DQI and Design + Construction Excellence

DQI is one of the strategies in the City’s Design + Construction Excellence program (D+CE). In 2004 Mayor Michael R. Bloomberg established the D+CE program as a Citywide initiative to improve the built environment. This wide set of strategies encompasses an array of innovative procurement, design, construction, and educational programs to create outstanding public works. In order for D+CE to achieve its goals, it must incorporate design evaluation strategies, such as DQI, to maintain constant focus on improving design quality.

The program has begun to successfully develop and implement new policy and procedure strategies, including revamping the RFP process for design and construction services, redefining and improving quality contracting, expanding the use of professional peers, instituting a new pre-qualification program for construction contractors, and focusing on evaluation programs such as the Design Quality Indicator program. D+CE also includes continuing education for all DDC and client agency employees.

THE GOAL OF D+CE IS TO CREATE OUTSTANDING PUBLIC BUILDINGS THAT ARE DESIGNED TO FUNCTION SAFELY, EFFICIENTLY AND PRODUCTIVELY FOR ALL USERS FOR DECADES TO COME.

For more information on DQI, please contact Faith Rose at rosef@ddc.nyc.gov or call 718.391.1080.

DQI Case Study:
121ST Precinct
970 Sanders Street, Staten Island
Rafael Viñoly Architects PC

One of the first projects in the DQI program is the new 49,000 square foot facility for the 121ST police precinct on Staten Island. The precinct will house a detective squad, an anti-crime unit, a community policing unit, and 300 staff members who will work at the facility in rotating shifts. The project is expected to break ground in February 2009, and has been through steps one and two of the DQI process. The group of stakeholders on the project includes a patrolman, a lieutenant, a sergeant, and architects from DDC and the consultant. A landscape architect and the commanding officer for capital construction for the NYPD have also been included. The 121ST police precinct will be the first NYPD facility designed under Local Law 86, and is seeking a LEED Silver rating from the United States Green Building Council.

DQI Horizontal Diagram

This chart illustrates the stakeholders’ collective scores as established by the FAVE process for the project’s most important considerations. The follow-up assessment score (in gray) demonstrates how effectively the project’s goals are being met.

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The Design Quality Indicator program is part of the City of New York’s Design + Construction Excellence program.
What is DQI?

DQI, the Design Quality Indicator program, is a tool for assessing and measuring design quality on a capital project from start to finish, and advances the following objectives:

1) Establishes consensus on design priorities at the onset of the project
2) Improves project scoping, scheduling, and management
3) Provides a framework and formal method to continually evaluate and monitor priorities throughout a project’s duration

DQI RESULTS IN TIGHTER SCHEDULES, FEWER DELAYS, AND A DECREASE IN THE NUMBER OF CHANGE ORDERS.

Who is involved in the DQI process?

A successful DQI team consists of:

1) A DQI leader, preferably a project manager or design liaison selected to champion the DQI process
2) A group of stakeholders representing the clients, users, facilities managers, architects, and contractors
3) A trained DQI facilitator who insures that the process is structured appropriately and runs successfully

What are the phases of the DQI process?

PHASE 1
PROJECT BRIEFING USING FAVE TO BUILD A VALUE PROFILE

The process starts with a project briefing in which the stakeholders collectively identify what is important in the design of the building. They do this using a data gathering tool called a FAVE, an acronym for Fundamental, Added Value, and Excellence. The stakeholders prioritize practical and value-based building criteria by placing brief FAVE statements (see examples in green box) into one of the following three categories:

FUNDAMENTAL: What factors are fundamental to the building achieving its purpose?

ADDED VALUE: What factors will add value, enhancing the building’s usefulness and aesthetic impact?

EXCELLENCE: What factors will help the design achieve excellence—creating a building of distinction?

Once the FAVE statements are organized into these categories, they are weighted in value from 1 (strongly disagree) to 6 (strongly agree). These results highlight the stakeholders’ most important values.

The next three phases in the process are assessment meetings. The stakeholders evaluate the project according to the values identified in the DQI FAVE briefing, and indicate how well those values are being achieved. The data are displayed in graph form, which can flag areas in need of improvement such as in example A at right.

PHASE 2
MID-DESIGN ASSESSMENT

PHASE 3
COMPLETION ASSESSMENT

PHASE 4
POST-OCCUPANCY ASSESSMENT

ILLUSTRATING DQI’S RESULTS

This sample DQI’s results is one way to illustrate the stakeholders’ collective scores for the project’s most important issues

Example A: For illustrative purposes, we’ve created a deficit in the access category. The shortfall in this category (indicated by the indent) flags the stakeholders’ dissatisfaction with how the current design meets the project’s stated goals for access.

Example B: A circle indicates that stakeholders are satisfied that all categories are on-track towards realizing defined goals—with no categories singled out for major improvements.

SAMPLE DQI STATEMENTS

> The building is the right size for its function.
> The building’s materials and finishes are well integrated.
> The building enhances the activity of people who use it regularly.

During Phase 1, statements such as these are categorized under the three FAVE questions and are then weighted on a scale of 1 (strongly disagree) and 6 (strongly agree). Phases 2–4 assess how well each statement is meeting its goals.