The cidb Construction Industry Indicators (CIIs) are measures of the performance of the industry, focusing on clients, the client’s agent / consultant and contractors. The CIIs have been captured annually since 2003, and are currently being captured by the cidb in partnership with the Department of Quantity Surveying and Construction Management of the University of the Free State.
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The summary results presented in this publication reflect selected indicators measured for projects completed in the 2010 calendar year. The survey results were obtained from client for 592 construction projects, and for contractors and sub-contractors on 1300 projects across all nine provinces. The indicators presented here cover:

- client satisfaction;
- contractor satisfaction;
- profitability and payment delays;
- procurement indicators; and
- health and safety.

### Key Focus areas – the “bottom 30%”:

As in previous years, while the overall performance results for the industry are encouraging, and in many cases show an improvement over previous years, the challenge is to raise the performance of the industry as a whole, and in particular the performance of “the bottom 30%”:

- Clients were neutral or dissatisfied with the performance of contractors on 16% of the projects surveyed in 2011.
- Around 15% of the projects surveyed had levels of defects which are regarded as inappropriate.
- Contractors were neutral or dissatisfied with the performance of clients on 21% of the projects surveyed.
- Contractors were neutral or dissatisfied with the quality of tender documents and specifications obtained from clients on around 22% of the projects surveyed.
- Contractors were neutral or dissatisfied with the management of variation orders on 26% of the projects surveyed.
- 65% of payments to contractors were made within 30 days or longer after invoicing.
- Quality (or functionality) was not taken into account in the adjudication of tenders on around 65% of public sector projects.
- Around 16% of the recommendations of the tender committee were overruled in the award of public sector projects.
- Around 8% of projects surveyed in the public sector were undertaken using contract documents other than those recommended in the *cidb’s* Standard for Uniformity.
- Safety on building and construction sites as well as transportation to the sites remains a concern.

The full report will be available on the *cidb*’s website [http://www.cidb.org.za](http://www.cidb.org.za).
Performance Improvement; Why is it Important?

What is client satisfaction?
The level of satisfaction of a client with a contractor’s performance on a project is an important indicator (or measure) of the contractor’s ability to execute and complete a project within the required expectations of the client. “Feedback is the food of champions”, and it is important for contractors to get feedback from clients on their projects so that they can improve their performance on future projects. These CIIs represent an aggregated industry view of the satisfaction of clients, contractors and the client’s agent.

Why is it important to improve?
The contractor’s survival depends on repeat work from clients, which is linked to the contractor’s performance on past projects. Contractors need to provide value for money to the client, as many clients are no longer awarding contracts on the lowest tender price, but also include the performance of the contractor on past contracts.

Contractors who improve their performance and, typically, who are above the industry norm will have a competitive advantage over their competitors. Contractors will also be able to complete the projects in less time, at less cost and higher quality and adding value for money to the client and higher profit margins for contractors.

“Clients in construction want their projects delivered on time, on budget, free from defects, efficiently, right the first time, safely and by profitable companies. Regular clients expect continuous improvement from their construction team to achieve year on year reductions in project cost and reductions in project time.”

Movement for Innovation (M4I), UK

These are but a few benefits that are possible through improved practice.

By capturing and publishing these CIIs, the cidb’s aim is to encourage the construction industry and its supply chain to strive to improve their performance.
Performance of the agent / consultants’ team:
Clients were satisfied with the overall performance of the agent employed on 84% of the projects surveyed in 2011. On the other hand, clients were neutral (i.e. neither satisfied nor dissatisfied) or dissatisfied on 16% of the projects. The results show little change over time.

A slight decrease in client satisfaction with the client’s agent was recorded with increasing project size. However, the variation in client satisfaction was smaller with the larger projects.
Performance of the contractor:

Clients were satisfied with the overall performance of the contractor employed on 85% of the projects surveyed in 2011. On the other hand, clients were neutral or dissatisfied on 15% of the projects surveyed in 2011. The client satisfaction observed in the 2011 survey is similar to that observed in 2010, but is a significant improvement over 2009 and 2008.

Client satisfaction with the overall performance of the contractor decreased noticeably with increasing project size, although the variation in client satisfaction was smaller on larger projects (i.e. the performance is more consistent on large projects). The decreasing client satisfaction with increasing project size may reflect the complexity of larger contracts and/or may be attributable to the fact that clients may be more discerning on larger projects.

Of significance is that the level of client satisfaction with the overall performance of the contractor in the 2011 survey was lower in the public sector than in the private sector, i.e. the public sector was less satisfied with the overall performance of the contractor. This is counter to that observed in previous years. A breakdown of public sector client satisfaction with the overall performance of the contractor employed shows that client satisfaction was highest in Limpopo, followed by Mpumalanga. These differences in client satisfaction with the overall performance of the contractor between provinces are likely to reflect both differences in the performance of contractors and differences in client expectations between provinces.
Construction schedule:
Clients were satisfied that contractors completed the project within the tendered construction schedule (excluding the impact of variation orders) on 83% of the projects surveyed in 2011, and were neutral or dissatisfied with the construction schedule on 17% of the projects. Significantly, there appears to be a sustained trend of increasing client satisfaction.

Quality of work delivered:
Overall, clients were satisfied with the quality of the completed work at handover on 85% of the projects, and were neutral or dissatisfied on 15% of the projects surveyed in 2011. Client satisfaction with the quality of work delivered continues to be the lowest in the residential building sector, followed by non-residential building. Client satisfaction with the quality of work delivered was highest in the electrical, mechanical and civil works sectors.

A breakdown of client satisfaction in the public sector with the overall quality of the completed work at handover shows that client satisfaction was highest in Mpumalanga and Limpopo. Similarly, clients are least satisfied with the quality of the completed work in the Northern Cape (which could be due to limited data), followed by the Western Cape and the Gauteng Province.

Again, it should be noted that the differences in client satisfaction between the provinces reflects both differences in the overall quality of the completed work at handover and differences in client expectations of quality.
Resolution of defects:
Clients were satisfied with the resolution of defective work during the construction period on 82% of the projects surveyed in 2011, and were neutral or dissatisfied on 18% of the projects surveyed. Satisfaction with the resolution of defects observed in the 2011 survey is significantly better than that observed in the 2008 survey, but does not appear to be showing any further improvement.

As with most aspects of client satisfaction with the performance of contractors, client satisfaction with the resolution of defects also tended to decrease with increasing project size.

Level of defects:
Around 86% of projects surveyed in 2011 were “apparently defect free” or had “few defects” at practical completion / handover, 12% of facilities had “some defects”, and 2% had “major defects” or were “totally defective”. The level of defects shows significant improvement over the 2008 survey, but has not shown any significant improvement between the 2009 and 2011 surveys.

Client satisfaction is a key factor in determining client loyalty and repeat business in the private sector. Quality is also increasingly being taken into account in the tender adjudication process in the public sector – and the cidb continues to advocate for the use of quality to be taken into account in the tender adjudication process.

While the overall results for client satisfaction continue to remain encouraging, clients remain neutral or dissatisfied with the performance of the client’s agents and contractors on around 15% of projects surveyed. These organisations should better manage their performance as it could substantially influence their ability to attract repeat business.

Of interest, it appears that public sector clients in Mpumalanga and Limpopo provinces are most satisfied with the overall performance of contractors and with the quality of completed work at handover, but it should be noted that client satisfaction reflects both the perceptions of clients of the overall quality of the work of contractors and the clients own expectations of quality.
Performance of the client:
Contractors rated the performance of clients as satisfactory on 79% of the projects surveyed in 2011, and were neutral or dissatisfied with the performance of the client on 21% of the projects surveyed. Contractor satisfaction with the performance of the client appears to have “stabilised” between the 2009 and 2011 surveys. Of significance is that contractors’ satisfaction with the performance of the client decreased significantly with increasing contract size, and that the variation in contractor satisfaction remained high with increasing contract size.

Contractor satisfaction with the performance of the client was highest with public corporations, and lowest with metropolitan councils, regional / district councils and the private sector. Furthermore, contractor satisfaction with the performance of public sector clients was highest in the Western Cape, Eastern Cape, and Limpopo, and was the lowest in the Free State and the North West. However, it is important to stress that the differences in contractor satisfaction between provinces is context specific, and conclusions should not necessarily be drawn such as the performance of clients in one province is necessarily higher that the performance of a client in another province. However, it is important to understand the underlying reasons for such perceptions of contractor performance of clients – many of which are highlighted in the following sections.
Quality of tender documents and specifications:
Contractors rated the quality of tender documents and specifications of clients as satisfactory on 78% of the projects surveyed in 2011, and were neutral or dissatisfied on 22% of the projects. Again, a noticeable decrease in satisfaction was observed with increasing project size.

Contractor satisfaction with the quality of tender documents and specifications was highest for provincial departments and regional / district councils – although this trend has shown quite significant changes from survey to survey. Furthermore, contractor satisfaction with the quality of documentation on public sector projects was lowest in Gauteng and the Free State.
Management of variation orders:

Contractors were satisfied with the management of variation orders on 74% of the projects surveyed in 2011, but were neutral or dissatisfied on 26% of the projects. Contractor satisfaction with the management of variation orders suggests a sustained increase over time. In the projects surveyed in 2011, contractors were least satisfied with the management of variation orders with the national departments, followed closely by the metropolitan council and the private sector clients. Similarly, as with the previous indicators surveyed, contractor satisfaction with the management of variations decreased with increasing project size.

Of significance is that there is a noticeable miss-match between the perceptions of the satisfaction of clients with the performance of contractors, and the satisfaction of contractors with the performance of clients on larger projects – with contractors being less satisfied with the performance of clients than clients being less satisfied with the performance of contractors.

A specific issue of concern is the quality of tender documents and specifications as well as the management of variation orders – and could be a reflection of the procurement capability of clients and their agents.
Profitability:
Contractors achieved profit margins of greater than 10% on 35% of the projects surveyed in 2011, while 34% of projects surveyed were undertaken at profit margins of around 5% to 10%. Of the projects surveyed in 2011 only 3% made a loss.
Payment of Contractors:
In the 2011 survey, 45% of payments to contractors were made within 30 days of invoicing, 47% between 30 to 90 days, and 7% over 90 days. Within the public sector, national departments and public corporations had the highest payment rates within 30 days or less.

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt; 14 days</th>
<th>14 to 30</th>
<th>30 to 60</th>
<th>60 to 90</th>
<th>90 to 120</th>
<th>120+</th>
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<tr>
<td>2011</td>
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<td>2010</td>
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<td>30%</td>
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<tr>
<td>2009</td>
<td>25%</td>
<td>25%</td>
<td>30%</td>
<td>20%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>2008</td>
<td>25%</td>
<td>25%</td>
<td>30%</td>
<td>20%</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Within the public sector, payment rates are reasonably consistent across all the provinces, but with the highest payment rates taking place in the Western Cape, Limpopo and Mpumalanga.

<table>
<thead>
<tr>
<th>Province</th>
<th>Private Sector</th>
<th>Public Corporation e.g. ESKOM, ACSA</th>
<th>National Department</th>
<th>Provincial Department</th>
<th>Metropolitan Council</th>
<th>Regional / District Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>53%</td>
<td>17%</td>
<td>47%</td>
<td>47%</td>
<td>59%</td>
<td>5%</td>
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<tr>
<td>FS</td>
<td>52%</td>
<td>15%</td>
<td>64%</td>
<td>28%</td>
<td>43%</td>
<td>11%</td>
</tr>
<tr>
<td>GP</td>
<td>53%</td>
<td>17%</td>
<td>47%</td>
<td>47%</td>
<td>59%</td>
<td>5%</td>
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<tr>
<td>KZ</td>
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<td>64%</td>
<td>28%</td>
<td>43%</td>
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<tr>
<td>LP</td>
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<tr>
<td>MP</td>
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<tr>
<td>WC</td>
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<td>15%</td>
<td>64%</td>
<td>28%</td>
<td>43%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Payment of Client’s Agent:
In the 2011 survey, 49% of payments were made to the client’s agent within 30 days of invoicing, 45% between 30 to 90 days, and 7% over 90 days. No significant improvement in the payment of the client’s agent has been observed since 2008. Within the general government sector, payment rates are lowest within regional / district councils and metropolitan councils.

Delayed payments to contractors and to client agents remains a concern, with only 45% to 50% of payments being made within 30 days of invoicing.

On a more positive note, contractors reported profits of more than 10% on 35% of the projects surveyed.
General Conditions of Contract:
The results of the 2011 survey show that, overall, the majority of projects are undertaken with contract documents that are in accordance with the cidb’s Standard for Uniformity. The lowest rate of compliance with the cidb requirements for contract documents is with provincial departments.

Adjudication of tenders:
The results of the 2011 survey show that quality (or functionality) was taken into account in the adjudication of tenders on around 40% to 55% of projects in the private sector, public corporations and provincial departments. Of concern is that quality (or functionality) was only taken into account in the adjudication of tenders in around 30% to 40% of projects in the national departments, and metropolitan and regional /district councils. Furthermore, of interest is an apparent low application of quality in the adjudication of tenders in the Northern Cape (but based on limited data), Free State, Eastern Cape and Western Cape.
A further assessment of tender adjudication on public sector projects is the award of tenders in accordance with the tender committee’s recommendations. The results of the 2011 survey suggest that overruling the recommendations of the tender committee in the public sector appears to be most prevalent in Limpopo, KwaZulu-Natal and Free State.

The evaluation of quality (or functionality) in the adjudication of tenders in the public sector remains low.

Of concern is the apparent overturning of public sector tender committee recommendations in Limpopo and KwaZulu-Natal, followed by Free State.

HEALTH & SAFETY INDICATORS

Health & Safety:
Construction related injuries and fatalities remains unacceptably high. Records of Health and Safety claims by the Federated Employers’ Mutual Assurance Company Limited (FEMA) for 2006 to 2010 (corresponding to the 2007 to 2011 surveys) show an ongoing increase in the number of fatalities. However, a large proportion of these fatalities (accounting for around 55% of the fatalities in 2010) are due to motor vehicle accidents – including non-work related MVAs.