February 24, 2006

Mr. David Sciarra
Education Law Center
60 Park Place, Suite 300
Newark, NJ 07102

Dear Mr. Sciarra:

On behalf of NJK-12 Architects, I am pleased to present our White Paper entitled "Educational Facilities Construction and Finance Act: Moving the Program Forward".

It is our hope that our observations and recommendations will spur constructive discussions that will lead to change and improved results in the schools construction program.

Over the next several weeks we will be conducting a survey of the largest cities across the country to determine what strategies they have implemented to meet the needs of educational facilities in urban areas. The data from the survey will be used to create a comprehensive report that will identify the latest successful strategies being incorporated throughout the country to meet this paramount need. We will forward a copy to you as soon as it is complete.

Thank you in advance for taking the time to review this document and we hope it can be of use. If you have any questions or comments please do not hesitate to contact me.

Jeffrey D. Venezia, AIA
NJ K-12 Architects, LLC

JDV/cc
Enclosure

EDUCATIONAL FACILITIES CONSTRUCTION AND FINANCING ACT: MOVING THE PROGRAM FORWARD

Prepared for:

Education Law Center

By:

NJ K-12 Architects, LLC

February 15, 2006

Educational Facilities Construction and Financing Act:
Moving the Program Forward ***Feb. 15, 2006***

EXECUTIVE SUMMARY

- In 1997 the Supreme Court stated **"no one can expect disadvantaged children to achieve in school buildings that are overcrowded, outmoded, dilapidated and often unsafe"**.

- Educational research now demonstrates that **"school design has a direct impact on learning"**.

- Bridge funding should be authorized **"immediately"** to move those stalled projects forward.

- Funding alternatives and creative project structures such as "**public/private partnerships"** and **"mixed use developments"** should be encouraged. A **"state-wide education fund"** for construction and a **"permanent funding"** source should be established.

- **NJDOE** and the **Abbott Districts** should take the lead in school programming, educational specifications, schematic design and project budgeting.

- **Land acquisition** should be delegated to the **district** and **municipalities**.

- Flexibility in project delivery should be encouraged with **design-build** with a **Guaranteed Maximum Price ("GMP")** a standard delivery methodology.

- Standards for design and construction should be **performance based**.

- **Districts** should be treated as separate entities with distinct **abilities, needs and educational & community goals.**

- Initial change should be initiated by **executive order** to get the program moving again.

- Systemic change should be enacted through the **legislature**.

We are confident that reforms such as those outlined in this Executive Summary and expanded upon in our White Paper will guarantee that the Supreme Court Abbott IV decision will be met, that the program's cost will be controlled and that public confidence in the program will be restored.

Educational Facilities Construction and Financing Act:
Moving the Program Forward ***Feb. 15, 2006***

INTRODUCTION

Over the course of the last seven years, as the State has struggled to comply with the landmark Abbott vs. Burke decision, much of the effect has appeared to be at cross purposes. High performance schools, community schools, budget and schedule control have been viewed as mutually exclusive terms.

What follows is our insight into the program and recommendations for reform based upon years of experience, thousands of successfully completed projects, and interaction with the numerous and varied stakeholders in **NJ Public School Education**.

I. BACKGROUND

A. The Supreme Court

The New Jersey Supreme Court was ahead of its time when it decided the Abbott IV decision on May 14, 1997. In that decision, the court did not focus on building new schools for the sake of constructing new buildings. Rather, the focus of the decision was providing an education that would prepare public school children for a **"meaningful role in society, one that will enable them to compete effectively in the economy and to contribute and to participate as citizens and members of their communities".**

The court recognized that we cannot achieve this goal unless we provide school facilities conducive to learning. As the court put it, **"No one can expect disadvantaged children to achieve in school buildings that are overcrowded, outmoded, dilapidated, and often unsafe".** The state's obligation to provide a thorough and efficient education includes a facility component. **The court was ahead of its time in pointing to the direct connection between learning and the quality of the learning environment.**

B. NJDOE

In November 1997, the New Jersey Department of Education issued a report, "A Study of School Facilities and Recommendations for the Abbott Districts" that outlined the state's response to the Abbott IV decision. In this report, the DOE made the following critical assumption:

> There appears to be no empirical research that directly established a cause and effect relationship or correlation between academic performance and the presence, absence, or configuration of specialized instructional spaces, provided that these facilities provide a clean, safe and functional environment which is conducive to learning (page 16).

The Department of education was making an important finding. If there is no empirical evidence of a link between the "configuration" of educational space and learning, then

many of the state's decisions on how to implement the program made sense:

1. Create a catalog of spaces that needed to be built or renovated for each district.

2. Design spaces that are "clean, safe and functional" at the minimal cost and at the greatest speed.

3. Hire architectural firms to design projects on a project-by-project basis, on an as-needed basis.

4. Prioritize projects based on their ability to move forward.

5. Concentrate all authority to control procurement, design, cost and schedule at the state level. Hire a project management firm to control the projects' delivery.

While it may have been true in 1997 that there was no clear evidence of the link between facilities and learning, this is certainly no longer the case. Educational research now demonstrates that school design has a direct impact on learning. Factors influencing learning include air quality, natural daylight, classroom acoustics, and spatial relationships. The cumulative effect of all the design decisions that go into a school project is profound. Indeed, some commentators have suggested that, taken together, the quality of the school environment is just as important as family background in student performance.

The typical school found in the Abbott district was built to accommodate passive, large group instruction. Best practices now encourage active student participation that is project based, cooperative, and interdisciplinary. The learning environment should enhance teaching and learning and accommodate the needs of <u>all</u> learners. Hence, there is a need to consider the demographic array of the Abbott Districts' populations, as well as the factors impacting their students' learning abilities, to design facilities geared toward their educational success. **In other words, schools for Abbott Districts require specific design for their "local particularized needs."**

C. Executive Order 24

The following are excerpts from E.O. #24 issued on July 29, 2002:

Community Schools:
"...shall attempt to incorporate community design features to maximize public access to the building and enhance the utility of the building to the needs of the community."
Community Participation:
"...provide opportunity for the community at large to have meaningful participation in the site selection process for the school facilities projects, and in the

design of school facilities."

Sustainable Design:
"All new schools shall incorporate the guidelines developed by the United States Green Building Council known as Leadership in Energy & Environmental Design (LEED) to achieve maximum energy efficiency and environmental sustainability in the design of schools."

Best Design Practices:
"...use the best design practices to create spaces that enhance the learning process and accommodates modern teaching techniques.

While attempts in some parts of the program have been made to implement E.O. #24, by and large the critical items regarding community facilities, participation and high performance have been abandoned in favor of budget and schedule control.

Any reform of the existing program must establish at the outset that the goal of the program is not to build new buildings to house students, but to create educational facilities that help prepare students to "compete effectively". In an important way, the facilities themselves must be considered part of the educational program designed to achieve this goal.

Any reform must recognize the importance to the community of these facilities and the overriding need for fiscal responsibility in a time frame that meets the spirit of the Supreme Court decision.

II. RECOMMENDATIONS

A. Funding

The funding of any program as massive as the School Construction Program in New Jersey is by definition an overwhelming task. Yet, as demonstrated by the infusion of construction dollars into the state's economy during other large scale transportation, health care and infrastructure projects, investment in our schools is a win-win situation. An investment that, based upon the Supreme Court decision, is a matter of when, not if.

With the price tag in the billions and climbing, it is imperative that all the stakeholders who benefit from the decision also participate in its cost. In order to spread the burden beyond the taxpayers of New Jersey, flexibility in project approach and financing should be developed.

According to the Emerging Trends in Real Estate 2006 prepared by the Urban Land Institute (ULI) and Price Waterhouse Coopers, there is **"an abundance"** of capital available for investment in the U.S. The sources are banks, pension & benefit funds and

overseas investors. **Mixed use developments** in the Abbotts that can be made fiscally attractive to private capital can help reduce the burden of this program. A methodology for incorporating **public/private partnerships** should be enacted. These partnerships already exists for higher education projects and should be allowed in the K-12 arena allowing for the passing on of the tax breaks and other incentives to help defer the overall program costs. **A statewide education fund** that taps the private sector who looks to our public schools for its future employers should be established. This fund can pay for community spaces as well as help the urban non-Abbott districts bridge the funding gap for their facilities. Grants from the foundation might be on an ascending basis with the more the community raises, the more it gets from the foundation.

Initially, bridge funding should be made available to move the stalled projects forward. A permanent source of school construction funding should be enacted. As demonstrated in the suburban districts, when the money is made available schools get built. **The economy wins, the community wins, and most of all the kids win.**

We recommend bridge funding be authorized immediately.

We recommend enacting regulations that allow for public/private partnerships in the Pre-K-12 arena. The formation of a statewide education foundation and the establishing of a permanent funding source for school construction.

B. **The Process**: There is a model out there that works. Non-Abbott districts submit a project for approval to NJDOE based upon their approved LRFP. During the approval process, the issues of program are resolved and budgets established and maintained throughout the life of the project. The attached spread sheet illustrates examples of initial budgets established prior to the referendum and the actual construction costs for a number of projects in non-Abbott districts.

This portion of the process should be handled by the district and its hired professionals along with NJDOE. The funds should be allocated to the districts by way of a grant from the state to cover this initial phase as well as the remaining A/E services for the project.

It would be the individual districts' responsibility to expedite this process to assure delivery of the facilities needed by their community.

We recommend that this so-called suburban model be followed up through schematic plan approval at NJDOE.

C. **Land Acquisition:** In a similar fashion to the process outlined above, the district, in cooperation with and the support of the local municipalities, must take the lead in land acquisition. Once a site is identified and approved for acquisition to NJDOE, the district and municipality would receive a grant to purchase the property.

If a site is identified as a brown fields or gray fields site, then the district and municipality would be given the option of entering into a **public/private partnership** that would allow for the infusion of DEP grants for cleanup and allow the tax benefits of the cleaned up site to be passed on to the private sector.

Only after the district has schematic approval and the district/municipalities have clear title to the land would the SCC take over the project for implementation.

We recommend putting land acquisition into the hands of the local district/municipalities (with the state still controlling the purse strings). This would help engage the communities in expediting this process and moving the project(s) along.

D. High Performance Schools

The development of performance based as opposed to quanitative standards at the state level can play an important role in controlling project costs during the design and construction process. A performance based design standard can be defined as written specifications that identify the minimum performance requirements of components, systems or buildings without identifying product brands, models or quantities.

The key characteristic of a performance specification is that it measures performance. It creates goals that must be achieved in a project's design and construction, while promoting flexibility in attainment. Ultimately, it allows architects and engineers to employ the most innovative practices in developing schools that are high performance - both in terms of their energy usage and efficiency and appurtenant cost savings and their ability to provide the best possible environment for teaching and learning. With performance specifications, that "flexibility in attainment" can realize additional cost savings in construction as they broaden the market and allow for the most competitive bidding during procurement.

We recommend the best way to achieve these goals is to develop standards for design and construction that are performance based.

Once the project has received NJDOE schematic approval, then the NJSCC should proceed with project delivery.

E. Project Delivery

In order to control costs, meet schedules and encourage competition, flexibility in project delivery should be the rule, **not the exception.**

The use of **design-build** as an effective project delivery method for educational projects

has gained national attention as a means to control costs, meet project schedules, ensure project quality and reduce the administrative burden upon school districts and their funding agencies. The New Jersey Schools Construction Corporation had an interest in the benefits of design-build, and in 2003 they commenced an innovative process for the delivery of public educational projects in New Jersey. The SCC subsequently adopted regulations for design-build.

The benefits of the design-build process:

1. Encourages the maximum amount of competitive bidding from interested design-builders.

2. Uses performance standards to ensure compliance with the district's educational facility goals. The district's educational program derives the design criteria.

3. Establishes performance standards for operating systems that promote low maintenance and operational costs, with good durability. Encourages flexibility to allow for innovation in systems design and environmental sustainability. Allows consideration of the system's life cycle costs, not just the initial construction costs.

4. Allows prioritization of design features to enhance educational performance.

5. Provides maximum flexibility to the design-builder in finalizing the construction documents in order to produce savings in both budget and project delivery time.

6. It creates a single point of responsibility for the delivery of the design and construction. Change orders are reduced. The need for administrative oversight is reduced.

The results of the design-build process have been proven through the NJSCC's experience with the Neptune Township School District's Summerfield Elementary School, the "pilot" project for their design-build program. The project's anticipated completion is April 2006, at its original established budget of $21 million. **This represents the ability of the NJSCC to efficiently and cost-effectively develop high performance educational space.**

We recommend that the NJSCC design-build model with a GMP (guaranteed maximum price) provision be initiated as the standard methodology for the program in the Abbott Districts.

F. State Resources

It is apparent that the present program attempts to treat all districts the same. The needs of a Newark are not the same as the needs of a Phillipsburg or Keansburg. Some districts are fully capable in implementing their own plans, others are not.

While the state's main oversight must be to keep track of the dollars and be accountable

to the public, providing the necessary manpower and/or funding for the required personnel to facilitate their own responsibilities in delivering the program to their students would be the best use of the state's resources.

We recommend that the state, in conjunction with the Abbott Districts, evaluate their needs for personnel to help expedite the projects and provide any grants or actual manpower that may be required.

G. Bundling

It is obvious that the program as it exists has a huge credibility problem with the legislature and the public. Going forward in the short term it has to address the 59 projects that were approved in July, the 200 projects put on hold and eventually, once they are approved by NJDOE, the 2005 LRFP's and their requirements.

In order to assure that the public and the legislature know what they're buying "bundles" of projects that have received schematic approval and have their land acquired and/or sites available as of a certain date can be put together and the funding authorized. Those "bundles" might also include grants for professional services on proposed projects as well as grants for land acquisition.

We recommend that a regular process be set up to identify projects and their associated costs once schematic NJDOE approval has taken place. As of a certain date, those "bundled" projects would then be authorized for funding.

Conclusion

In the last several years, the State of New Jersey has made a significant down payment in meeting the goal announced in the Abbott decision of **preparing the children to take on a meaningful role in society.** With the benefit of hindsight, we are now in a position to evaluate what worked - and what did not - in helping us achieve this goal.

As outlined in this white paper, it is time for New Jersey to recognize

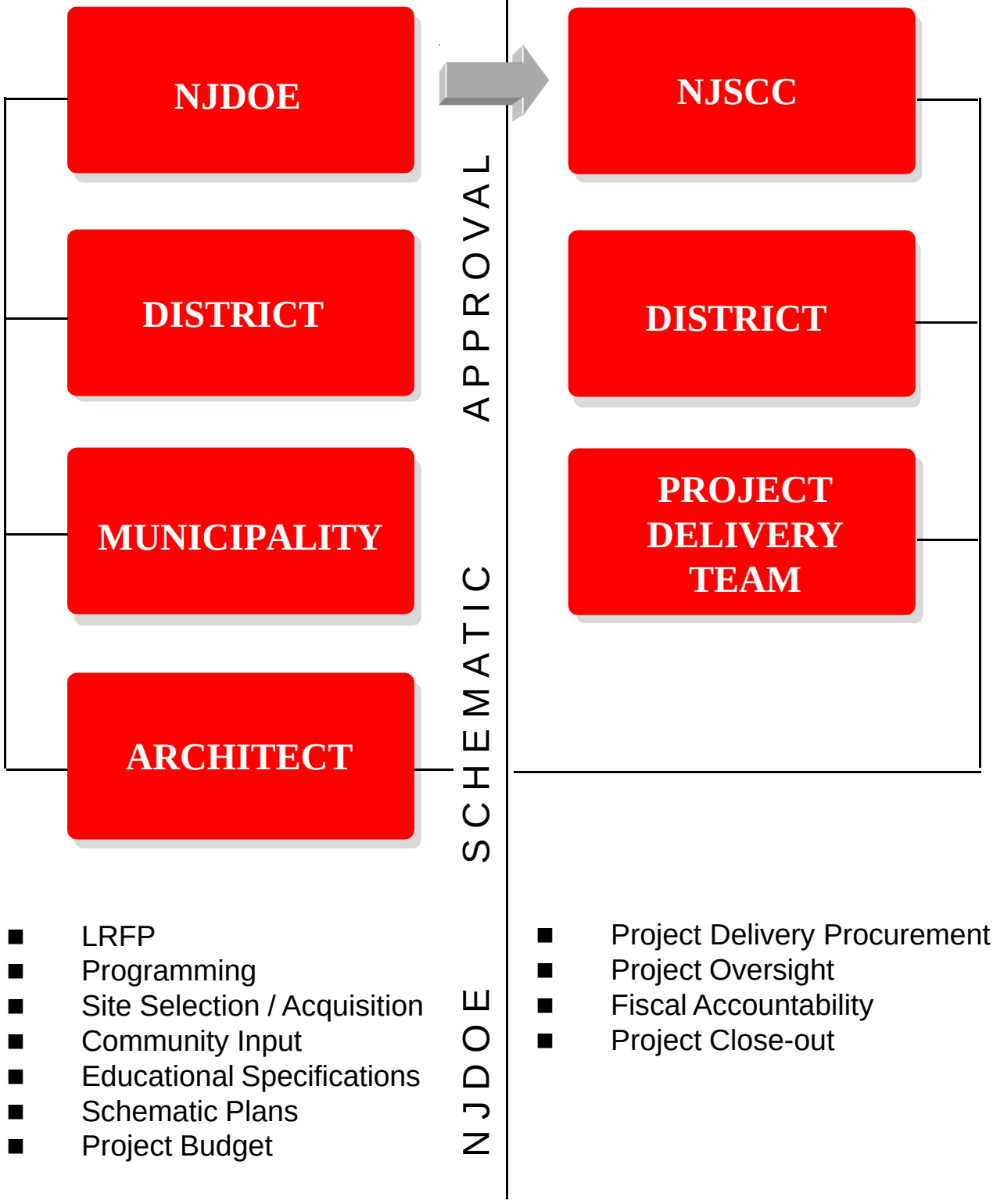
- the need for funding alternatives
- the need for a permanent source of school construction funds
- the nexus between design and learning
- the importance of long-range facility planning
- the need for community participation in the design and site selection process
- the need for flexibility in project delivery
- the need for accountability

Many of these features have worked successfully in the suburban districts and there is no reason why this success cannot be matched in the Abbott districts. We are confident that these recommendations are realistic and practical and, with the issuance of an executive order, these recommendations can be implemented immediately. Once implemented, we predict that these

reforms will produce a groundswell of public support for continuing this investment. And, in return for empowering the districts to take ownership of the design and programming of these projects in accordance with their approved long-range plans, we anticipate that cost and scheduling efficiencies **will increase**, not decrease, thereby creating a statewide success that every citizen can celebrate.

(This document contains 12 pages including the cover)

PROPOSED PROCESS FLOW CHART



- LRFP
- Programming
- Site Selection / Acquisition
- Community Input
- Educational Specifications
- Schematic Plans
- Project Budget

- Project Delivery Procurement
- Project Oversight
- Fiscal Accountability
- Project Close-out

EDUCATIONAL FACILITIES COST COMPARISON

Project	Referendum Amount	Area	Final Cost	Cost per SF
Montgomery Township High School	$ 54,288,000.00	454,559	$ 58,543,760.00	$ 128.79
East Brunswick High School	$ 18,800,000.00	96,200	$ 18,800,000.00	$ 195.43
Freehold Regional High School	$ 61,000,000.00	282600	$ 60,000,000.00	$ 212.31
Monmouth Regional High School.	$ 6,990,000.00	39,200	$ 6,940,000.00	$ 177.04
Churchill Junior High School	$ 26,875,000.00	190,136	$ 26,800,000.00	$ 140.95
Marlboro Memorial Middle School	$ 29,600,000.00	154,373	$ 24,400,000.00	$ 158.06
New Egypt Middle School	$ 12,500,000.00	76,000	$ 11,900,000.00	$ 156.58
Paterson Public School #27 Mod. Add	$ 5,500,000.00	25,373	$ 5,500,000.00	$ 216.77
The Neptune Township Midtown Elementary School	$ 29,900,000.00	150,000	$ 30,700,000.00	$ 204.67
Bogota Elementary Schools	$ 13,800,000.00	87,028	$ 12,500,000.00	$ 143.63
Marlboro Early Learning Center	$ 7,900,000.00	39,538	$ 6,800,000.00	$ 171.99
Joseph Feraina Early Childhood Ctr	$ 5,830,000.00	42,800	$ 5,980,000.00	$ 139.72
South River Primary School	$ 11,900,000.00	57,000	$ 10,880,000.00	$ 190.88
South Brunswick High School	$ 42,400,000.00	363,225	$ 43,799,591.00	$ 120.59
Mill Lake Elementary School (Monroe Township)	$ 11,110,000.00	71,150	$ 9,922,679.00	$ 139.46
Vo-Tech HS (Perth Amboy / Middlesex County)	$ 20,000,000.00	131,337	$ 21,101,586.00	$ 160.67
Academic Building for Union County Vo-Tech HS	$ 11,790,000.00	73,476	$ 12,271,223.00	$ 167.01
Magnet High School for Union County Vo-Tech HS	$ 4,200,000.00	56,718	$ 4,359,851.00	$ 76.87
Colts Neck High School	$ 27,000,000.00	180,073	$ 23,106,625.00	$ 128.32
North Brunswick High School	$ 27,090,000.00	381,241	$ 32,112,903.00	$ 84.23
Garfield ECC	$ 6,673,000.00	46,202	$ 10,469,203.00	$ 226.60
Central Elementary School (East Brunswick)	$ 17,320,020.00	38,850 (New) 40,100 (Renov.)	$ 17,290,000.00[1]	$ 219.00
Lawrence Brook Elementary School (East Brunswick)	$ 15,914,000.00	39,798 (New) 34,005 (Renov.)	$ 15,787,000.00 (1)	$ 216.25

[1] Referendum Budget Prepared March ‘04
Referendum Held Dec. ‘05
Bid Received Feb. ‘06