

Full Course Title: NYC OMB: How to improve the project design process to better balance project cost and quality for New York City infrastructure projects

Course Title for Registration System: NYC OMB Infrastructure

Course Number: SIPA9000.024

Faculty Advisor: Avi Schwartz

Columbia Email Address: as3819@columbia.edu

Meeting Date/s Times: Fridays 9:00A – 10:50A

Location: IAB 501

Office Hours: F 10:30 – 11:30

Credits: 3

Course Overview:

Summary of project: To maintain and enhance the vitality of New York City, billions of dollars must be spent annually on renovating, replacing and adding to the City's built environment. Getting public projects built in New York City requires a complex cooperation among various agencies – those that require the infrastructure investment (such as police, parks, schools, sanitation, hospitals) and those that enable construction such as the Office of Management and Budget and the Department of Design and Construction.

One critical aspect to capital projects is the balance among design, design quality and value where crucial decisions on form, function and cost need to be made. Many believe that the inability to bring in projects on time and on budget is a direct function of the design and project management processes. How can New York City agencies collaborate to improve the balance on cost versus quality, enhance accountability for project budgets while continuing to achieve each project's public mission? How do disparate agencies with different operating models deal with project budgeting, project management and value engineering? The objectives of this study are to:

- Understand New York City processes related to design, project management, project budgeting and value engineering
- Identify design management techniques that permit project stakeholders to evaluate and balance cost & quality
- Identify management tools during the design phase that are within owner/or managing agency's general control and what resources are available to project managers.
- Strengthen the ability of capital project managers to achieve well-designed and cost-effective projects, given funding constraints.

Brief description of client: New York City's Office of Management and Budget (OMB) oversees

an annual expense budget of \$65.9 billion and a capital budget of more than \$7.9 billion a year. With staff of approximately 300 employees, OMB prepares and monitors the budgets and programs of over 80 City agencies and covered organizations such as the Transit Authority, Health and Hospitals Corporation and the Housing Authority.

The Department of Design and Construction (DDC) builds many of the civic facilities New Yorkers use every day. As one of the City's primary capital construction agencies, DDC provides communities with new or renovated facilities such as firehouses, libraries, police precincts, courthouses and senior centers. To successfully manage this portfolio, valued at over \$6 billion, DDC partners with other City agencies, as well as with emerging and world-renowned architects and consultants whose experience and creativity bring efficient, innovative, and environmentally-conscious design and construction strategies to the projects we build.

Deliverables to client:

- Detailed Project Work Plan
- Through interviews, case studies and data analysis where practical, identify techniques to enhance cost versus quality decisions and the effectiveness of budget management.
- Develop recommendations from the menu of design management techniques that agencies can use during design to enhance processes

Special skills/knowledge needed by team members:

- The student team should possess a combination of communications (written, spoken, and graphics skills), project management (scheduling, task management, team building) and process analysis. While each student may not possess the full range of these skills a cross section of these skills is essential to the success of the team.
- Interest in built environment and the capital construction process, outcomes and improvement.
- Ability to quickly learn about NYC's capital delivery process and identify impediments / risks to project budgeting, project management and value engineering.

Initial meeting(s) with your student team in late November or early December, if applicable: Initial team meeting will be held the week of 11/29.

Dates for meetings with client, if already scheduled: TBD.

Field component: Interviews and data gathering will be conducted at various New York City agency offices throughout the course of the project.

Student selection: [All eligible students may apply for up to five workshops through a special online application process from October 15th until October 31st. Assignment of students will be coordinated by the Office of Academic Affairs, and relevant faculty will be consulted about team membership for their workshop(s).]

Grading (students receive an individual grade):

Grades for the workshop will be based on the following criteria:

- Quality of individual written work (10%)
- Quality of participation in class, Peer review (20%)
- Feedback from the client (20%)
- Overall professionalism, including timeliness, ability to work with team, etc. (20%)
- Quality of team's final report and briefing (30%)

Readings: TBD

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http://sipa.columbia.edu/resources_services/student_affairs/academic_policies/code_of_conduct.html

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