

# BID PRICE AND LEVEL OF COMPETITION WHITE PAPER

Paul G. Carr, Ph.D., P.E., AIA

## Introduction

In engaging the services of a Construction Contractor to complete any public or private works project the ultimate goal is to deliver a building program that meets the three requirements of a successful project;

1. on-time,
2. on-budget, and
3. at the full planned project scope and quality.

This is known as the ‘triple constraint’, and managing the balance of these three competing limitations is the goal of the Project Stakeholders.

*The second consideration in this triple constraint carries as a major element to achieve this goal: Bidding Interest and Competition*

The relationship between bidder interest, participation and construction costs is critical to understand budget control. Too many owners and consulting firms measure successful bidder participation when they get ‘at least three bids’ – that is not an ultimate goal.

Dr. Paul G. Carr, P.E., AIA has studied as a major area of his research the relationship between bidder participation and construction costs as they relate to both the Architect/Engineers’ Estimate and the Average Bid Price. The average bid is often referred to as the ‘pack price’, or consensus bid price.

*The greater the bidder participation, the lower the bid prices.*

Of course, this is intuitively obvious, but by how much? In other words what is the impact or penalty for getting only three bids versus, 4, 5 or 6? By not focusing on maximum qualified bidder participation is wrong-headed. It is essential that a Stakeholder Team makes every effort to create a project that is ‘attractive’ to bidders, so bid participation yields a healthy bid response.

Any restriction on bidding opportunity will have a commensurate negative impact on the bid prices that may be expected. These restrictions might be as simple as pre-qualification or, in effect, a limited / invited bidder selection. These restrictions can limit bidder interest thus a cost penalty can be expected.

The following chart is drawn upon the study by Dr. Carr of 663 bids on 125 separate NYS Public Works Construction Projects. The chart compares the ratio of the Pack Price, or consensus price to the low bid price – measured against the number of bids received for each trade.

There is a measurable value to the expected cost results for a Construction Program when consideration is given to maximizing the level of Bid Competition. This is often referred to as “free, open and unfettered competition” which is the hallmark of a public bidding philosophy. If through a robust effort to develop bidding interest in a project, greater bidding competition can be expected. This can include the proper scoping, scheduling and packaging of the work, and refusal by the Stakeholders to impose artificial limitations on who will be allowed to bid the project. These restrictions outside the norm of the industry might include dictating business conditions prerequisite to project participation.

On average that impact can be found in the bid result data set that encompasses 125 public works projects, summarized in the next chart.

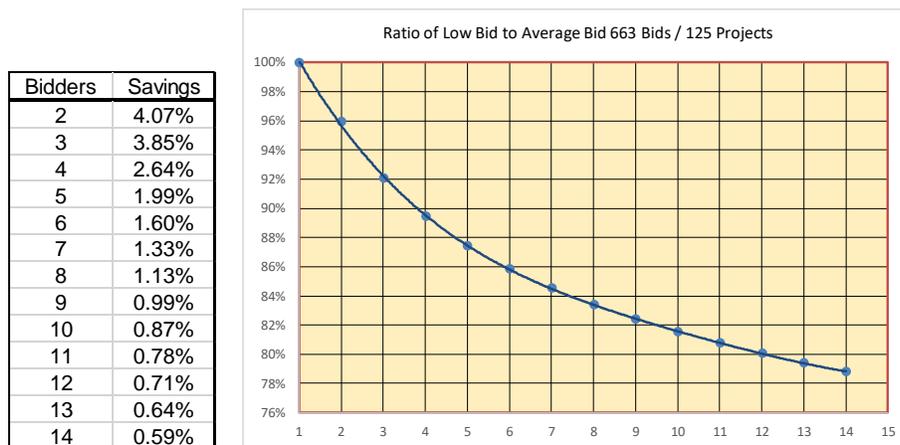


Figure 1 Ratio of Average Bid to the Low Bid based upon the No. of Bidders

Clearly, for every additional bid received, while there is a diminishing rate of savings as the number of bidders goes up, but the benefit measured through lower bid prices does continue. The difference between those Stakeholders who strive to achieve 5 bidders, and those who are satisfied with ‘at least 3 bids in each trade’ – can see on average over 4 ½ % reduction in the Construction Cost. At three bids the low to average bid is 92.1%, while by adding two bidders in each trade, on average, one can reduce this to 87.5% or a significant Project savings through this one action.

Project Stakeholders and Design / Construction Management professionals should fully understand the essential nature of driving competition at the bid phase.