808	816	815	808
4	882	890	908	859	922	818	879	850	796	783	813
5	890	864	887	891	871	919	862	861	802	764	794
6	934	891	898	924	923	864	937	892	817	781	819
7	940	967	922	933	964	970	990	984	953	896	908
8	937	915	965	866	918	941	897	966	949	889	897
9	991	991	963	1073	972	1015	1017	986	1071	1029	981
10	817	849	818	833	893	802	870	852	818	860	846
11	668	696	741	701	694	787	700	787	731	716	733
12	675	665	689	723	720	702	804	669	780	757	749
Total	11437	11374	11335	11354	11374	11297	11435	11240	10953	10557	10702

Table 3. ***Brandywine School District: Enrollment Projections 2003-2013***

GRADE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
PK	45	45	45	45	45	45	45	45	45	45	45
K	641	647	678	589	599	595	592	591	594	598	601
1	803	806	814	853	741	753	748	744	743	747	752
2	742	745	748	755	791	687	698	694	690	689	693
3	806	731	733	736	743	779	677	688	683	679	678
4	792	791	716	719	722	729	764	664	674	670	666
5	791	771	769	697	699	702	709	743	645	656	651
6	793	789	769	768	695	698	701	708	742	644	655
7	908	879	875	853	852	771	774	777	785	823	715
8	877	878	849	846	824	823	745	748	751	758	795
9	986	964	964	933	929	906	904	819	822	825	833
10	803	807	789	789	764	760	741	740	670	673	675
11	729	692	695	680	680	658	655	639	638	578	580
12	751	747	709	712	696	697	674	671	654	653	592
Total	10467	10290	10155	9975	9781	9603	9428	9270	9136	9038	8931

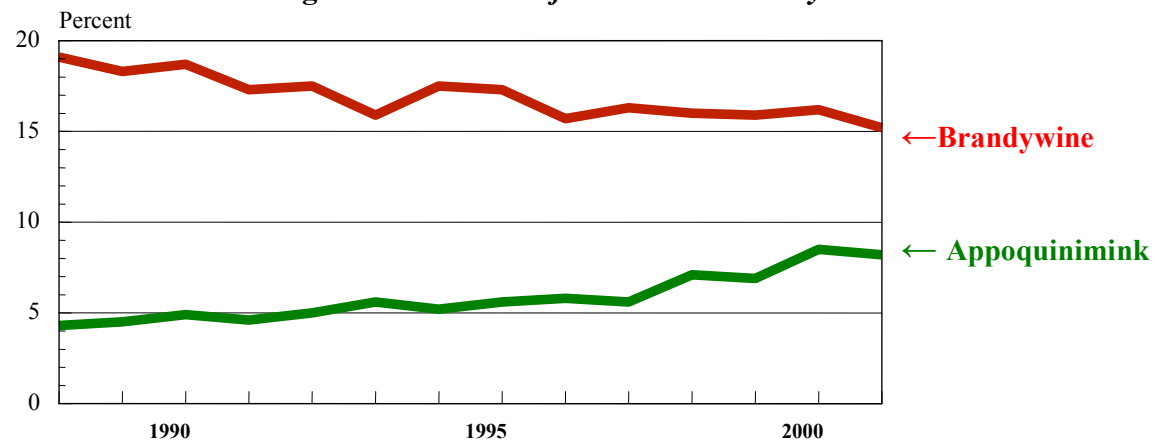
Table 4. ***Appoquinimink School District Enrollments: 1992-2002***

GRADE	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
PK	4	5	4	7	3	5	12	3	42	16	19
K	232	269	273	274	286	340	367	398	389	408	378
1	274	261	314	320	319	330	398	447	481	512	438
2	259	300	263	326	335	354	368	421	467	488	461
3	262	266	330	281	358	358	393	392	444	516	474
4	240	284	280	357	317	380	393	424	427	491	484
5	230	258	311	290	345	335	405	403	471	477	440
6	251	237	283	345	323	362	368	436	438	516	492
7	247	262	245	300	327	342	409	417	478	481	546
8	215	248	271	260	312	346	352	385	422	487	548
9	211	196	240	296	297	333	336	315	373	415	478
10	172	197	190	213	281	259	303	354	309	402	395
11	128	149	175	151	165	206	209	274	328	294	347
12	119	140	169	170	160	187	210	220	277	312	313
Total	2844	3072	3348	3590	3828	4137	4523	4889	5346	5815	5813

Table 5. ***Appoquinimink School District: Enrollment Projections 2003-2013***

GRADE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
PK	15	15	15	15	15	15	15	15	15	15	15
K	376	489	452	460	468	483	501	520	544	568	593
1	458	449	584	539	549	558	577	598	621	649	678
2	371	450	441	573	529	539	548	566	587	610	637
3	455	385	467	458	595	549	560	569	588	610	633
4	479	473	400	485	476	619	571	582	591	611	633
5	491	496	490	415	503	493	641	592	603	612	633
6	516	524	529	522	442	536	525	683	631	642	653
7	475	557	565	571	563	477	578	567	737	680	693
8	517	499	585	594	600	592	502	608	596	775	715
9	531	503	486	569	578	584	576	488	591	580	754
10	547	530	503	485	569	577	583	575	487	590	579
11	435	497	482	457	441	517	525	530	523	443	537
12	397	436	499	484	459	443	519	527	532	525	445
Total	6063	6304	6497	6627	6786	6981	7220	7419	7646	7911	8198

Figure 11. ***Percent of New Castle County Births***



Due to the changing school-age population in each school district, land-use planning and targeted growth maps must be used in direct relation to the projected population tables. Another example Ratledge used to stress this point was the increasing population in Sussex County. He presented a graph showing the sources of this population growth. The increase is not due to a natural increase (births), but instead to an increase in migration to the area. The actual increase is due to the amount of *retirees* moving into the area. Again, Ratledge pointed out that this is why population distribution maps must also be considered prior to planning for new school sites *(See Figures 12-13)*.

Figure 12. ***New Castle County Sources of Population Growth***

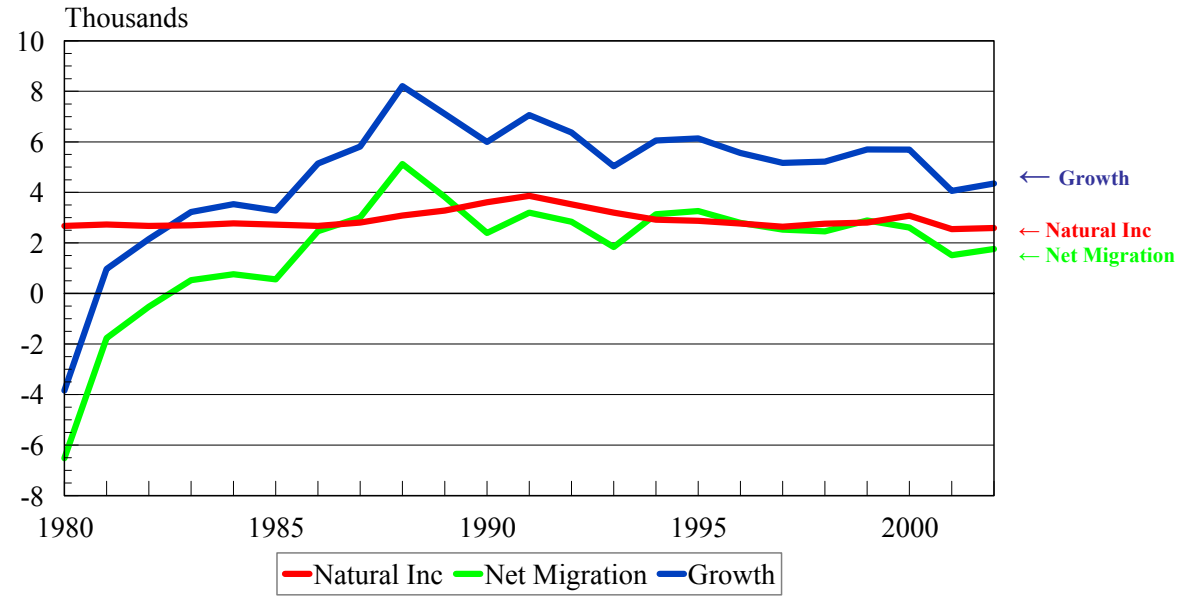
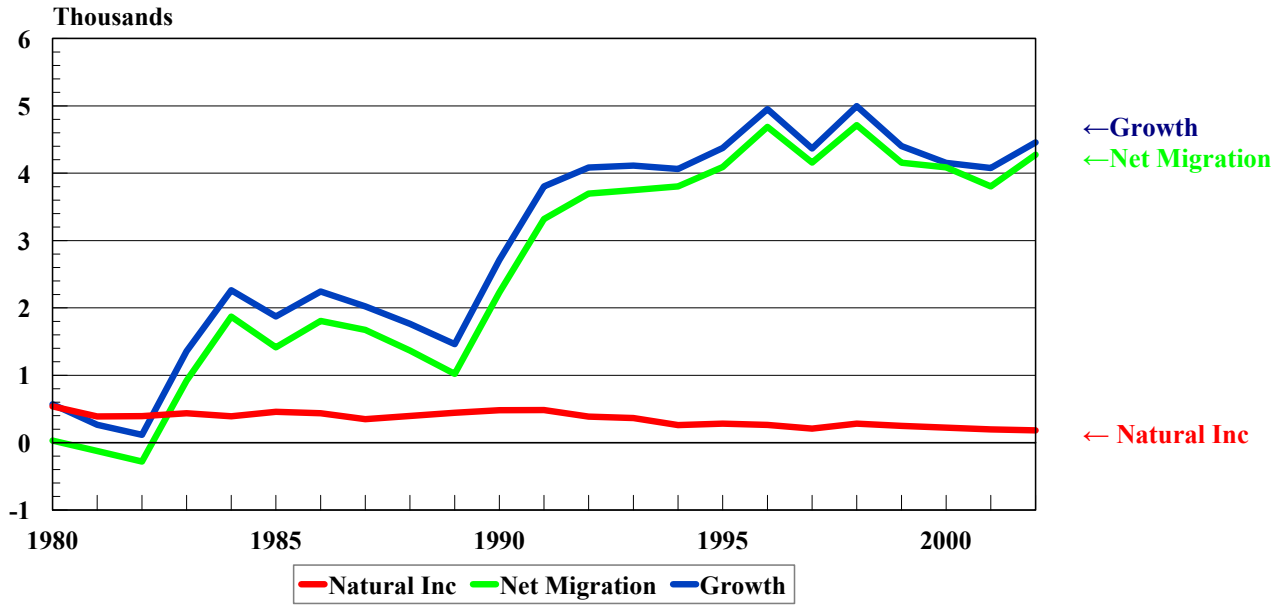


Figure 13. ***Sussex County Sources of Population Growth***



There was a discussion between Ratledge and summit participants during the presentation that focused on the impact of charter schools. Budget Director Jennifer J. Davis stated that approximately 20 percent of charter school growth is non-traditional in Delaware, students that were previously in a home-schooling atmosphere, for example. Davis then asked, "Do we have to assume now that charter schools are going to survive? And if so, do we build new schools assuming that charter schools will always absorb some of the school population?"

Secretary of Education Valerie Woodruff answered by stating that twenty to thirty percent, depending on the school district, of charter schools take non-traditional students. More time is needed, at least five years, before Delaware can answer Davis's question on whether new school infrastructure can assume a certain percentage will always be absorbed by a charter school. Woodruff reminded the group of the "No Child Left Behind Act[1]" initiative.

1. On January 8, 2002, President Bush signed into law the "No Child Left Behind Act" of 2001 (NCLB). This act contains the President's four basic education reform principles: stronger accountability for results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work (http://nclb.gov/next/overview/index.html).

Conclusions

Summary of the Sessions: Discussion and Feedback

Based on the discussions of two small group work sessions by attendees, several topics were raised for possible future policy forums to be conducted by the Institute for Public Administration. These topics were subsequently voted on by attendees to determine their level of priority for the future of school siting, design, and construction in Delaware. These topics, ranked from highest to lowest priority, include school siting, durability of school building design, co-location of services, multiple uses for school buildings, land use, K-12 campus approach, and school financing.

School Siting

The concern over the school-siting process and infrastructure analysis was raised by many, receiving 28 votes. Attendees stated that the Land Use Planning Act (LUPA) process provided a positive mechanism for school siting. However, they thought land-banking may have a downside. Infrastructure considerations pertinent to sewer, water, emergency services, libraries, roads, storm water, social services, transportation, and highways were deemed significant. Some participants stressed the conversation that took place about synchronizing DelDOT's strategies with the school-siting issues.

Durability of School Building Design

In the vote count, durability of school building design closely followed school siting with 24 votes. Attendees concurred that there should be a standard design for the internal structure of school buildings. However, external designs should be flexible and allow for diversity. Creating a central depository for establishing secondary design plans and indexed stock designs was suggested. Attendees stated that a standard design plan should evolve from the best aspects of submitted designs.

Concern was expressed over whether or not planning systems, construction equipment, and building materials should be standardized to allow for consistency. One attendee recommended incorporating the factors pertinent to long-term costs, energy efficiency, infrastructure considerations, and environmental impacts with school building financing. The possibility of lease purchasing for school financing and a study of school capacity to allow for the creation of schools without legislation could also be explored.

Multi-Use School (Complex)

The concept of a multi-use school complex was received positively. Attendees felt that school buildings could expand their usability to incorporate community services, space for community meetings, senior centers, and libraries. However, attendees concurred that all stakeholders must "buy-in" to the long-term use and the maintenance of this complex facility.

It was stated that services that are developed should be utilized to their maximum potential, and services that are underutilized should be discontinued or avoided.

Co-Location

Co-location ranked fourth on the list of priorities pertinent to the future of school siting, design, and construction in Delaware. Attendees proposed that the Certificate of Necessity process should entail two steps addressing: (1) the need for a school building in a specific area and (2) the location of the building. This would further incorporate a focus on defining land acquisition and construction. Attendees also suggested that this process could possibly incorporate a pre-screening checklist.

Concern relative to cohabitation within a shared location was raised, specifically relating to security, access, services, and policy. Recommendations were made to incorporate pre-planning decisions, which are currently excluded from "the formula." Attendees expressed the need for further review of the shared costs of co-location, including utilities, janitorial services, general maintenance, and long-term use and responsibility. The school-siting process also could be based on a "regionalized" approach rather than at the district level.

Land

The issue of land, although ranked fifth on the list of priority topics, raised some concerns. Attendees believed that districts or the state should have the right to option property. Delaware should establish a "land bank," which would allow for the state to purchase land earlier in growth areas and then allow for the subsequent allocation to districts when needed. It was noted that the state owns land development rights, but purchase rights could be negotiated prior to the actual purchase of the land. Attendees agreed that DelDOT's corridor of preservation model, the concept of early land purchases, and the agriculture program could be patterned.

School Financing

School financing was critical to the day's discussion. Although school financing only received nine votes as a separate topic, many other issues relating to finance were discussed as sub-topics in the previous categories. For example, issues were discussed relating to how financing for school buildings should incorporate long-term costs, energy efficient methods, infrastructure considerations, and environmental impacts. The primary recommendation involved a reassessment of school financing and possible considerations of lease purchasing.

K-12 Campus Approach

The K-12 Campus Approach received nine votes. Attendees felt that this approach of separate and independent campuses for different grade levels would utilize economies of scale and therefore be more cost-effective.

Other Topics

Although attendees did not place a high priority on district strategic planning, transportation issues and impact fees, they were discussed in the group work sessions.

Following a discussion on the above-mentioned topics, there was a conversation on the next steps that need to be taken. Ideas included:

- Share information gathered with chief school officers.
- Continue a dialogue with the summit participants so as to not lose momentum.
- Create more conversations on the Certificate of Necessity, including LUPA, design issues, etc. This cannot be done in isolation – there needs to be a discussion around the Certificate of Necessity process.
- Develop and adopt standards. (Buck Simper's office has already created some standards, in addition to the Christina and Red Clay Consolidated School Districts. These districts are already creating systems and standards. The summit participants hoped that this development of standards and implementation of those standards will continue.)
- Build schools now- financially, it is the time.

List of Recommendations

1. Begin a more in-depth research project that includes:
    a. Information gathered at the summit
    b. Strategies on how DelDOT could synchronize its strategies with DOE and school-siting issues

2. Research and create a standard design for the internal structure of school buildings, however, external designs should be flexible and allow for diversity
    a. Standardize planning systems
        i. Construction equipment
        ii. Building materials
    b. Analyze design methods to encourage the usage of cookie-cutter schools
    c. Research the possibility of lease purchasing for school financing and study school capacity to allow for the creation of schools without legislation

3. Help design a new Certificate of Necessity (CN) process
    a. Include how to define land acquisition and construction
    b. Review and determine compatibility with county and municipal comprehensive plans
    c. Assess the suggestion to create a two-step system that addresses:
        i. Need for a school building in a specific area
        ii. Location of the building
    d. Review the CN process by determining its applicability to siting schools and other state investments including roads, sewers, and water
    e. Clarify how the CN can be used as a positive step towards school siting
    f. Review existing practices in other states
    g. Interview current stakeholders and communities using the information attained at the summit on school infrastructure
    h. Determine whether the process and persons authorizing the CN are appropriate
    i. Relate the CN process to financial mechanisms for adequacy (determine

compatibility with the state's strategies for spending policies, especially in relationship to growth areas)

4. Research how to be more aware of planned growth areas
    a. Include how to define land acquisition and construction in the CN process
    b. Review the CN's relationship to LUPA and the new PLUS process
    c. Analyze the relationship of school infrastructure needs to perceived growth in enrollment, especially in targeted growth areas
        i. Demonstrate the necessity from a demographic perspective (e.g., how many students, what age, and when)
    d. Include infrastructure considerations pertinent to sewer, water, emergency services, libraries, roads, storm water, social services, transportation, and highways, which were deemed significant to the school-siting process
    e. Research how districts or the state should have the right to option property, which would include research on how to establish a "land bank" to allow the state to purchase land earlier in growth areas and then allow for the subsequent allocation to districts when needed
    f. Research the K-12 Campus Approach – with separate and independent campuses for different grade levels – and how it would utilize economies of scale and therefore be more cost-effective

5. Continue to gain input from summit participants and schools
    a. Begin in-depth conversations with school superintendents to get a more comprehensive perspective that can be compiled and shared with chief school officers
    b. Provide a follow-up meeting that has best practices data with regard to identifying the priorities around the country

6. Research other uses that are compatible with schools
    a. Identify those sites which might lend themselves to multiple uses and incorporate community services (e.g., state service center, library, police station, and/or meeting space)
    b. Determine which existing unused facilities could be retrofitted to accommodate school needs
    c. Continue to review how a shared services location would be able to handle shared costs (e.g., utilities, janitorial services, general maintenance, and long-term use and responsibility)

7. Establish how charter school siting is/should be addressed

8. Research school financing options, including lease purchasing. One example is how financing for school building should incorporate long-term costs, energy efficient methods.
    a. Research the financial impact of busing
    b. Evaluate district strategic planning, transportation issues, and impact fees

Appendix A: Participant List

Baker, Charles
New Castle County Planning Department

Brandenberger, Andrew
Cape Henlopen School District

Carlson, Amy
Keene Elementary School

Cherry, Phillip
Delaware Department of Natural Resources & Environmental Control

Czerwinski, Jr., Edward J.
Appoquinimink Board of Education

Davis, Jennifer J.
State Budget Office

Disabatino, Andrew
UDiS Company

Hill, David
State Budget Office

Holland, Constance
Office of State Planning Coordination

Hunter, Anna Wojewodzki
Institute for Public Administration
University of Delaware

Lewis, Jerome R.
Institute for Public Administration
University of Delaware

Lofink, Vincent
Delaware House of Representatives

McMahon, John
Delaware Contractors Association

Moretti, Richard
Red Clay Consolidated School District

Morton, Michael
Office of the Controller General

Norman, Anne
Division of Libraries

O'Donnell, Edward
Institute for Public Administration
University of Delaware

Ratledge, Edward
Center for Applied Demography and Survey Research
University of Delaware

Reeb, Ralph
Delaware Department of Transportation

Ross, Peter M.
Institute for Public Administration
University of Delaware

Savickas, Stacy
Institute for Public Administration
University of Delaware

Shupard, Susan
Delaware School Board Association

Simpers, Buck
Buck Simpers Architects and Associates

Spence, Dorcell
Department of Education

Stevenson, Kenneth
University of South Carolina

Vacirca, Nicolas
Department of Education

Vasalotti, Anthony
Buck Simpers Architects and Associates

Venables, Robert
Delaware State Senate

Walling, Lee Ann
Office of Governor Ruth Ann Minner

Wian, Kathleen
Institute for Public Administration
University of Delaware

Woodruff, Valerie
Department of Education

Appendix B: Raw Data Collected During Brainstorming Sessions

School-Siting Issues *(twenty-eight votes)*

- Land-banking may have a downside
- Infrastructure considerations:
  - Sewer
  - Water
  - Emergency Services
  - Libraries
  - Roads
  - Storm Water
  - Transportation and Highways
  - Social Services

Life Expectancy of School Buildings (*twenty-four votes)*

- Lease purchasing, rethink school financing
- Cost of school site selection should not be only factor
  - Need to analyze long-term cost
  - Look at energy efficient methods
  - Consider costs of transportation, sewer, etc.
  - Environmental aspects
- School capacity should be looked into. This may help to create neighborhood schools without legislation.
- Consistent/standard design for school interiors with a variety of external designs (central depository for second design plans)
- Variety of stock designs that are indexed
- Standard design should evolve from best practices
- Standardize systems, equipment, and materials should be considered

Multi-Use School (Complex) *(fifteen votes)*

- Within schools
  - Libraries within schools
  - Other services within schools
  - Need to avoid negative connotations
  - Mall-complex design

- Make sure stakeholders "buy-in" to long-term use and maintenance
- Utilize all services to maximum potential
- Not necessarily just a school
  - Senior Center
  - Community meetings (acoustics)

Co-Location *(thirteen votes)*

- Address cohabitation issue within co-location – access, security, services, policy
- Create a formula for pre-planning decisions
- Discuss how to share of cost – utilities, janitorial services, general maintenance and long-term use and responsibility
- Create a two-step Certificate of Necessity process. Need for school and where to locate to be considered first
  - Define land acquisition
  - Construction
- Consider using pre-screening check-list
- **"**Regionalize" choice of school sites rather than district to district

Land *(ten votes)*

- Allow districts or the state the right to option property
- Option to buy property before it is needed
- Create a "land bank" – state purchases land in growth area and then districts reimburse them
- Research the DelDOT's corridor of preservation model
- Pursue early land purchasing
- Copy the agriculture process/program
- Buy development rights early on and the rest of the land later

School Financing *(nine votes)*

- Re-think school financing (i.e., lease-purchasing)

K-12 Campus Approach *(nine votes)*

- Separate and independent campuses for different grade levels
- More cost-effective
- Economies of scale
- Creative interactions (mentoring)

District Strategic Plan *(six votes)*

- Strategic plan needs to be re-visited each year – it needs to be an ongoing process
- All parties involved should be using the same data

Busing/Transportation *(three votes)*

- Consider this in the planning – maintenance
- Integrate public transportation with school's transportation
- Review pick-up and drop-off bus stops

Impact Fees

- Expand impact fees statewide

Appendix C: An Evaluation of the Combined Public/School Library at Middletown High School

For a copy of the full report, please visit www.ipa.udel.edu.

Catherine Wojewodzki
Librarian
University of Delaware
April 2002

Executive Summary

In January 1997, the combined Appoquinimink Community Library/Middletown High School Library opened in the new Middletown High School building. Initiated under Governor Carper's administration as a model for a more cost-effective way to provide library services in Delaware, the collaboration is an effort of the school and the New Castle County Department of Libraries to provide better library services for area residents and students. The Delaware Division of Libraries requested this evaluation of the project and advice on whether it should initiate more joint high school/public libraries in Delaware.

This study considers the funding and governance of joint libraries and how they manage their collections, staffing, use of the library, and library services. It does not address public relations, legal issues, or the various aspects of working with a public library board of directors. A brief discussion is included of the library services available before the merger, those available now, and those that should be available. This comparison considers costs, services, and use of the library (circulation, program attendance, library visits, etc.).

Information was gathered from statistics reported to the state, interviews with the librarians, and surveys of students and community members. The statistics reported to the state each year are shown in Table 5 on page 12 of the full report. Appendix A in the full report is a brief literature review of the published books, articles, and regulations used as resources. The results of two surveys conducted to ascertain community satisfaction with the combined library are reported in Appendices B and C of the full report.

Criteria for evaluation of the combined library

In the absence of national standards or performance measures for combined public/school libraries, the decision was made that a good combined library should meet all local standards for public and school libraries. For public libraries, two standards based on community size are used in this report: (1) a local definition used by New Castle County

for planning library services, which specifies the collection size, staff, hours, and transactions of a community-size library, and (2) a national average budgeted expenditures for materials and salaries. For the school library, the standards set forth by the Delaware Governor's Task Force on School Libraries are used.

The New Castle County Department of Libraries has a master plan that spells out library space and service needs using a planning index based on the population. This county plan specifies three levels for libraries: regional libraries, area libraries, and community libraries. According to this plan, a community library is designed to serve a population of 5,000 to 15,000 and should be 5,000 to 10,000 square feet in size. This report will use this standard for evaluation, since the Appoquinimink Community Library/Middletown High School Library was designed to meet the needs of a community of less than 10,000. The *Master Plan* details the following expectations for a community library:

- A collection of 15,000 – 30,000 volumes which would be primarily a circulating collection for users of all ages and include some very basic reference materials.
- Four to six full-time staff positions or the equivalent.
- Thirty to forty hours of service to the public each week.
- Children's story hours.
- Access to the entire collection of the New Castle County Libraries via the online catalog and daily delivery service.
- Annual circulation of 50,000 – 150,000.

Another way of looking at the capacity of a library to provide services is by considering its expenditures. The January 2000 issue of *Library Journal* reported that libraries serving fewer than 10,000 people were planning to spend about $35,000 on materials, $119,000 on salaries, and $193,000 overall to support their libraries. These numbers allow us to compare libraries with regard to their commitment to building their collections and providing sufficient qualified staff.

Standards for school library media centers proposed by the Governor's Task Force on School Libraries in 1996 define minimum, good, and exemplary levels for staffing and book collection size. The recommended numbers are shown in the table above for a school about the size of Middletown (1,300 students during the 2000-2001 school year). These are standards for Delaware public schools that any combined public/school library should meet.

Chart 1. ***School Library Standards***

Standard	Librarians	Support staff	Books*
Minimum level	2	2	19,500
Good	2.5	2.5	26,000
Exemplary	3	3	32,000

* currently useful volumes

Standards for School Library Media Centers

Using these standards allows us to set reasonable expectations for the combined Appoquinimink/MHS Library. The following chart shows our expectations for this library in one column and the actual figures for the Appoquinimink Community Library/Middletown High School Library in the next.

Chart 2. ***Standards for a Combined Library to Serve a Community of less than 10,000 Residents and a High School of 3,000 Students***

Criteria	Expectation	Appoquinimink/MOT
Library size	5,000 – 10,000 sq. ft. for the public community library	12,150 sq. ft.
Collection size	19,500 – 30,000 items	41,500 items
Staff	4-5 FTE (2 MLS librarians)	6 FTE (2 MLS librarians)
Hours/week	30-40	67.5
Annual circulation	50,000 – 150,000 items	93,643 items
Programming	Limited, includes children's story hour	Limited, includes children's story hour
Materials Budget	$35,000	$36,000
Staff Budget	$119,000	$108,762 + 3 school employee salaries (est. $120,000+)
Total Budget	$193,000	$159,000 from County + school salaries, materials, and building expenses (est. $132,000+).

It is immediately apparent that the combined library has been a success. It enjoys longer hours than either of the libraries would have had if they were separate entities. The facility also enjoys a larger staff than either would have experienced alone. The larger combined collection is especially beneficial to the school, since the community library has a larger collection and budget for acquiring new materials. The major constraint on services is space. The 12,000 square foot library is slightly larger than the 5,000 - 10,000 square feet New Castle County would like for a community library, but the presence of the school library in the same facility increases the need for space. The rapidly growing student enrollment requires additional space for projects and study. It is difficult to fit both story hour and a class of high school students into this library at the same time.

Additional criteria for assessing how the library is serving the community are more subjective. They include an up-to-date operating agreement between the county and the school district, easy access for the community, adult programming, and community perception of the library. The county and school district have a good operating agreement, but it needs to be updated. The construction of a new wing at the high school makes access to the library awkward and obscures the entrance.

The combination of these two libraries has served the Appoquinimink community well. Together the two libraries have been able to offer better services to their users and benefited from their cooperative relationship. The joint library allowed the community to have a new, much larger library with more resources and longer hours. The school also benefits from the longer hours, additional staff, and the much larger collection of the public library.

Looking ahead

Since the library opened, both the school population and the area's residential population have grown tremendously. It is time for the community, New Castle County, and the Appoquinimink School District to consider expanding the library. The space available in the school building may be large enough for the school library, but the county should consider upgrading the Appoquinimink Community Library to an area or regional library with larger collections, longer hours, more staff, more space, and additional programming and children's services.[1] From the beginning of this endeavor, population growth was expected, and the county is planning to expand library services to the area residents by building a larger library. In the meantime, the combined library has allowed the citizens of Middletown and the surrounding area and the high school students to enjoy much better services than the county or school were previously able to offer.

Planning for future combined libraries in Delaware

Those deciding to establish a joint library will find a wealth of publications to guide their work. From the Appoquinimink project, we have learned that early public involvement is necessary. It should begin before the building plan for the school is created in order to allow easy access, meeting rooms for adults, space for children's activities, and adequate computer infrastructure. Planning needs to include what will happen if the school needs more space and how staff vacancies will be handled. Since the school district generally contributes to the building and utilities and the public library is likely to contribute most of the collection, consideration needs to be given at the beginning as to what will happen to the collections if and when the entities decide to separate.

A combined school and public library requires extra attention to those practices that foster good library service such as collection development policies and patron behavior guidelines. A joint library needs to have procedures for adhering to both school and public library policies. Clear guidelines are needed for student access to information. In Delaware, school Internet access is filtered by the state. Yet, the public library may need to have unfiltered access to allow for the reference librarians and public to locate needed information.

A joint library will be as successful as the commitment of both parties to create a strong, comprehensive operating agreement, follow its dictates, and provide adequate support. Future joint libraries in Delaware may be a good idea if both parties are willing to bring adequate resources to the projects. The benefits can include a larger, more varied collection for both students and community members; better access to resources through the county library catalogs; longer hours; and, with good planning, a better facility for both parties. The challenges tend to center around computer use, the tendency of the school's needs to take precedence, and the much broader mission of a public library to serve all members of its community. Research has found that combining libraries does *not* save money. However, a larger library can generally offer better, more varied and flexible service as it can draw on a larger collection and more staff and can be open more hours. Very small communities with less than 3,000 residents should consider whether a combined library might allow them to provide better service.

1. The New Castle County FY 2003 Budget Request of the County Executive included $300,000 to begin planning for a new library.

Appendix D: References

Centers For Disease Control Report. Creating A Healthy Environment: The Impact Of The Built Environment On Public Health (2001). Quoted in Lee Ann Walling, *Getting Smart About Schools* (May 2003).

Covey, Stephen R. The 7 Habits of Highly Effective People (1990). Quoted in *The Future of School Siting, Design and Construction in Delaware* (May 2003).

Delaware Code. Title 29 State Government Part IX. State Planning and Property Acquisition Chapter 92 Land Use Planning, as amended by House Bill 506. Quoted in Nick Vacirca, *The Delaware Department of Education's Certificate of Necessity* (May 2003).

Delaware Population Consortium Report. Annual Population Projections (October 2001). [Online] Available http:www.cadsr.udel.edu/DOWNLOADABLE/DOCUMENTS/DPC_2001v0.pdf. Quoted in Lee Ann Walling, *Getting Smart About Schools* (May 2003).

Delaware State Senate. 141st General Assembly. Senate Bill No. 353. An Act To Amend Title 17 of the Delaware Code Relating To A Safe Routes To School Program 002. Quoted in Lee Ann Walling, *Getting Smart About Schools* (May 2003).

ERIC Digest Volume 28, Number 2 (December 2000). Quoted in Lee Ann Walling, *Getting Smart About Schools* (May 2003).

National Trust For Historic Preservation Report. Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can't Walk To School. (November 2000): [Online] Available http: www.national trust.org/issues/schools.Sum.pdf. Quoted in Lee Ann Walling, *Getting Smart About Schools* (May 2003).

The New Rules Exploring Community, Mobility, Scale and Trade Report. Jack and the Giant School. (Summer 2000). [Online] Available http:www.newrules.org/journal/nrsum00schools.htm. Quoted in Lee Ann Walling, *Getting Smart About Schools* (May 2003).

Institute for Public Administration
College of Human Services, Education & Public Policy
University of Delaware
180 Graham Hall
Newark, DE 19716-7380

phone: ***302-831-8971*** *e-mail:* ***ipa@udel.edu*** *fax:* ***302-831-3488***

www.ipa.udel.edu

The Institute for Public Administration (IPA) links the research and resources of the University of Delaware with the management, information, and leadership needs of schools and local, state, and regional governments in the Delaware Valley. IPA provides assistance to agencies and local governments through direct staff assistance and research projects as well as training programs and policy forums. IPA's wide range of program areas includes civic education, conflict resolution, health-care policy, land-use planning, local, state and international government, school leadership, water resources, and women's leadership. IPA's main office is on the University's Newark campus in 180 Graham Hall. Jerome Lewis is the director of the Institute and can be reached at 302-831-8971.