

## AN ANALYSIS OF THE 2009/2010 Design-Build Municipal Water and Wastewater Industry Market

### Introduction

Each year since its inception, the Water Design-Build Council (WDBC) has collected data on the municipal design-build contracts for the water and wastewater infrastructure entered into by members and their clients during the prior year. Statistics include the total sales value of design and construction contracts, average project duration, and those states leading in the use of design-build alternative project delivery. WDBC members represent the nation's leading companies performing work in the water and wastewater industry. This analysis on the 2009/2010 market updates WDBC's study, reporting on the design-build industry achievements from 2005 through 2008.

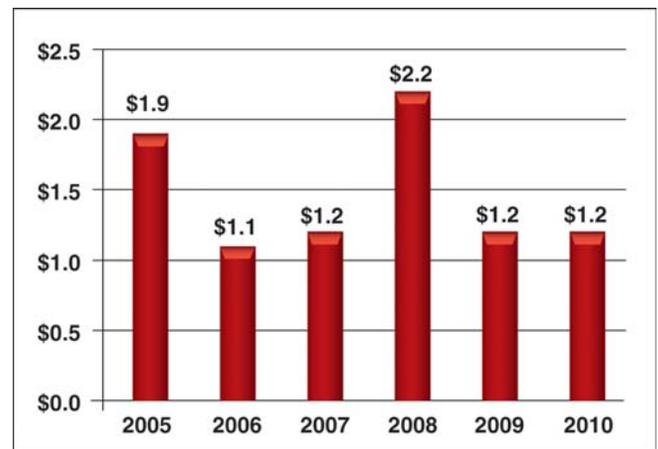
### Market Summary

Overall, the 2009/2010 data shows that the market employing design-build (alternative project delivery methods) continues to be stable with significant opportunities to increase in the future. Even though funding to develop and rehabilitate municipal water and wastewater infrastructure throughout the U.S. has been impeded by varying economic factors, system improvements using design-build methods are continuing in several regions, particularly the sunbelt, with five states dominating the market share. While the number of and sales of design-build projects occurring in 2009 and 2010 mirror those in 2007 and 2006, the use of design-build, design-build-operate (DBO) and construction-management-at-risk (CMAR) has continued to be strong and stable over the past two years as the preferred alternative delivery methods to design-bid-build for water and wastewater systems.

### Design-Build Contract Sales

The 2009/2010 reported annual sales value (Exhibit 1) illustrates the dynamics of a "holding pattern" which is also an indicator of the economic issues facing municipalities, ultimately impacting the water/wastewater design-build industry.

EXHIBIT 1  
Total Design and Construction Sales Value (\$Billions)  
(2005–2010)



Sales represent the value of the entire contract on the day the contract was signed. The entire value of the contract is allocated to the year in which the contract was signed. It is not broken out over the full duration of the contract. For example, if a \$10 million design-build contract was signed in 2008 (as shown in Exhibit 2) then the entire sales value is allocated to 2008—even if the contract is a five-year contract with \$2 million per year.

Because sales data only provides a snapshot in time, it is not appropriate to compare year-to-year values of sales.\*

\*Because this report is based only on member data, it does not attempt to capture the total or entire size of either the U.S. or North American market. To accomplish a survey of this magnitude, significant data would need to be collected from a large number of construction firms. This type of an endeavor, however, is a future goal.

The 2009/2010 market data continued to be stable for design-build projects, (Exhibit 2), with the average value of a sold project similar to 2007. The value of projects sold in 2008 creating the spike at \$27.1 million is attributed to two very large contracts. However, as will be noted in Exhibit 3, the number of projects sold in 2009 were actually greater in number, but of less value.

Overall, the number of 2009/2010 sold projects, presented in Exhibit 3, was also relatively steady from 2005 to 2008 until a variance occurred in 2009 with a spike of 124 projects. This variance is attributed to 3 states having more projects of less than average value. Subsequently, the number of projects sold in 2010 (87) is more consistent with prior years.

EXHIBIT 2  
Average Value of Sold Projects (\$Millions) (2005–2010)

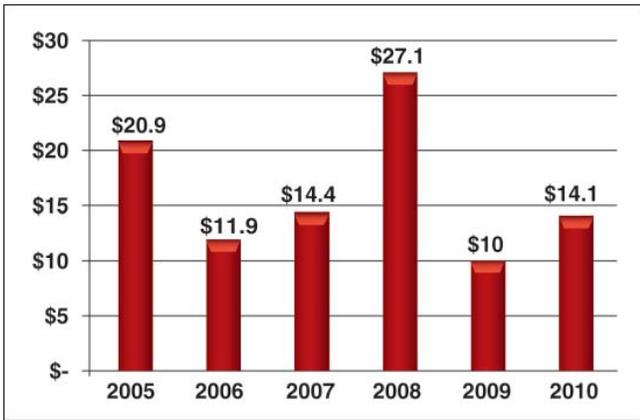
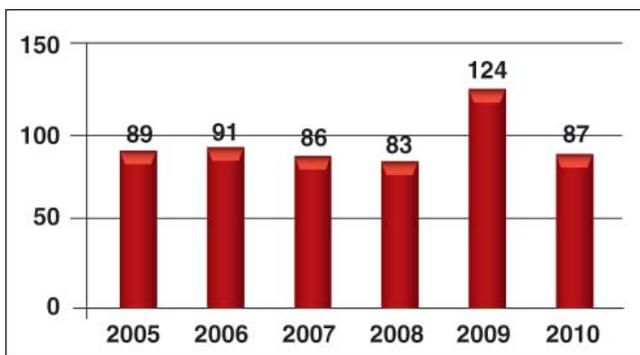
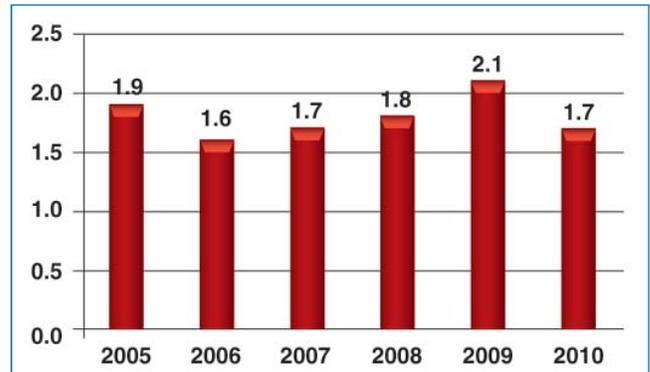


EXHIBIT 3  
Total Number of Sold Projects (2005–2010)



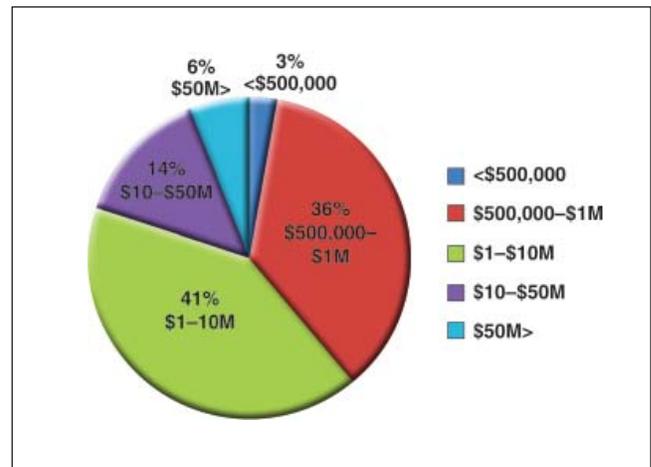
The average contract duration for design-build for contracts in 2009/2010 shown in Exhibit 4 have also remained constant with those of prior years. Please note that the contract durations in this analysis do not include the “operate” portion of DBO projects.

EXHIBIT 4  
Average Contract Duration (Years) (2005–2010)



Reported contract values remained steady in 2009/2010—but shifted in the various levels (Exhibit 5). In comparison with the 2008 study, 2009/2010 contracts averaging between \$1–10 million rose 23%—contracts ranging \$500,000 to \$1 million increased 18%; while those ranging from \$10 million and greater increased an average 4%.

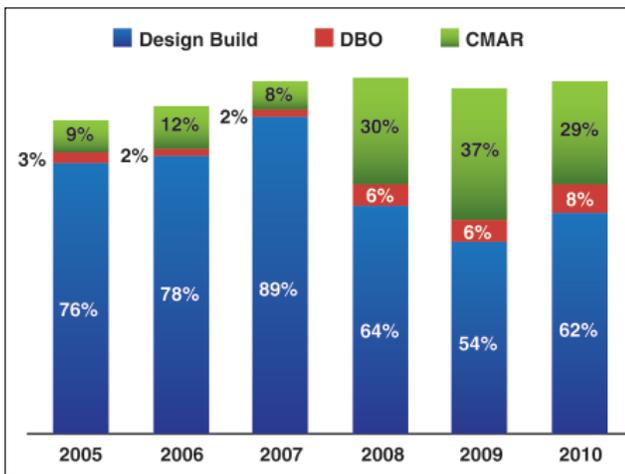
EXHIBIT 5  
2009/2010 Contract Values



In 2008, design-build was the most-used alternative project delivery method; with CMAR having an increasing market share (22%) (Exhibit 6).

In 2009/2010, the percentage of market share contracts (shown in Exhibit 7), illustrates an average market share growth of 35% for CMAR and an 7% increase for DBO as alternative project delivery methods since 2007.

EXHIBIT 6  
Market Share by Contract Type (2005–2010)



As presented in Exhibit 8, 2009/2010 design-build project sales according to the delivery type used continue to be strong with CMAR steadily increasing in market share since 2007.

EXHIBIT 7  
Market Share by Contract Type (2009/2010)

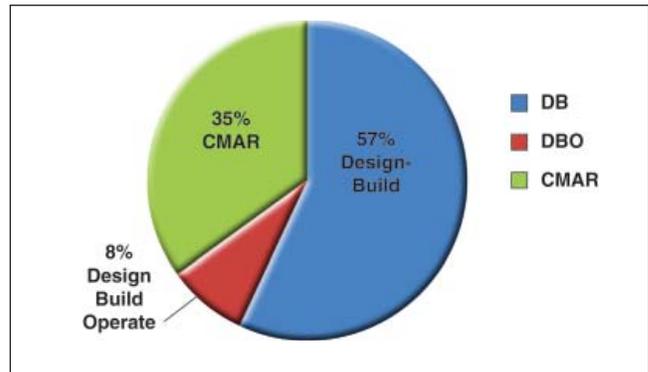
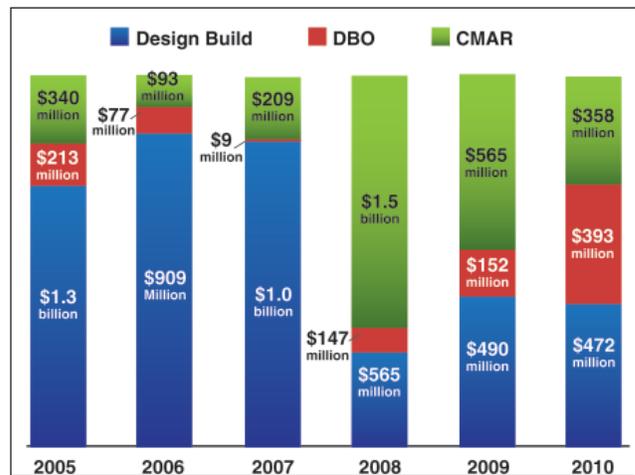


EXHIBIT 8  
Average Value of Contract Types per Year (2005–2010)



## Design-Build Locations

The data in this study represents projects sold in 35 states. Although the number of states not enabling the use of design-build methods for the water infrastructure has declined in the past five years, there are still a few with regulations that only permit traditional design-bid-build, and some with limited regulatory approvals. Since 2005, state legislation supporting the use of design-build for the water infrastructure has been steadily

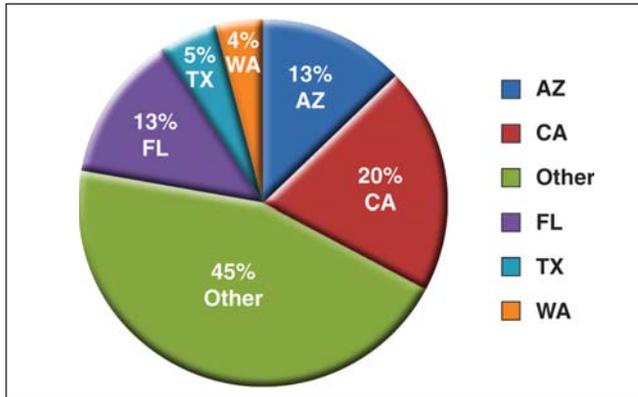
increasing, with many states embracing it as a preferred alternative delivery method. In 2011, there are only 10 states remaining that have limited legislation for design-build of water/wastewater systems (2010 DBIA).

Since 2005, California, Arizona, Florida, Texas and Washington have been leaders in the use of design-build for water/wastewater systems. These states alone ultimately account

*continued*

for 55% of member sales (see Exhibit 9). These states were also the early leaders with legislation approved enabling the use of design-build.

EXHIBIT 9  
5 States Lead Overall with Design-Build's  
\$8.8 Billion Sales (2005–2010)

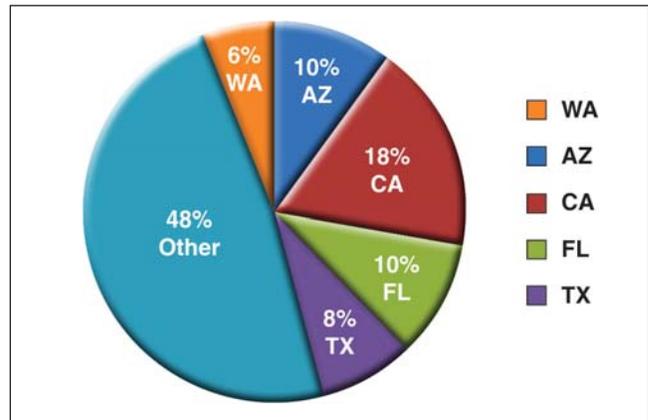


Among the five states leading in the use of design-build projects, there are interesting variables within the sales data from 2005 through 2010 as it relates to number of projects sold. As an example, Florida leads in the total sales value category reporting \$1.9 billion, with 76 sold projects averaging \$25 million per sold project. In contrast is California as a leader with a total of 117

sold projects in this same 6-year period at a reported \$1.5 billion, but only has an average sale value of \$12.6 million per project.

Similar to the 2008 data, the same 5 states continue to dominate in 2009/2010 with the percentage of sold projects. However, there are differences in the varying shifts in both the average sales value and number of projects sold among the leaders. In 2009 and 2010 (Exhibit 10) California is the lead state with 39 projects sold (a total of \$612 million) with an average sales value of sold projects at \$16 million.

EXHIBIT 10  
Top 5 States with an Average of  
Sold Projects in 2009/2010  
(Percent of \$2.4 billion sales volume in 2009/2010)



## Assessing the Municipal Design-Build Market

The 2009/2010 survey data shows that the design-build industry market has maintained its steady progress, with the exception of the spike in 2008. In addition, there are numerous indicators pointing towards future market growth. These indicators include increased attention being given to the issues affecting the water infrastructure, and an overall improvement in the economy. The 2009 and 2010 data also reflects that municipalities put on hold and delayed much needed improvements to repair aging systems and comply with regulations, which indicators for a more robust market coming years. This perspective will be further addressed in 2012 with an update of the 2011 Market Data.