



The Knowledge Leader for Project Success

Leveraging 25 Years of Industry Leadership

COAA Benchmarking Program Phase II

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COAA Best Practices Conference

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Edmonton, Alberta

Building On
25 Years



Why Benchmarking?

(Texas Hold-Em – 2 Players)



Bob Benchmarker

Winning Percentage

37.6% (Before Flop)

26.0% (After Flop)

95.5% (After Turn)



Will Chansit

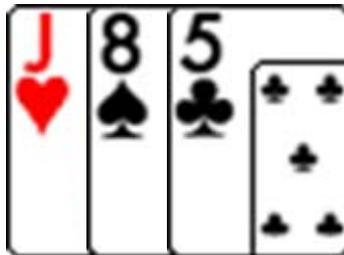
Winning Percentage

?

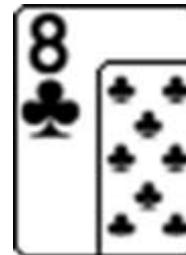
?

?

WINNER!



Flop

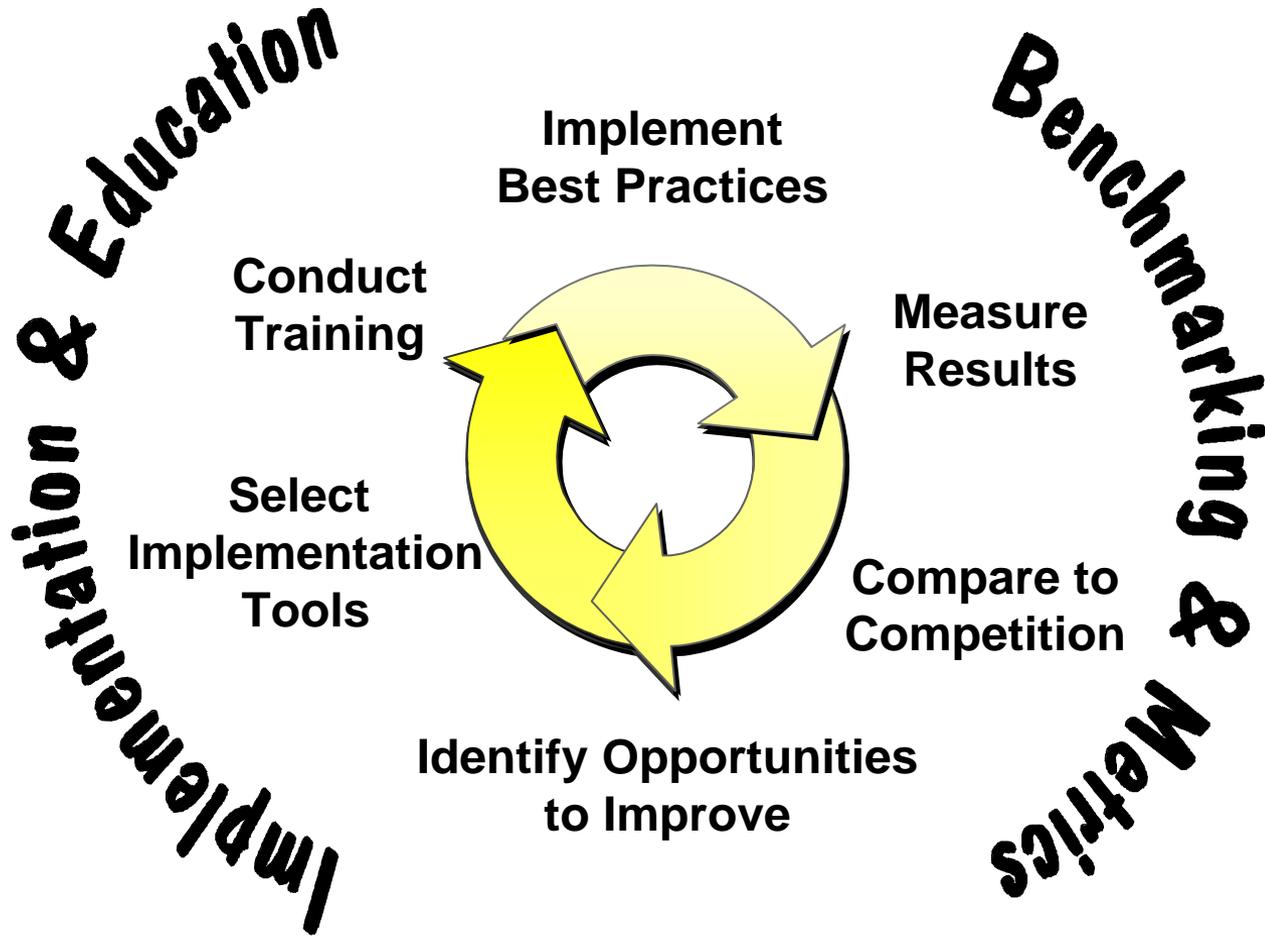


Turn

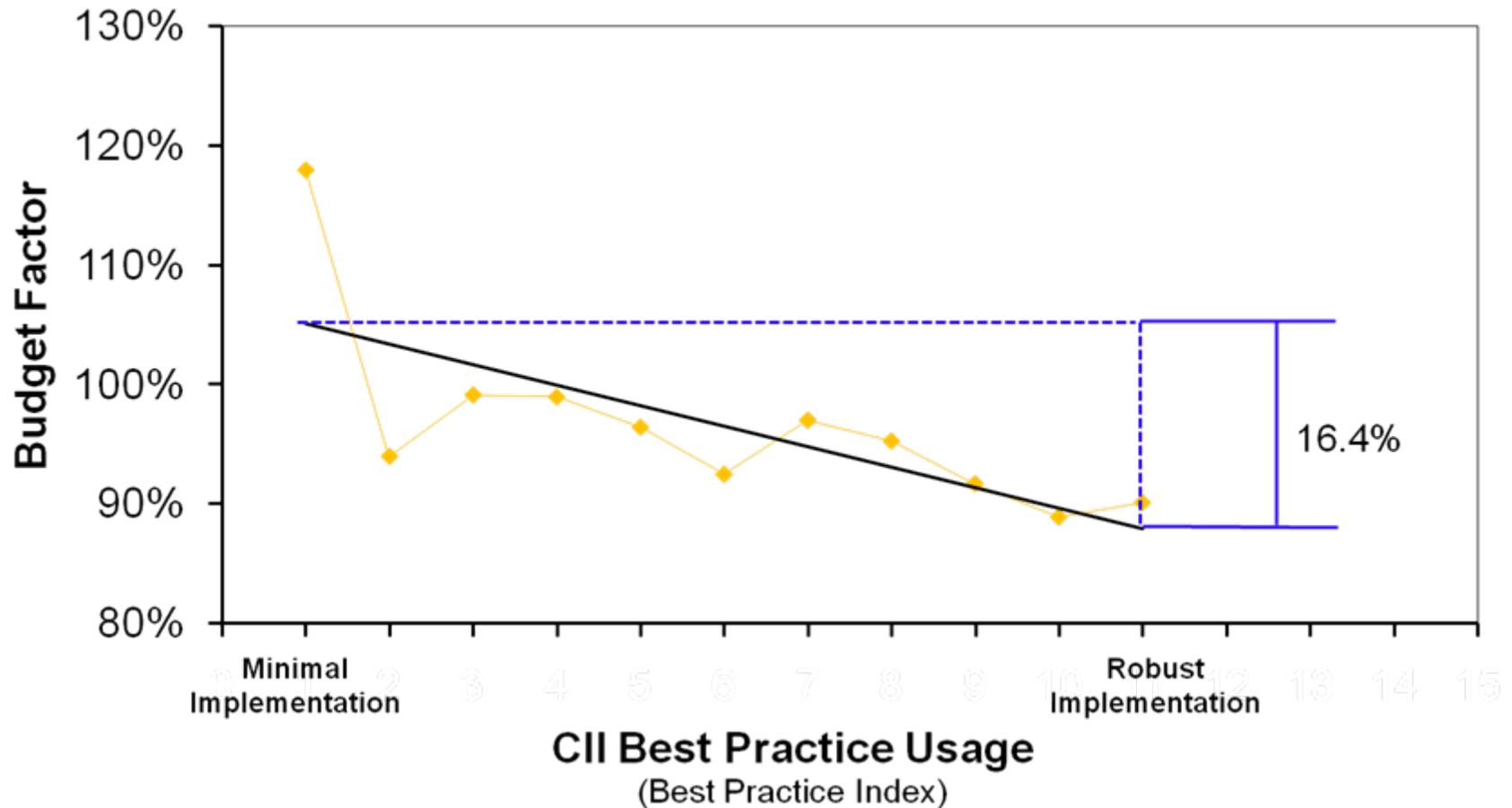


River

Integral to the Improvement Process

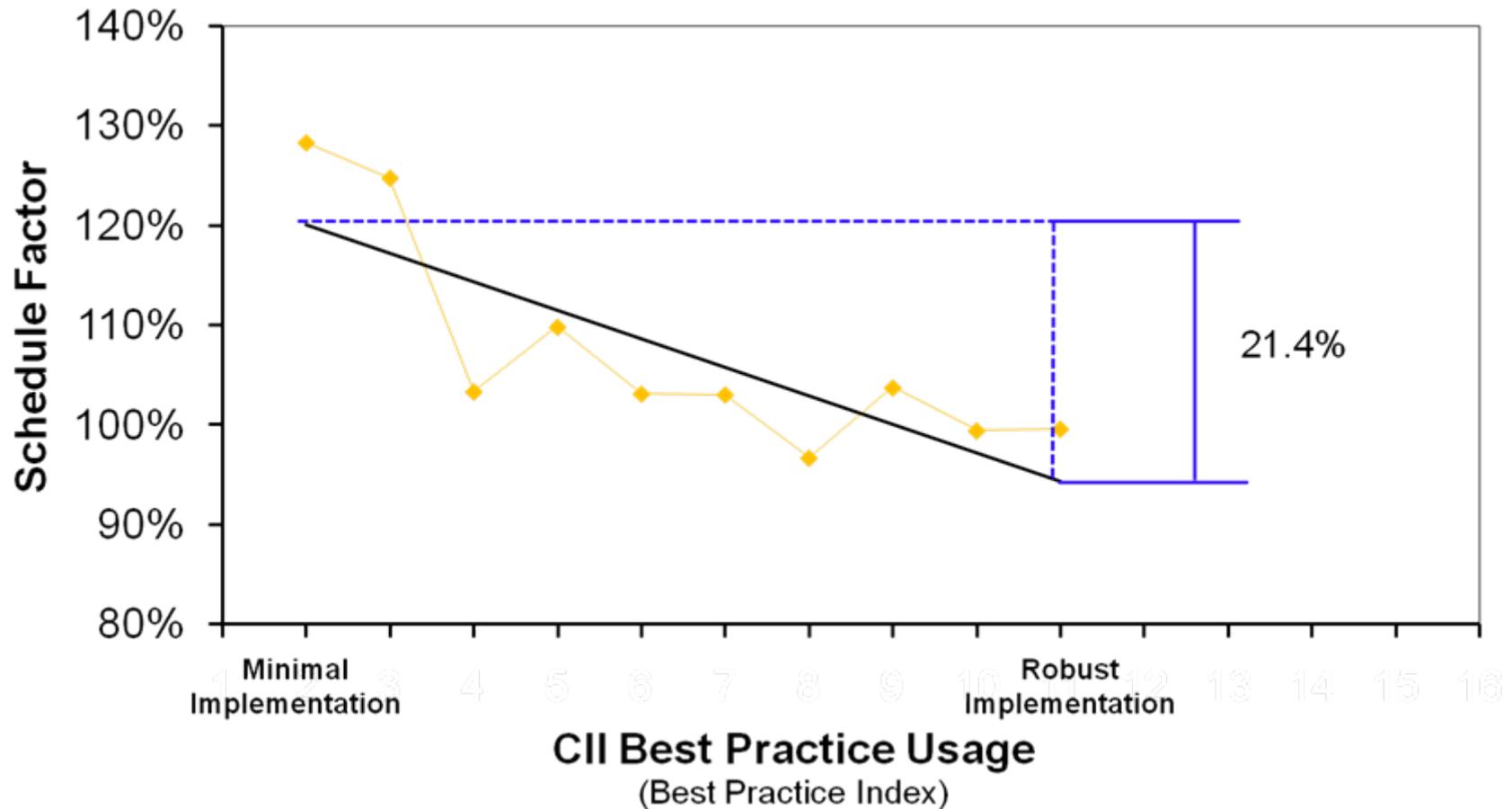


Value of Best Practices (CII Owners)



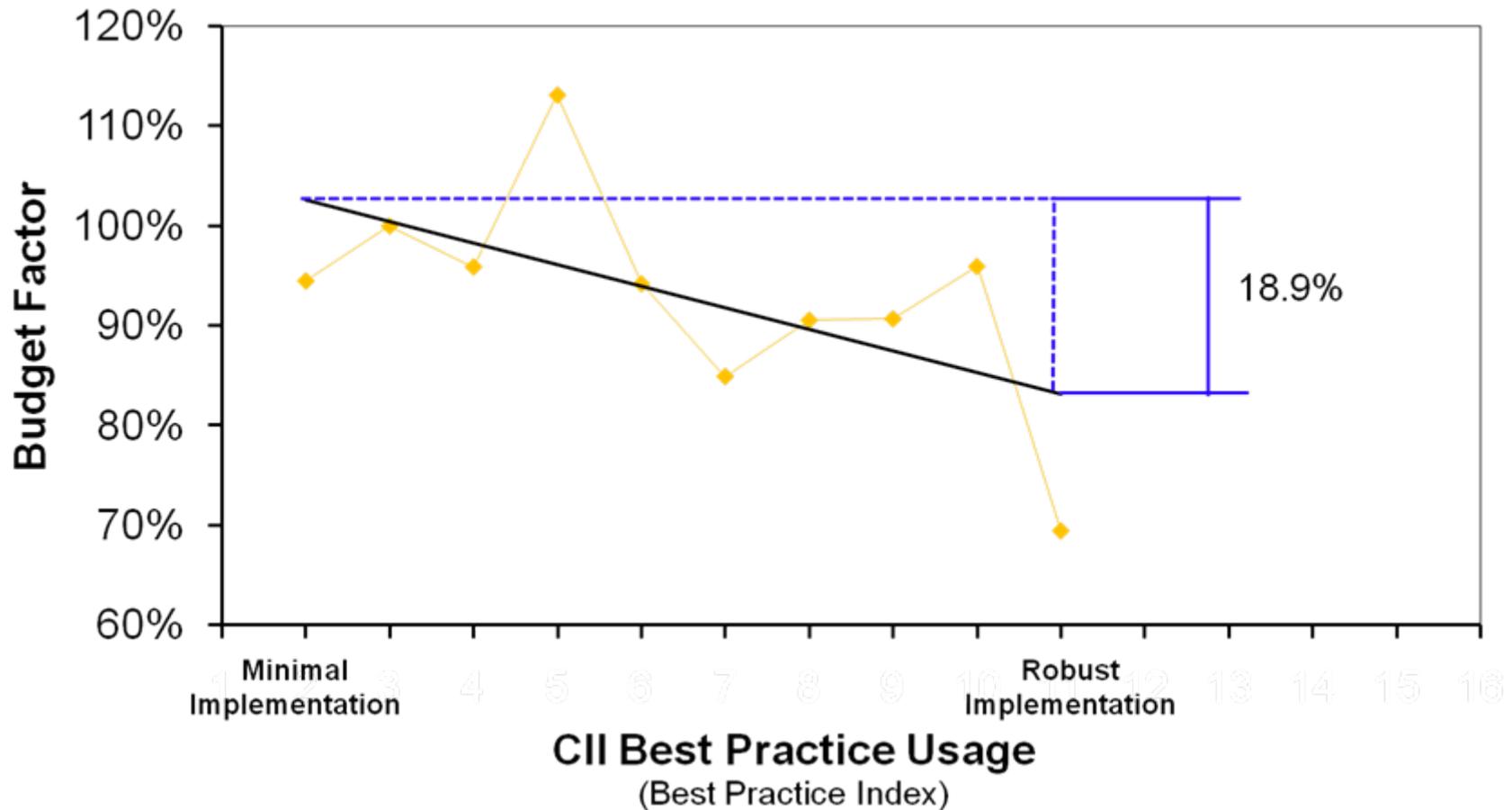
Note: Average Budget 53 Million, submitted after 2002 (n=152)

Value of Best Practices (CII Owners)



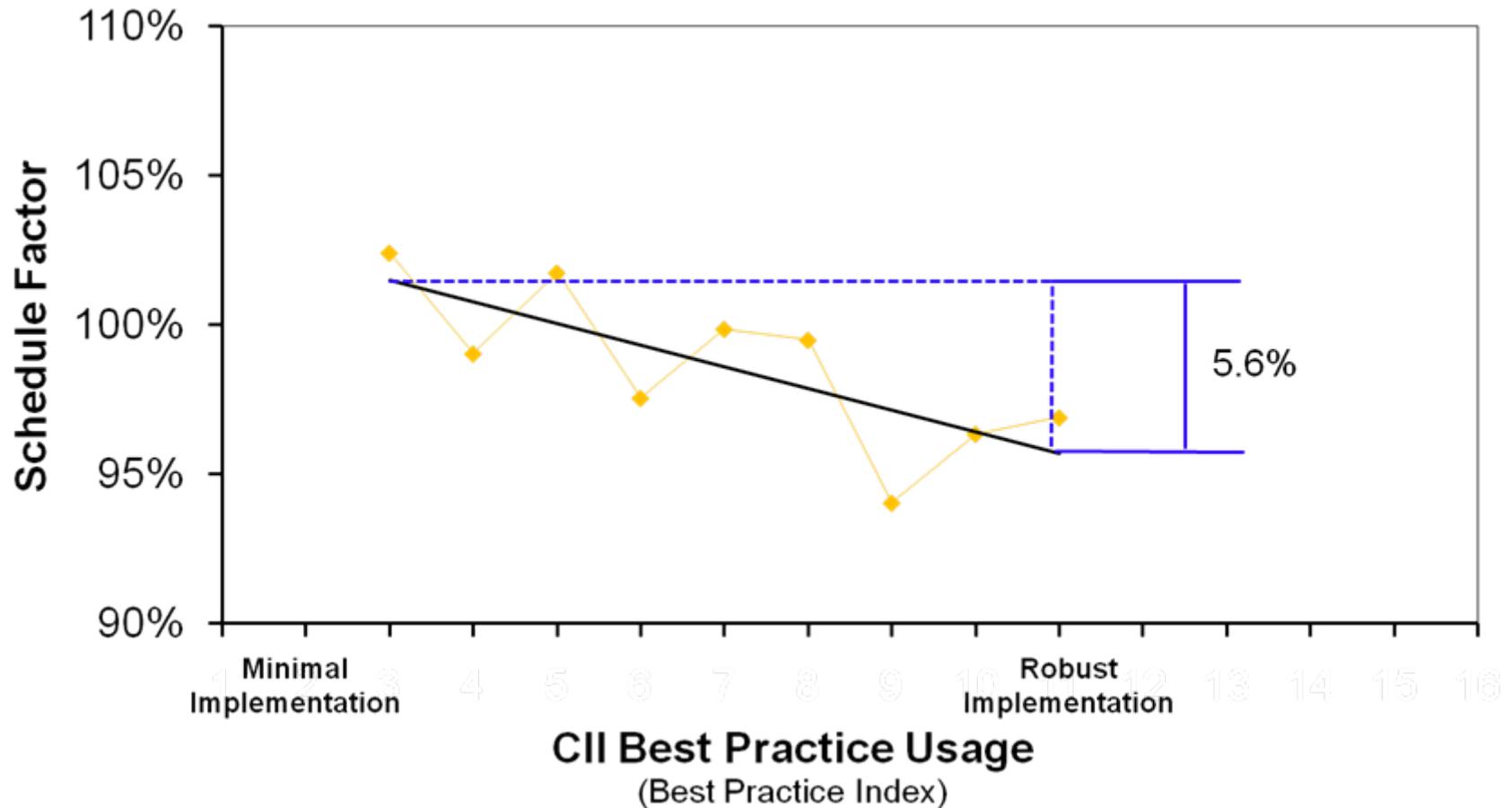
Note: Average Planned Duration 135 weeks, submitted after 2002 (n=152)

Value of Best Practices (CII Contractors)



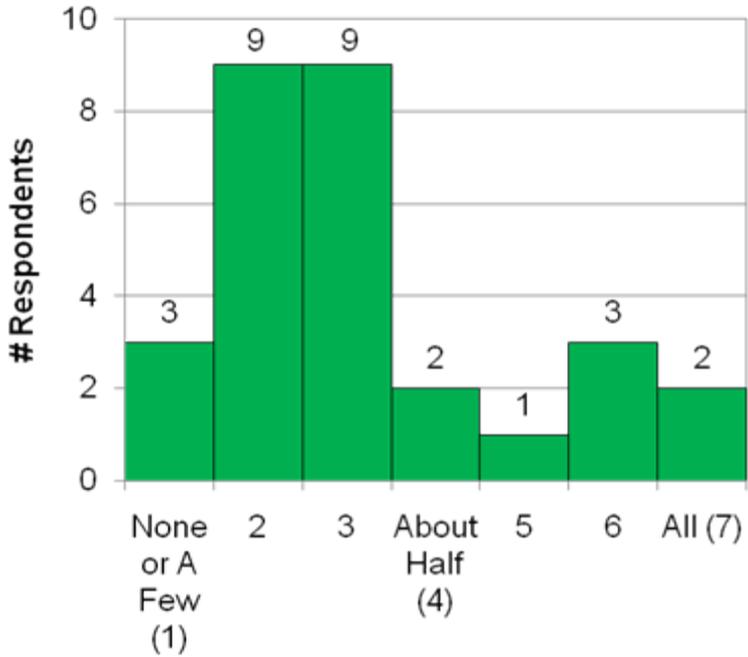
Note: Average Budget =58 Million, submitted after 2002 (n=81)

Value of Best Practices (CII Contractors)

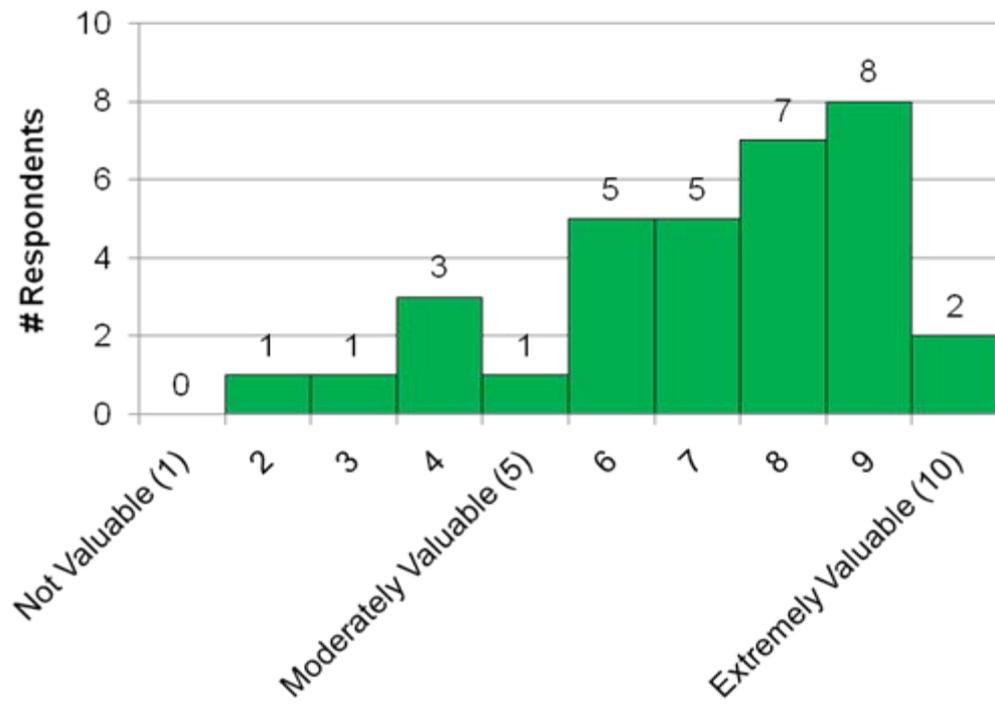


Note: Average Planned Duration=109 weeks, submitted after 2002 (n=81)

Benchmarking is a COAA Best Practice



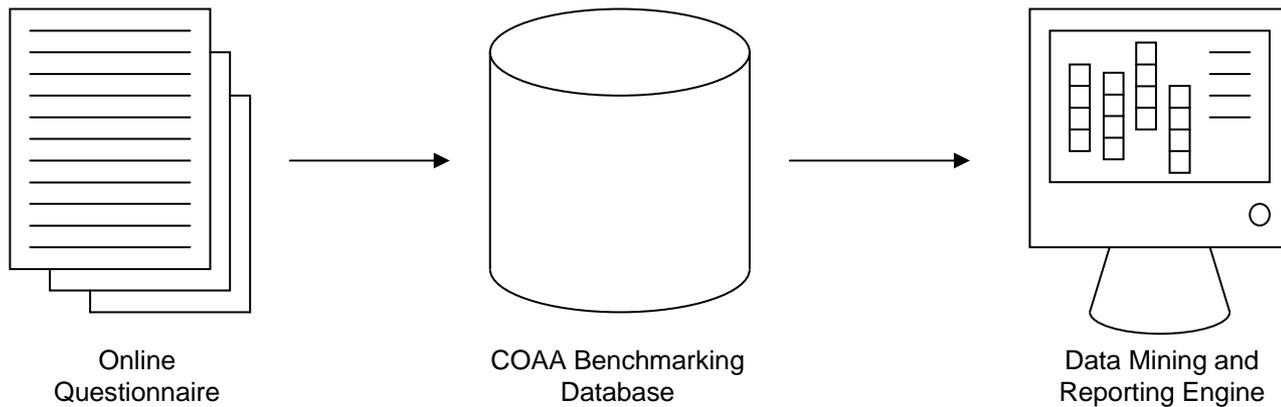
Projects' Use of external Benchmarking



Value of Benchmarking

COAA Benchmarking (Phases I and II)

- 3-Step Process



Program Changes (2009)

- Level 1 Productivity
 - Engineering Productivity Index
 - Construction Productivity Index
- Tier 1 Questionnaire
 - Contains 20% of All Questions
 - Remaining 80% Still Available (Optional)
- CII Summer Intern Program
- Additional Industry-Specific Metrics (U/S & D/S Oil & Gas)
- NextGen Benchmarking System

Project-Level Productivity

- Engineering Productivity (1 Number)
- Construction Productivity (1 Number)

Level I (Project)

Project

Level II (Discipline)

Total Piping

Level III (Sub-Category)

**Total
Small Bore**

**Total
large Bore
(ISBL)**

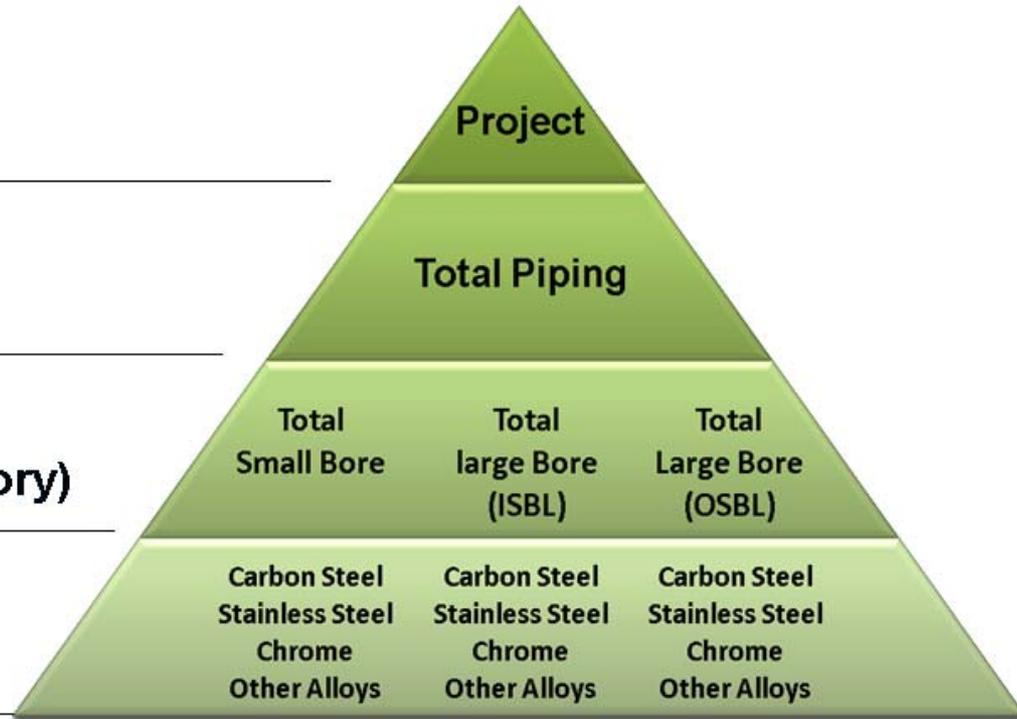
**Total
Large Bore
(OSBL)**

Level IV (Element)

**Carbon Steel
Stainless Steel
Chrome
Other Alloys**

**Carbon Steel
Stainless Steel
Chrome
Other Alloys**

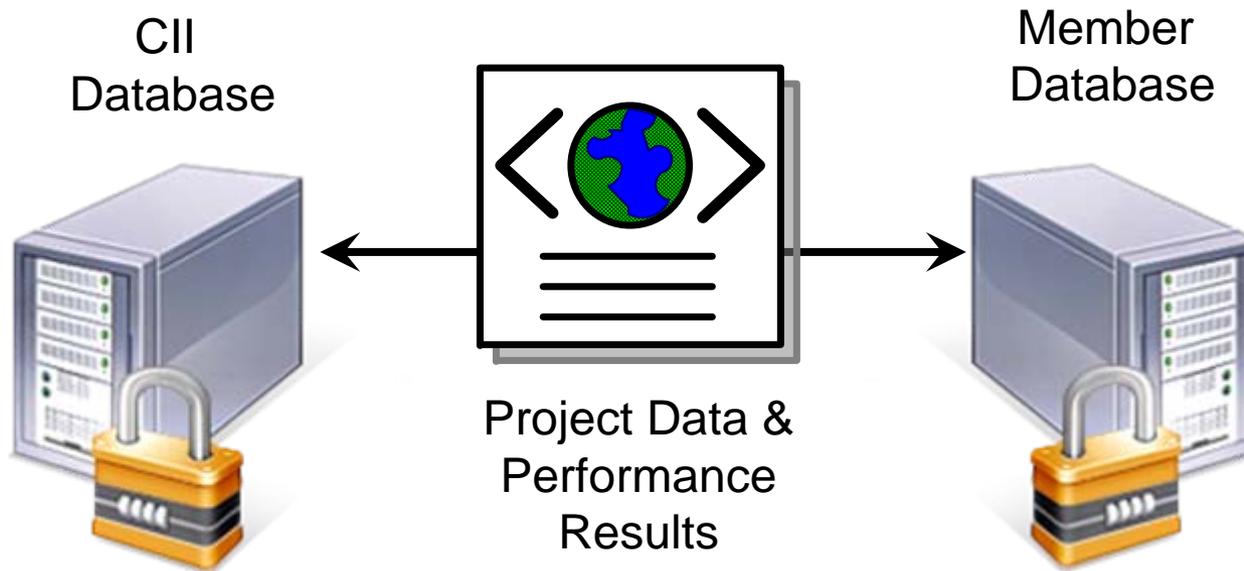
**Carbon Steel
Stainless Steel
Chrome
Other Alloys**





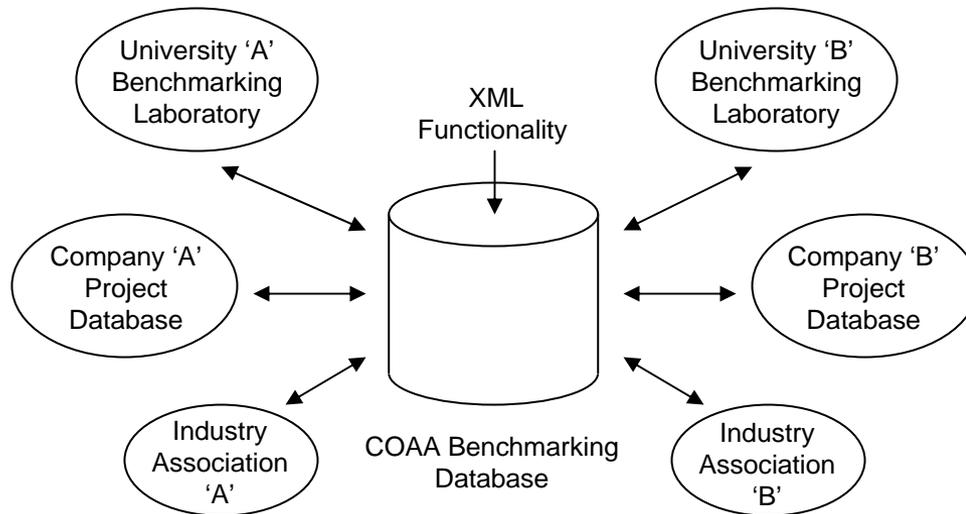
Automated Data Entry

- Benchmark **ALL** your projects (350 Projects / Year)



NextGen System (2009)

- Federated Architecture
 - XML Functionality Enables:
 - Data Transfer from Member Companies / Participants
 - Data Transfer from University 'Benchmarking Labs'
 - Projects from Industry Associations



Phase II Features

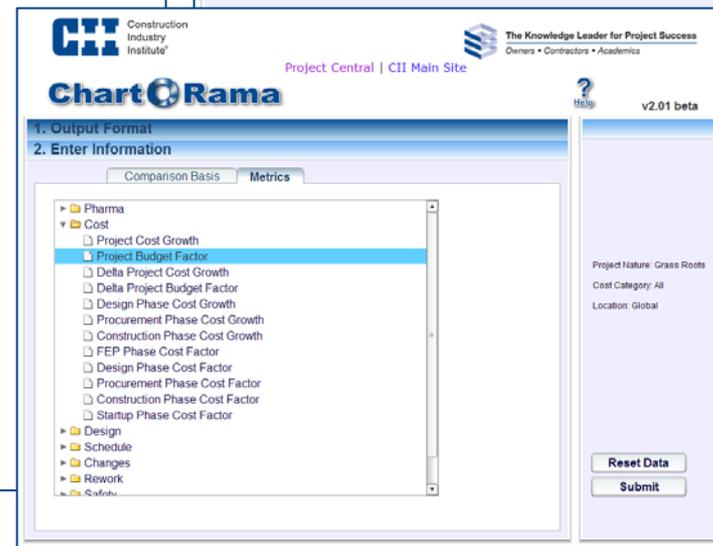
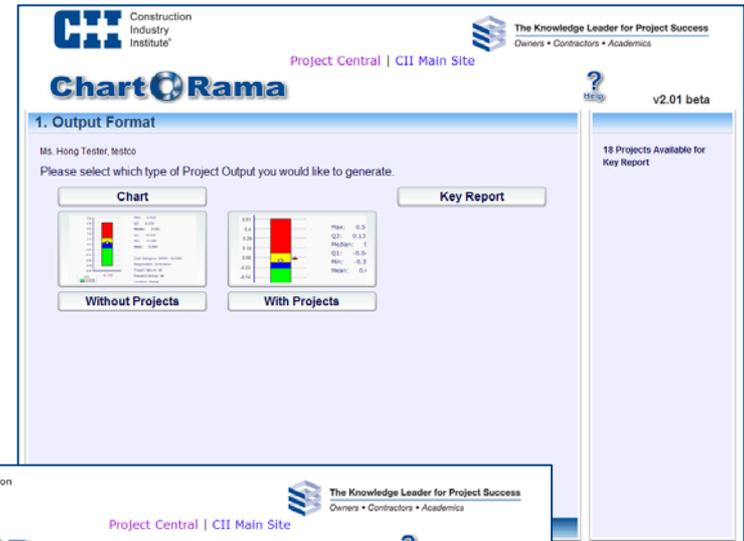
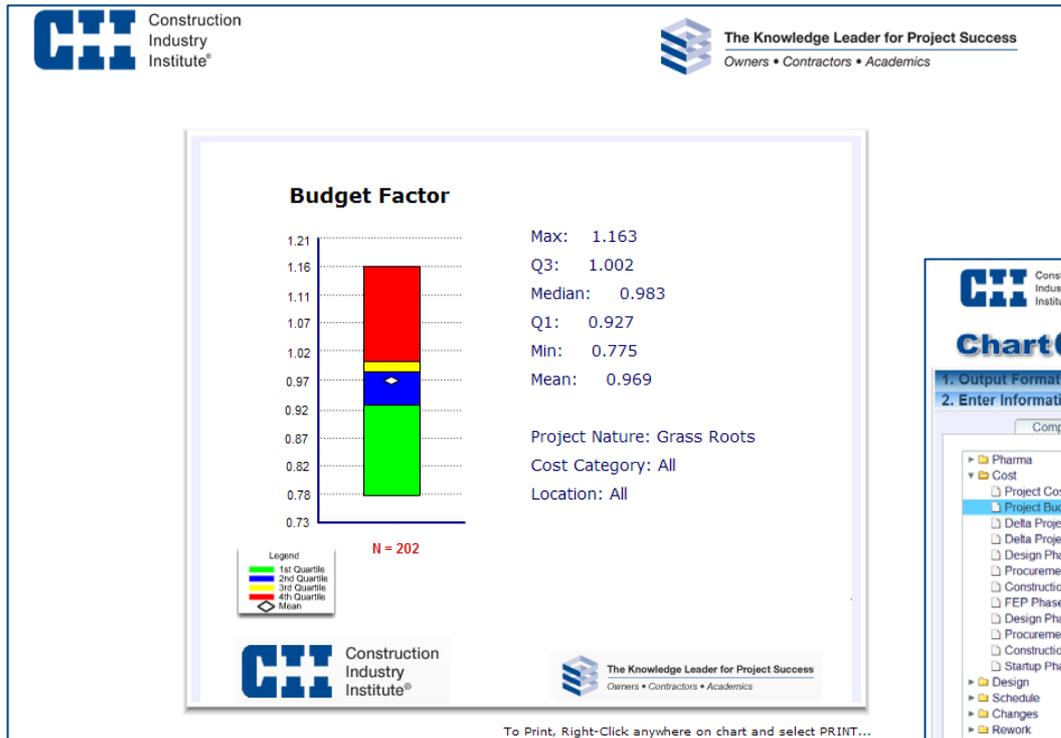
- Customized Questionnaire Development
 - Additional Absolute Metrics (\$CDN/??)
 - Indirect Costs (Detail)
 - Pipeline Projects
 - Modularization (Productivity in Fab Yard)
 - Other (Scaffolding, Project Delivery, Construction Productivity)
- Alberta-Based Benchmarking Lab
 - Full-Time Alberta-Based Support
 - Real-Time (OTJ) Training
- Alberta Report #2

Phase II System Enhancements

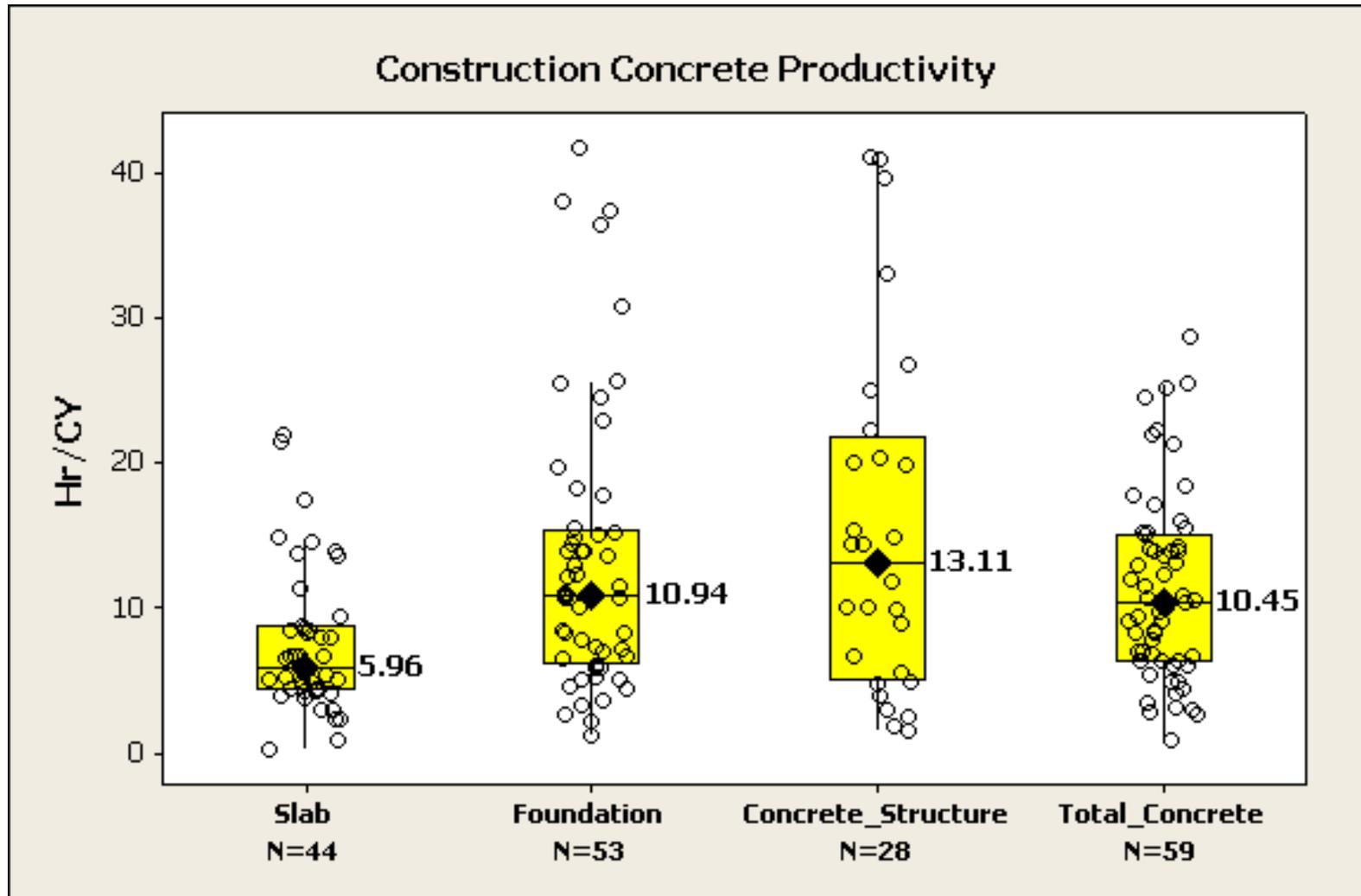
- Internal (Business Unit, Product Line) Benchmarks
- Automated Key Reports
- Company-Level Reports
- Executive Dashboard
- Full Data Mining Capability
 - Comparisons with CII (U.S.) Database
 - “Level 1” Productivity Metrics (All Disciplines)

Phase II Data Mining

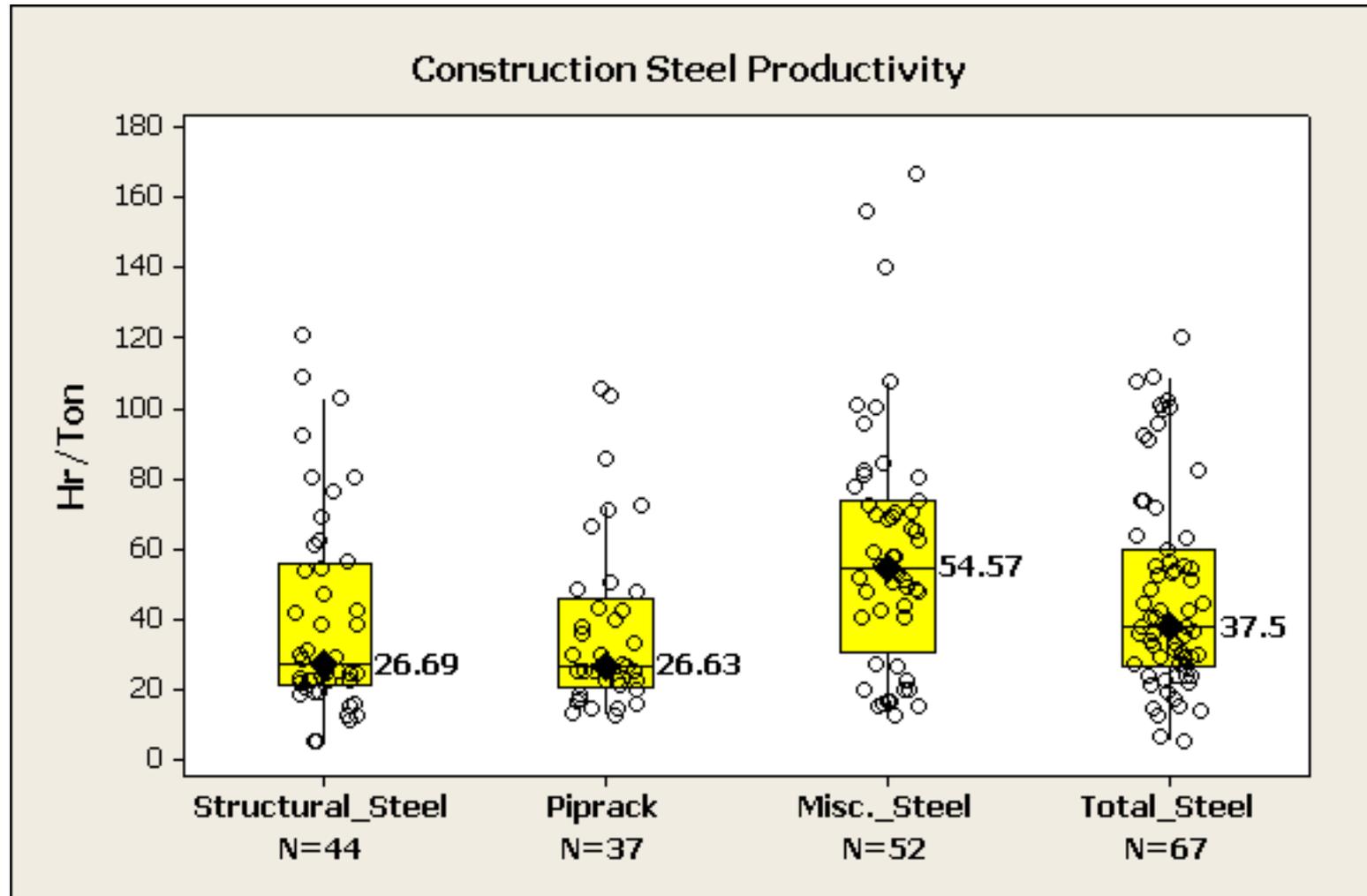
- Web-Enabled Queries



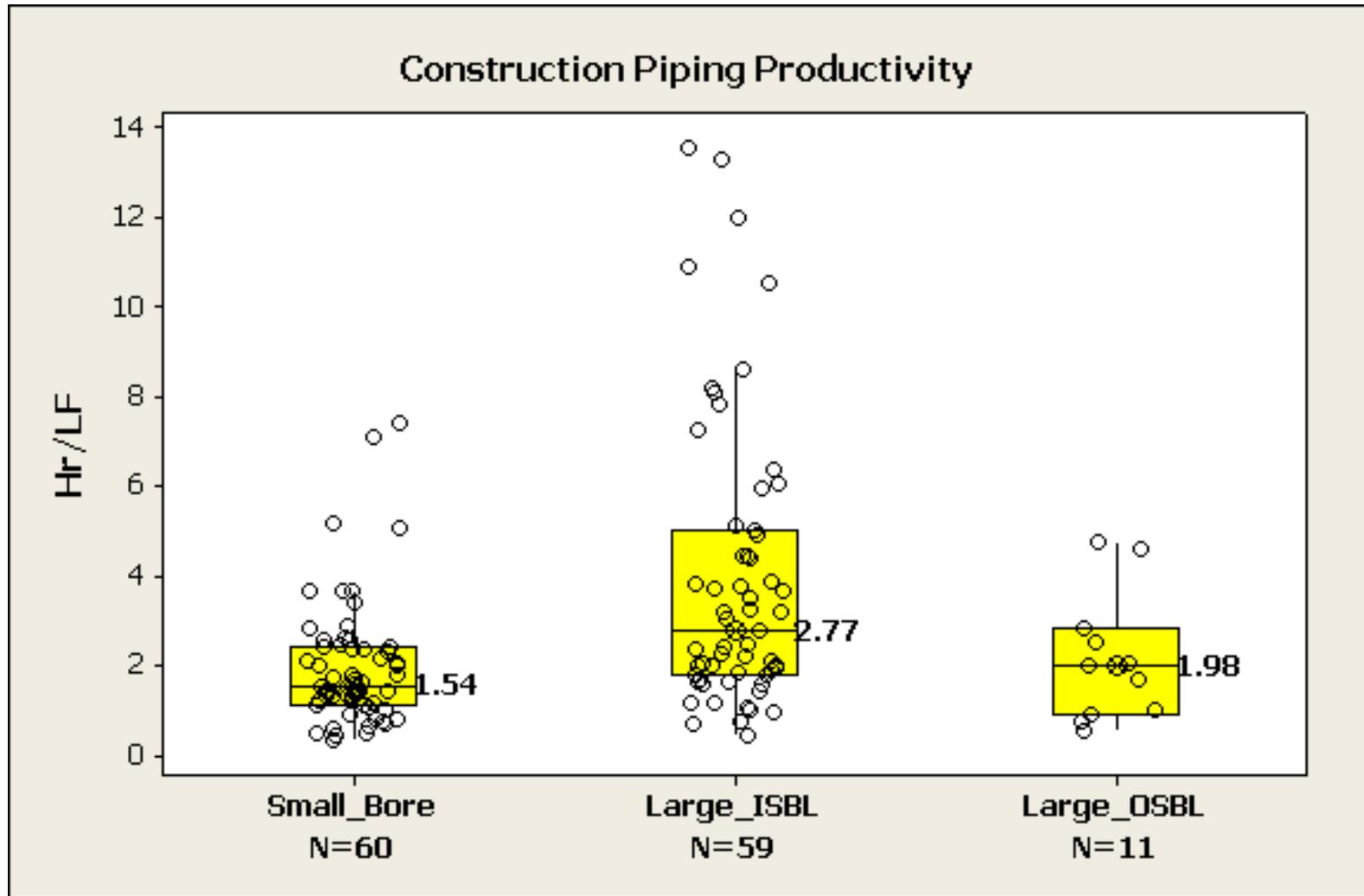
Concrete Construction Productivity



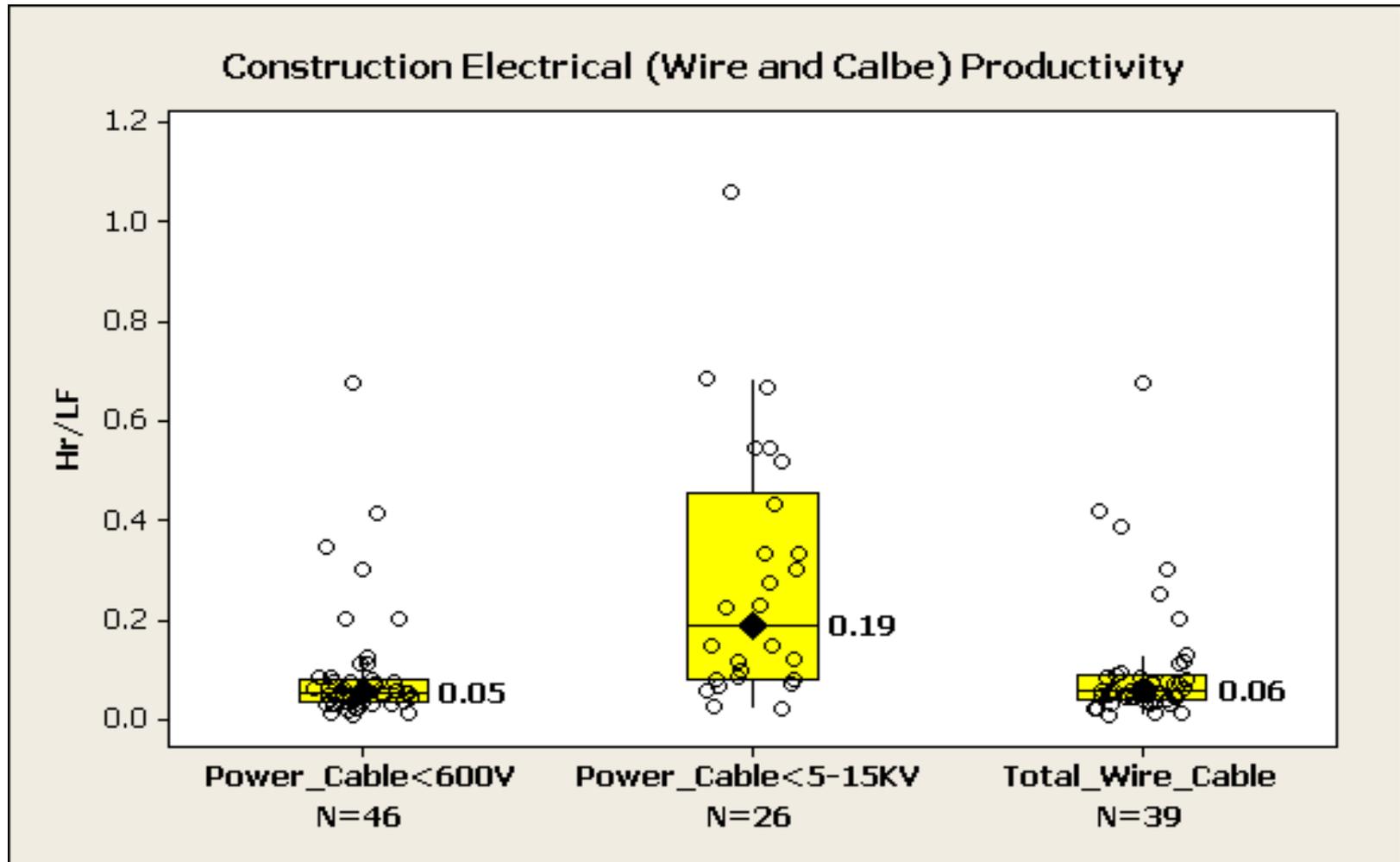
Structural Steel Construction Productivity



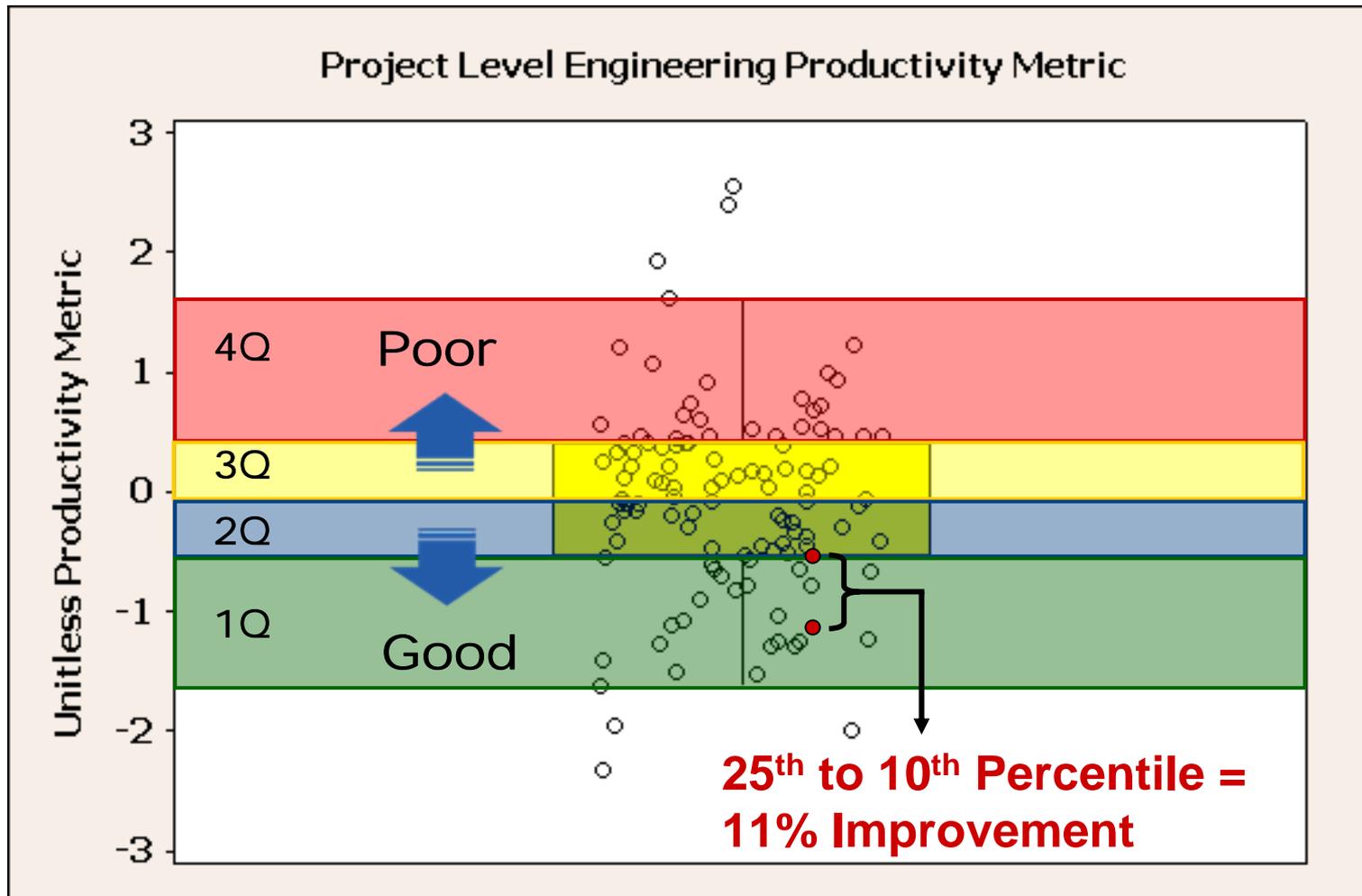
Piping Construction Productivity



Electrical Construction Productivity



Project-Level (Engineering) Productivity

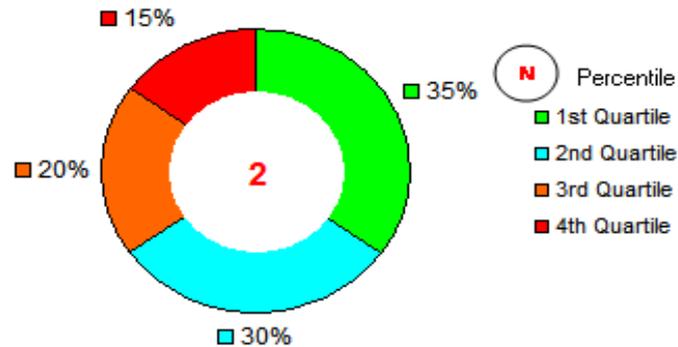


Executive (Portfolio) Dashboard

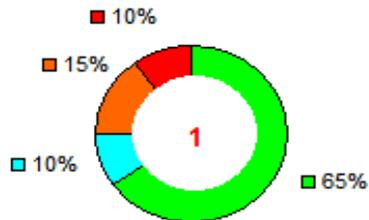
■ All Projects

Number of Project : 20

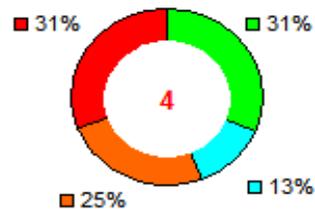
Overall Project Performance



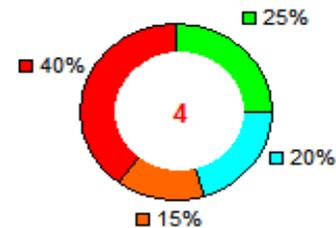
Cost Performance



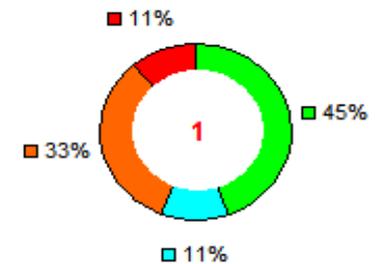
Schedule Performance



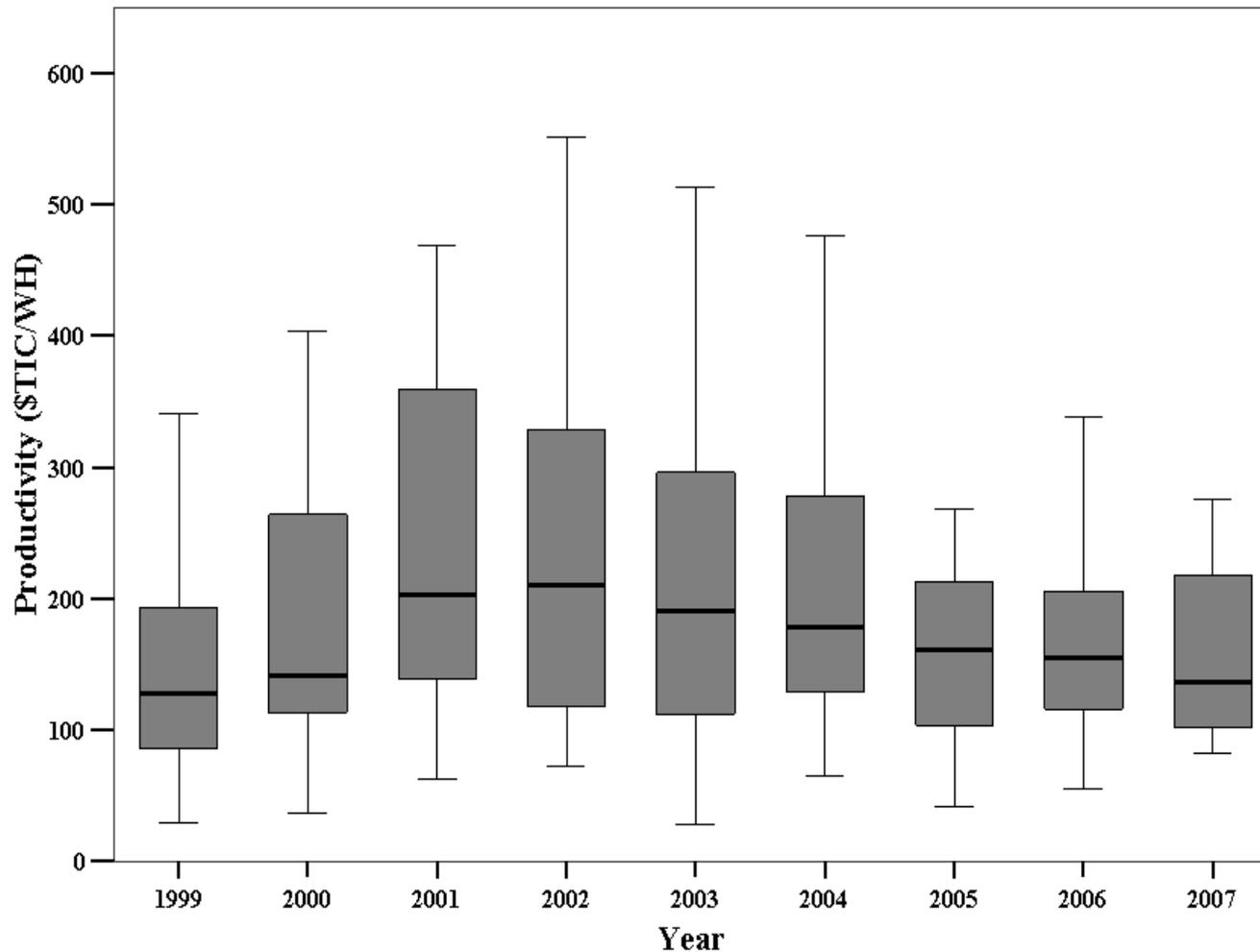
Dimension Performance



Practice Use Performance

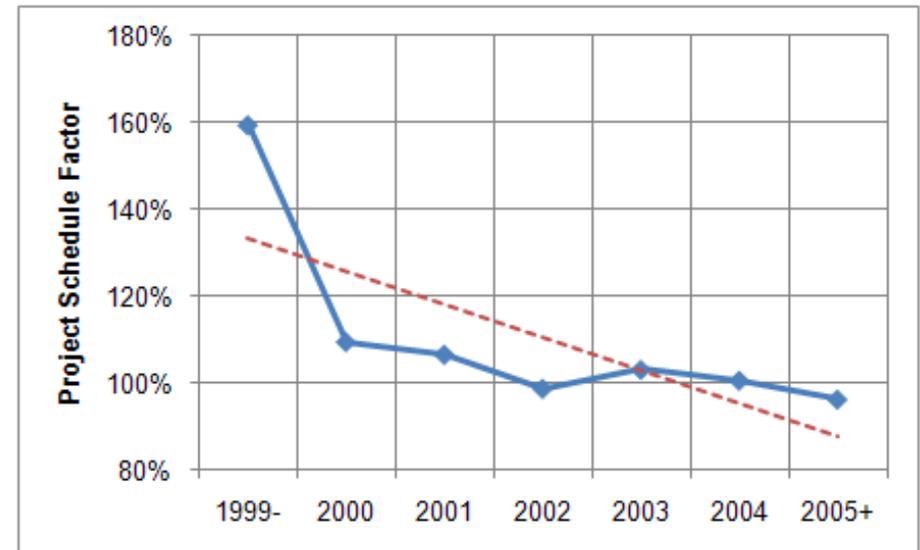
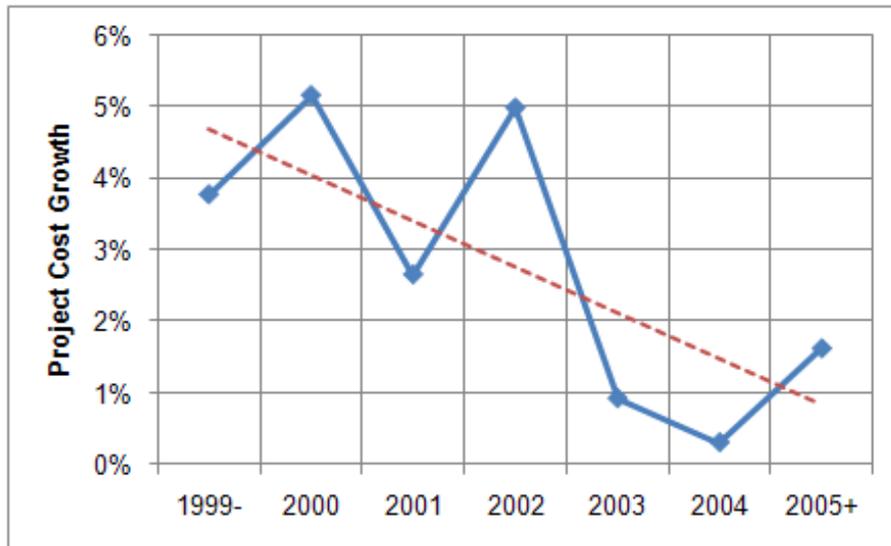


U.S. Dept. of Commerce / NIST Study



Does Benchmarking Work?

Cost (Growth) and Schedule (Factor) Trends



Questions?

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