

## NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION

On January 11, 2013, John C. Liu, New York City's comptroller, wrote to the residents of the city about his audit of the New York City Department of Parks and Recreation (DPR).<sup>1</sup> Among his responsibilities, the comptroller made recommendations for city programs and operations and audited city agencies. Liu summarized his office's findings: "The audit found that DPR was not carrying out and overseeing capital construction projects in a timely and cost effective manner."<sup>2</sup>

### New York City Department of Parks and Recreation

The New York City DPR was responsible for maintaining more than 1,700 city parks and recreational facilities, preserving natural areas, and furnishing recreational properties.<sup>3</sup> The agency was in charge of 29,098 acres of parks, beaches, playgrounds, stadiums, marinas, gardens, and squares. The DPR not only cared for street and park flora and fauna, historic houses, statues, monuments, and open spaces in the five New York City boroughs, but also oversaw activities supporting physical fitness, environmental education, and performing arts.

The capital division of the DPR planned and executed DPR capital redesign and rebuild projects. Design, construction, and management of these projects was typically done by a combination of the 460 division employees and outside consultants and contractors. Approximately 150 projects were completed each year. In 2010 to 2011, the division spent \$496.3 million on capital projects.<sup>4</sup>

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<sup>1</sup> [http://comptroller.nyc.gov/wp-content/uploads/documents/MH12\\_137A.pdf](http://comptroller.nyc.gov/wp-content/uploads/documents/MH12_137A.pdf).

<sup>2</sup> *Audit Report on the Department of Parks and Recreation's Oversight of Capital Projects*, January 11, 2013, [http://comptroller.nyc.gov/wp-content/uploads/documents/7E12\\_067A.pdf](http://comptroller.nyc.gov/wp-content/uploads/documents/7E12_067A.pdf) (accessed August 29, 2013).

<sup>3</sup> "About the New York City Department of Parks & Recreation," <http://www.nycgovparks.org/about> (accessed August 21, 2013).

<sup>4</sup> [http://comptroller.nyc.gov/wp-content/uploads/documents/7E12\\_067A.pdf](http://comptroller.nyc.gov/wp-content/uploads/documents/7E12_067A.pdf).

## The Planning Fallacy

DPR was not alone in its oversight of its capital projects. Despite the increase in knowledge and use of project management techniques, the media frequently reported stories of other projects that were delivered late, over budget, or with reduced scope. In 1979, Daniel Kahneman, a Nobel Prize winner from Princeton University, along with his longtime collaborator from Stanford, Amos Tversky, coined the term for this phenomenon: the “planning fallacy.”<sup>5</sup>

Cognitive biases such as overconfidence and wishful thinking have been suggested as causes of the planning fallacy.<sup>6</sup> Under this explanation, setting unattainable project goals is not deliberate and, in fact, is often done subconsciously. Bent Flyvbjerg from Oxford University has suggested that the fallacy is caused by more intentional considerations on behalf of the planner, such as incentives, organizational pressures, and strategic deception.<sup>7</sup>

In their 1979 paper, Kahneman and Tversky stated that “the planning fallacy is a consequence of the tendency to neglect distributional data and to adopt what may be termed ‘an internal approach’ to prediction, where one focuses on the constituents of the specific.”<sup>8</sup>

## Taking an Outside View

To overcome the planning fallacy, Kahneman, Flyvbjerg, Dan Lovallo, and others have suggested taking an outside view. The outside view focused on the project as a member of a class of projects and attempted to estimate the project’s performance by assessing its similarities to other members of that particular class. This approach counteracted the optimism bias and other causes of the planning fallacy and also produced better estimates. In contrast, an inside view in project planning focused predominately on the specific details of the project at hand and estimated what would happen in that particular case.

## Data

To investigate the existence of the planning fallacy in organizations, information from nearly 1,800 capital projects undertaken between 1998 and 2008 was obtained from the office of the chief engineer of the New York City DPR. **Exhibit 1** provides a description of the columns in the dataset that can be found in the accompanying student spreadsheet UVA-QA-0815X. In light of the data, how severe was the planning fallacy during this time? Could this data be used for overcoming the planning fallacy?

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<sup>5</sup> Daniel Kahneman and Amos Tversky, “Intuitive Prediction: Biases and Corrective Procedures,” *TIMS Studies in Management Science* 12 (Amsterdam: North-Holland, 1979), 313–27.

<sup>6</sup> Dan Lovallo and Daniel Kahneman, “Delusions of Success: How Optimism Undermines Executives’ Decisions,” *Harvard Business Review* (2003): 56–63.

<sup>7</sup> Bent Flyvbjerg, “Delusions of Success: Comment on Dan Lovallo and Daniel Kahneman,” *Harvard Business Review* (December 2003): 121–22.

<sup>8</sup> Kahneman and Tversky.

Exhibit 1

**NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION**

Data Column Description

<b>Column</b>	<b>Data Description</b>
Project number	Project identifier
Project title	A brief description of the project undertaken
Design schedule and completion date	Date when the project's final plans should be completed and approved
Design actual completion date	Date when the project's final plans are completed and approved.
Title request	Date that a title, including contract number and name, is obtained from the New York City DPR's map and file office; official beginning of the contract paperwork
Construction registered amount	Amount of approved funding for construction (may exclude design and construction management)
Total budget	Total amount spent on the project
Registration approved; pending order-to-work date	Date the funds are registered by the New York City comptroller; date when construction may begin
Scheduled completion date	Target project completion date
Final inspection	Actual completion date
Status	Indicates final inspection and/or beginning of guarantee period. Final inspection marks the end of construction. If approved, the guarantee period begins, typically lasting one year from the final inspection date. During this time, the contractor is responsible for the work completed.
Construction unit	Team responsible for the project

Source: Created by case writer.