

Bidding Patterns of Successful Low Bidders

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13 Out of Every 1000 Successful Bids are Won by Less than 1/10th of 1 Percent

Bidding on construction projects is a complex and challenging process. It is an expensive but necessary part of being in the business of construction contracting. Every contractor will relate to the experience of fine-tuning their bid to the very last nickel and still being second low bidder by only the thinnest of margins. We wondered just how often this happened, and if there was anything that could be learned from taking a closer look at the bidding patterns of the successful low bidders. In particular, it might be instructive to measure your company's performance against the identified industry averages as an indication of the overall effectiveness of your preconstruction processes and bidding success.

This is the second time we have done this analysis. The first was in 2004 so we will also have a look at the changes in the marketplace over the last five years.

1. Methodology

The data parameters for this study were determined by the author and are as follows:

- 1) The tenders closed between September 9th 2004 and March 9th 2009.
- 2) The projects were all located in British Columbia, Canada.
- 3) The projects were all publicly tendered and the bidding results are public information
- 4) There were a total number of 2134 results evaluated.
- 5) 21 of the 2134 results were excluded from the final data set as the percentage difference between the low bid and the second bid exceeded 200% and were deemed to be excessive anomalies.
- 6) The data was recorded by the four BC Construction Association affiliated Regional Construction Associations in BC (BC Construction Association - North, Southern Interior Construction Association, Vancouver Regional Construction Association, BC Construction Association - Vancouver Island) and is available to members in their PlanSource application.
Note: The Author wishes to acknowledge and express appreciation to these Associations for providing us the use of the data for this study.
- 7) In this study, the objective is to evaluate bidding patterns leading to a contractor being declared the Low Bidder ("Successful Low Bidder"). While it is reasonable to assume that the vast majority of these projects were awarded to the low bidder there has been no attempt made to confirm the projects were actually awarded for the prices indicated in the study. There was also no available data and no attempt to evaluate the impact of separate, alternate or unit prices on the success of a bid.

After gathering the core data and excluding the anomalies, the data was analyzed:

- The percentage differences between the low bid and the second low bid on each project were calculated.

- The average of all bids for each project was calculated.
- The average of all bids for all projects was determined.
- The percentage difference between the low bid and the second low bid for all projects within geographic regions was determined.
- The percentage difference between the low bid and the second low bid for all projects within specific project value ranges was determined.

2. The Findings

The base findings of the study including the comparative numbers for the 2004 data are as follows:

	2004	2009
Date	Aug. 22 2001 - Sept. 8th 2004	Sept. 9 th 2004 and Mar. 9 th 2009
# of Projects	1927	2134
Total number of Bids	7696	7913
Avg. # of bids per project	4.12	3.65
Average Project Value	\$ 1,041,485	\$ 1,637,556
Avg. % difference low to second	13.27%	16%
Avg. % difference low to average price	31.50%	30.77%
Median differential (1077 of 2114)	5.50%	8.75%

Percentage differences are interesting, but just how thin is the actual price margin between being declared the Successful Low Bidder and an unsuccessful bid. The short list of notable examples shown in *Table 1* makes it clear just how close the difference can often be. These are some of the closest results of the total number of 2113 results evaluated for this study. It's obvious from these numbers that no matter how big or small the project second place is just a few dollars away. They are not all shown here but there were in fact 10 projects where there were two identical bid prices on the project.

Low Bid	2nd Bid	\$ Difference	% Difference
\$4,174,567.00	\$4,174,567.00	\$0.00	0.0000%
\$106,875.00	\$106,875.00	\$0.00	0.0000%
\$3,260,000.00	\$3,260,000.00	\$0.00	0.0000%
\$118,200.00	\$118,200.00	\$0.00	0.0000%
\$506,680.00	\$506,680.00	\$0.00	0.0000%
\$450,939.90	\$450,939.90	\$0.00	0.0000%
\$799,000.00	\$799,000.00	\$0.00	0.0000%
\$72,000.00	\$72,000.00	\$0.00	0.0000%
\$7,486,410.82	\$7,486,433.38	\$22.56	0.0003%
\$575,282.00	\$575,295.00	\$13.00	0.0023%
\$290,933.00	\$290,960.46	\$27.46	0.0094%
\$863,300.61	\$863,412.96	\$112.35	0.0130%
\$863,145.00	\$863,272.00	\$127.00	0.0147%
\$2,771,979.01	\$2,772,423.87	\$444.86	0.0160%
\$5,497,000.00	\$5,498,000.00	\$1,000.00	0.0182%
\$389,741.85	\$389,819.00	\$77.15	0.0198%
\$78,630.00	\$78,649.00	\$19.00	0.0242%
\$643,965.00	\$644,250.00	\$285.00	0.0443%
\$497,777.00	\$498,000.00	\$223.00	0.0448%

Table 1

Chart 1 below, details the distribution of results across the entire sample. As might be expected, there is a roughly even distribution across the percentage spectrum with a few notable exceptions in the higher ranges. More detailed analysis, provided later, will show that the highest price volatility exists in the lower dollar valued projects. The differences between 2004 and 2009 indicate less competitive market conditions in the last 5 years.

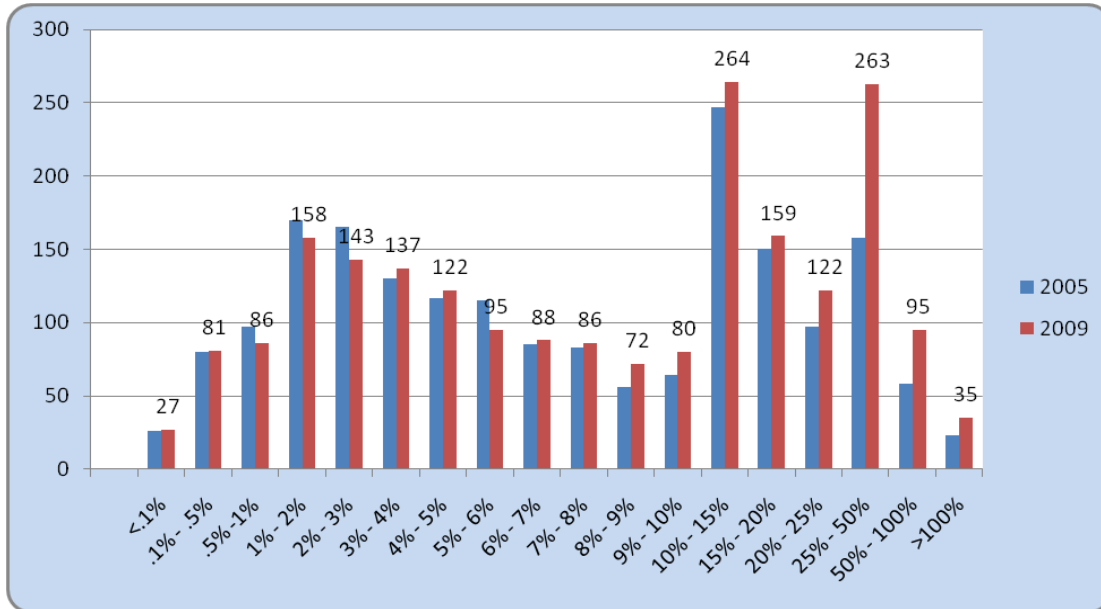


Chart 1

Table 2 details the distribution of low bids by percentage difference between the low bidder and the second low bidder. 1.3% of bids are won by 0.1% or less, 5.1% by .5% or less and 9.2% by 1.0% or less. 55.6% of all bids are won by 10% or less. The surprise here is the very large number of bids won with a difference of 10% or more.

% of Bids by Range			
Range	# in Range	Cumulative Total	% of Bids
Less than .1%	27	27	1.3%
Less than .5%	81	108	5.1%
Less than 1%	86	194	9.2%
Less than 2%	158	352	16.7%
Less than 3%	143	495	23.4%
Less than 4%	137	632	29.9%
Less than 5%	122	754	35.7%
Less than 6%	95	849	40.2%
Less than 7%	88	937	44.3%
Less than 8%	86	1023	48.4%
Less than 9%	72	1095	51.8%
Less than 10%	80	1175	55.6%
Less than 15%	264	1439	68.1%
Less than 20%	159	1598	75.6%
Less than 25%	122	1720	81.4%
Less than 50%	263	1983	93.8%
Less than 100%	95	2078	98.3%
Greater than 100%	35	2113	1.7%

Table 2

Chart 2 and Table 3 tell a clear story. The higher the actual dollar values of the bid, the tighter the bidding in percentage terms. For example, the 2009 table projects valued at \$100,001 – \$250,000, 30 projects representing 8.2% of the total of 366 in the category had a difference between the low bid and second bid of only 1% or less. On the largest projects, 26% of them are won by less than one percent. Obviously the larger the gross dollar values of a project the greater the actual cash value of the percentage difference.

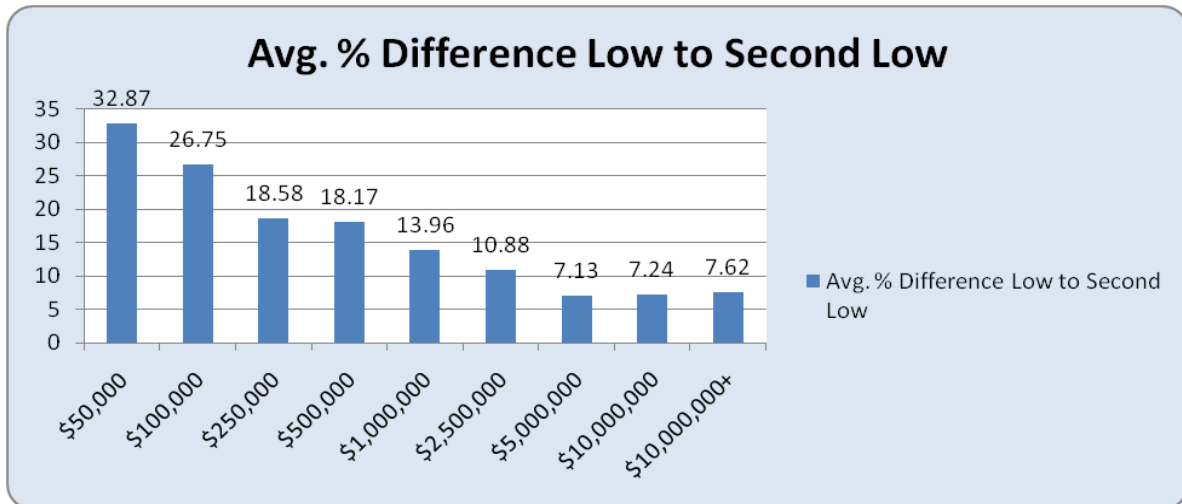


Chart 2

2004 - Bids by % Difference							
Project Value	Total # of Projects in	# of bids by specified % difference low bid to 2 nd bid					
		1.0% or less		0.5 % or less		0.1% or less	
		#	%	#	%	#	%
\$0 - \$25,000	40	1	2.20%	1	2.20%	0	0.00%
\$25,001 - \$100,000	337	14	4.20%	8	2.40%	2	0.60%
\$100,001 - \$250,000	456	26	5.70%	12	2.60%	5	1.10%
\$250,001 - \$500,000	362	41	11.30%	22	6.10%	4	1.10%
\$500,001 - \$1,000,000	255	36	14.10%	18	7.10%	7	2.70%
\$1,000,001 - \$2,500,000	260	39	15.00%	18	6.90%	4	1.50%
\$2,500,001 - \$10,000,000	182	36	19.80%	23	12.60%	4	2.20%
\$10,000,001 - \$50,000,000	23	10	43.50%	4	17.40%	1	4.30%
	1921	203	10.60%	106	5.50%	27	1.40%

2009 - Bids by % Difference							
Project Value	Total # of Projects in	# of bids by specified % difference low bid to 2 nd bid					
		1.0% or less		0.5 % or less		0.1% or less	
		#	%	#	%	#	%
\$0 - \$25,000	39	1	2.56%	0	0.00%	0	0.00%
\$25,001 - \$100,000	272	16	5.88%	7	2.57%	2	0.74%
\$100,001 - \$250,000	366	30	8.20%	18	4.92%	4	1.09%
\$250,001 - \$500,000	364	26	7.14%	16	4.40%	5	1.37%
\$500,001 - \$1,000,000	337	35	10.39%	24	7.12%	7	2.08%
\$1,000,001 - \$2,500,000	367	32	8.72%	18	4.90%	2	0.54%
\$2,500,001 - \$10,000,000	322	42	13.04%	21	6.52%	7	2.17%
\$10,000,001 - \$50,000,000	46	12	26.09%	4	8.70%	0	0.00%
	2113	194	9.18%	108	5.11%	27	1.28%

Table 3

Another indication of overall competitiveness in the market is the total number of bidders involved in a project. *Chart 3* demonstrates the rapid change in market conditions in 2009 with averages of almost 1.5 more bidders per project. It is not unusual to see lists of 10 or more bidders on a project in 2009 where in 2007 that was virtually unheard of.

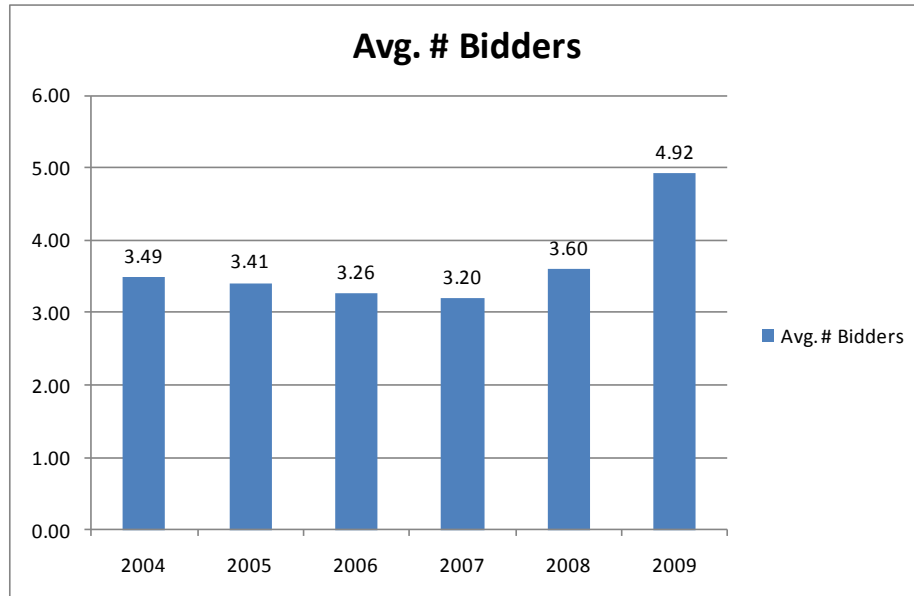


Chart 3

3. Regional Analysis

There is a clear difference in results, depending upon which region of the province the bid closed in. Table 4 details results that range almost a full 5% based upon the average bid price. Just as in 2004 the tightest bidding is in the Southern Interior region. In 2004 the Lower Mainland was the second tightest region to bid in but this time that distinction switches to Vancouver Island. Northern BC continues to be the region that has the greatest average difference in prices between the low and second bidder.

It is particularly interesting to note the change in the median difference. For those who were in the market they will know that overall competitive pressure was lower but the change from a median of 5.5% to 8.75% is a dramatic representation of the impact of a generally less competitive environment.

	2004		2009	
	# Projects	%	# Projects	%
Average % difference all results	1921	13.27%	2113	16.25%
Average % difference Northern BC	341	16.55%	480	19.84%
Average % difference Southern Interior BC	622	11.56%	820	14.65%
Average % difference Vancouver Island	615	12.53%	557	14.79%
Average % difference Lower Mainland	343	14.61%	256	15.72%
Median % difference 2004 (#960 of 1921 results)		5.50%		
Median % difference 2009 (#1057 of 2113 results)				8.75%

Table 4

4. How Do Your Results Measure Up?

While this information may be interesting, you might wonder how to make it relevant for your company. The simplest way is to assemble a reasonable sample of bid results from your most recent successful bidding activity. Calculate the percentage difference between your low bid and the second low bidder on each project. Calculate the average percentage difference of all the results. How does this compare to the Overall Industry Average benchmark identified in this study of 16.0%? How does it compare to the averages identified based upon the dollar value of the project? The lower the number, the less money that is typically left on the table, which provides at least one measure of your bidding efficiency.

5. Eight Steps to More Effective Bidding Practices

Our objective at Infinite Source is to utilize our expertise in bidding processes and practices, combined with our technological expertise to help our clients with practical solutions that enhance their efficiency and reduce the costs of the bidding process. We provide our clients with technology solutions such as our preconstruction software system to ensure they have done all that they can to achieve the best and most accurate possible prices from Trade Contractors and Suppliers. PlanSource is directed at ensuring, to the greatest extent possible, that your firm is the low bidder, and not second place, because of one missed price that would have made the difference.

The following list of suggestions provides a guide to some steps you can take to ensure your estimators have the best and most effective processes and tools in place:

1) Create and maintain a database of all your current Trade Contractors and Suppliers.

The Trade Contractors and Suppliers that bid to your company and the relationships that you have with them are a critical element of a Contractors ability to be the Successful Low Bidder. Keeping track of their contact information, knowing all the sections of work that they can bid on and being able to track their history of bidding to your company is all-important information. **PlanSource** has a complete set of tools that allows everyone in your company to not only have easy access to this critical information, but it also ensures that when one of your staff updates a Trade or Suppliers information, it is then current and available for everyone.

2) Send out Invitations to Bid.

It is difficult for a Trade Contractor to bid to you if they are unaware that you are bidding on the project. You can leave it to chance that they will take the initiative to find out from the Owner or Design Consultant who is bidding, and that the information will be kept up to date. By proactively notifying them that you are bidding, saves them time and effort, and ensures that you have increased your chances of better Trade coverage. **PlanSource** simplifies the tasks required to do this into one

application and utilizes an integrated fax/email engine allowing you to contact the entire list of bidders that you want to invite in a matter of minutes.

3) Track who is bidding to you and be sure you have adequate coverage in all areas.

It is easy to focus on the large components of work and leave the small Trade sections or Suppliers to chance as you can always ‘plug’ a number if you have to. As this study demonstrates, even a few dollars on a small component can mean the difference between being low bidder and an also ran. **PlanSource** provides detailed tracking and reporting tools that allow you to easily keep on top of any gaps in your Trade coverage ensuring the best possible price for each section of work.

4) Make sure that all your invited bidders have easy access to all the Drawings and Specifications.

Many projects require estimating staff to spend endless hours printing, copying, collating, packaging, couriating, emailing, and faxing to ensure that everyone has *all* the information they need to prepare a complete and accurate bid. **PlanSource** manages all your document management and distribution requirements allowing you to have confidence that all the necessary information is distributed to all your Trades and Suppliers, whether they want to utilize online access and the many advantages it represents, or whether they prefer the traditional paper based approach.

5) Make sure that all your invited bidders are notified of all Addenda and Supplementary bidding information.

It is obvious that a bidder who is missing information will not submit an accurate bid. The result could be an inaccurate number in your selection of trade prices that ultimately affects the accuracy of your bid potentially making it either too low or too high. This is also a common source of disputes that have to be sorted out after a project has been awarded.

The fax machine is still the standard for distributing addenda to the large number of Trades and Suppliers on a project. As the number and size of addenda seems to be ever increasing it is important to have an efficient means to distribute all this information. **PlanSource** combines the advantages of a fax machine and email application into one single application. Using predefined and saved project contact lists it allows you to easily distribute notices, information, and addenda to any number of recipients within a matter of minutes whether they have only a fax machine, or prefer to receive the information via email.

6) Make sure that all your invited bidders have access to the documents relating to all Addenda and Supplementary bidding information.

Notifying bidders that there are addenda or changed information is not good enough on its own. The detailed addenda or other information needs to be readily accessible

by everyone. The typical options include faxing, copying and couriering or placing it in your office planroom. All of this is time consuming and expensive. Using **PlanSource** eliminates the problems of distribution. Once everyone has received a simple notice that the information is available it is easily and immediately accessed online or ordered to be printed and delivered by the Trade or Supplier. Everyone wins when they have faster and better access to this essential information.

7) Address elements of the General Conditions and the way you plan to run your site in advance.

Trades and Suppliers need to know things like whether hoisting is available for them onsite, or whether scaffolding will be made available to them. Having ready access to this information allows them to provide you with a more accurate bid and avoids subsequent disputes. Estimators can avoid the large amount of time spent conveying this information to individual Trades and Suppliers utilizing **PlanSource** which provides an easy means to distribute this information exclusively to those who are bidding to you as well as the ability to know whether they accessed the information or not.

8) Track and analyze your bid results.

Knowing why your price was the low bid, or, as importantly, why you were not the low bidder, can be critical to your Company's future bidding success. Keeping track of the bidding results for everything you bid on can help in understanding this. This study provides one benchmark to measure your results against but you need to be able to record and review the results over time. **PlanSource** provides an effective means to do this using project information tracking tools for your projects.

We hope you find this information helpful in evaluating if you are doing all you can in your efforts to ensure that you are the successful low bidder on as many projects as you can. If you would like further information relating to this study we would be more than pleased to assist you. We wish you the best of luck in your future bidding endeavors.

PlanSource is an integrated solution that streamlines and automates routine estimating tasks enabling faster, better and more accurate estimates. With over 100,000 projects completed, PlanSource is a sustainable building practice that saves estimating professionals up to 20% of their time, eliminates costs and reduces the risk of claims and errors. Additional information on how PlanSource can help you improve your bid results can be found at www.plansource.ca.