

FEATURES

ABSTRACT

While many real estate transactions and projects go forward as scheduled, from time to time there are instances of project delay that can result in economic losses. Because time is money, these delays may impact value. A delay might have positive, neutral, or negative impacts on property value, depending on real estate market conditions, the use of the property, or other specific issues and circumstances. A variety of valuation methodologies can be employed in these situations. Ultimately, it is the employment of valuation methodologies that are based in conventional approaches to value that will yield an analysis of the financial impacts. Project delay valuation approaches are an invaluable resource in computing some types of damage. Indeed, project delay economics has played a key role in computing damages in some of the world's most complex real estate damage cases and should be considered in any real estate damage assignment.

Project Delay Economics

by Randall Bell, MAI

On March 1, 1954, the US military detonated a thermonuclear hydrogen bomb at the Bikini Atoll in the Marshall Islands. Given the code name Castle Bravo, this was the most powerful atmospheric nuclear bomb in the history of the world. The blast was so powerful that it vaporized two-and-a-half islands and created a crater approximately a mile wide and 400 feet deep.

This nuclear test also became the largest environmental case in world history. Nuclear fallout spread out over a hundred miles and contaminated vast areas, including inhabited islands. One of the issues to arise from the event involved the extent of property damages.

Like any real estate damage case, the focus was on costs, loss of use, and risk, sometimes referred to as *stigma*. In terms of costs, they were paid for by the US government. Yet the contaminated areas were so vast that the remediation took decades, and much of the land was never remediated.

In spite of the size and complexities in the case, in the property damage analysis completed for the Nuclear Claims Tribunal the key valuation issue came down to loss of use. Indeed, the loss or delay of use is often the core issue in real estate damage assignments.

Overview of Project Delay

Time is money. Real estate valuation is often based on schedules and revenues that are forecasted over time. With forecasts, it is always important to identify and address issues that can cause delays.¹ In most circumstances, the original projections reasonably reconcile with actual performance. However, some delays may be unforeseen or unavoidable despite the best management practices. Delays could be due to legal, contractual, construction scheduling, or eminent domain issues or due to externalities, contamination, or any variety of detrimental conditions. Some delays may be due to negligence or other improper conduct. Regardless of the underlying reasons, delays can impact construction, sales, leasing, or land development. Because of this, delay claims are major sources of litigation.²

1. M. E. Abd El-Razek, H. A. Bassioni, and A. M. Mobarak, "Causes of Delay in Building Construction Projects in Egypt," *Journal of Construction Engineering and Management* 134, no. 11 (November 2008): 831–841.
2. Hamed A. Al-Saggaf, "The Five Commandments of Construction Project Delay Analysis," *Cost Engineering* 40, no. 4 (April 1998): 37–41.