Introduction

In 2013, the American Society of Civil Engineers (ASCE) Report Card for America’s Infra-structure stated that the US needs up to $1.3 trillion in capital investments to replace the aging water pipes and repair the wastewater infrastructures. It is further believed by the industry that the streamlined approach of alternative project delivery methods, such as Design-Build (DB), and Construction Manager At-Risk (CMAR) helps ensure the economical and timely design and construction of the water and wastewater infrastructures.

Objective

To measure the level of satisfaction of owners, project staffs, and decision makers in using the APD methods

Methodology

• Questionnaire survey was distributed between October 1, 2012 and December 14, 2012
• Out of 455 people, 153 people (35%) responded to the survey
• Qualtric Survey software was used to collect data

Results

Experience of the respondents

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB</td>
<td>33%</td>
</tr>
<tr>
<td>CMAR</td>
<td>21%</td>
</tr>
<tr>
<td>DB/CMAR</td>
<td>46%</td>
</tr>
</tbody>
</table>

Contractor selection process

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Value</td>
<td>78</td>
</tr>
<tr>
<td>Qualifications only</td>
<td>41</td>
</tr>
<tr>
<td>Price</td>
<td>15</td>
</tr>
</tbody>
</table>

Level of satisfaction with APD methods

- Level of owner’s involvement in the design process
- Quality of Completed Project
- Company’s communication process with Owner
- Overall Project Delivery Methods Experience
- Transition to Operation
- Lower claims and disputes
- Lower number of Change Orders
- Risk Distribution between Owner and Company
- Other Water Infrastructure System Owners with the use of Alternative Delivery Methods

Cost & schedule performance of projects using APD methods

- Schedule Advantage
- Better Quality
- Cost Advantage
- Few Disputes
- Other Reasons (Innovations, …)

Use of innovative ideas in projects using APD methods

- Use method again
- Innovative ideas used to save money or time or to improve quality

Conclusions

The use of APD methods saves cost and schedule in the projects. Majority of owners are satisfied with:
1. Level of owner’s involvement
2. Quality of completed projects
3. Communication among parties
4. Innovation used.