



City-wide School Construction Costing and Planning System

New York, NY

Client

New York City Department of Education & School Construction Authority

Problem

Every five years the Department of Education (DOE) completes a Five Year Capital Plan, typically to the value of approximately \$8 – 13 billion. This capital plan is based on the structural condition of about 1,600 school buildings around New York City's Five Boroughs.

In order to comprehensively perform costing for the annual school construction budget, the DOE needed a system that would allow for associating costs with building deficiencies, allow for prioritization of construction, and perform reporting features to allow them to extract necessary information.

Warshaw Group developed the Capital Plan Development System (CPDS) and more recently developed an online version, aptly named the Online Capital Plan Development System (oCPDS).

oCPDS is used by a team of Capital Plan analysts to plan projects to respond to building deficiencies and needs for new schools. The system will also be available to the School Construction Authority and other agencies for updating information about actual project cost.

Scope

Warshaw Group has been involved in this ongoing project since 1997 in many capacities including:

- Business requirements analysis in conjunction with DOE and the New York City School Construction Authority (SCA)
- Creation of costing and forecasting algorithms to assess and prioritize construction needs with SCA
- Creation of a comprehensive reporting structure using Mobile Validity® Report Server and Filter Builder to enable the generation of multiple targeted reports
- Deployment of an inter-agency deficiency and costing system
- Technology transfer and ongoing technical support
- Ongoing technical maintenance and data analysis expertise

Solution

Warshaw Group's has provided services as an integral software solution developer and consultant company since the project formally began in 1998. The company worked with ATIG (a consortium of companies in the inspections area – Advanced Technology Integration Group) who is contracted by the SCA to assist with costing and prioritization process. Warshaw Group also applied industry-standard costing parameters and components to make oCPDS a success.

The system developed by Warshaw Group allows for comprehensive reports to be generated based on specific SCA requirements, and Warshaw Group's costing calculation software enabled report generation based on inspection deficiencies.

Deficiencies found through the inspection process (using software developed by Warshaw Group referred as part of the Building Condition Assessment Survey – BCAS) are costed and prioritized using the Deficiency Costing Prioritization system. This system allowed DOE and SCA to manage the extraordinary task of prioritizing the deficiencies of 1400 public schools using built in algorithms and reporting.

oCPDS, the planning system, then uploads this information to create a range of projects based on different planning scenarios.

The oCPDS system allows DOE and SCA to manage the entire set of school construction projects, of which there are more than 1,600 planned for the next five years at a cost of about \$13 billion, and track the execution of these projects. The system coordinates between the two agencies, manages import and export of information as the Capital Plan moves through its lifecycle from Planning to Operating to Planning a new Plan, as well as feeding information to the Office of Management and Budget.

Warshaw Group facilitated and oversaw the collection of data and integration of the data into the system. Warshaw Group also provided all necessary technical support to ensure that the project progressed smoothly, and assisted DOE and SCA in ongoing project evaluation.

