



**Construction
Clients' Group**
CONSTRUCTING EXCELLENCE

Share, Learn, Innovate
...Together

CCG Annual Members Event 2011



The NZ Construction Industry
Benchmarking Programme



Amanda Warren, CCG

Japanese Study Tour 2010



“How many of your projects are on target?...

.....time, cost, quality, safety, satisfaction?”



An aerial night view of a city skyline, likely New York City, with numerous skyscrapers illuminated. The scene is dominated by blue and white light, with some warmer tones from building lights. The perspective is from a high vantage point, looking down and across the city.

“If we are not being too modest.....”

“100%”

UK Study Tour 2006





1998
Sir John Egan



2009
Andrew
Wolstenhulme

Five key drivers for change

- Committed leadership
- Focus on the customer
- Product team integration
- Quality driven agenda
- Commitment to people

Four key project processes



Seven targets for improvement

- Capital cost **-10%**
- Construction time **-10%**
- Predictability **+20%**
- Defects **-20%**
- Accidents **-20%**
- Productivity **+10%**
- Turnover & profits **+10%**

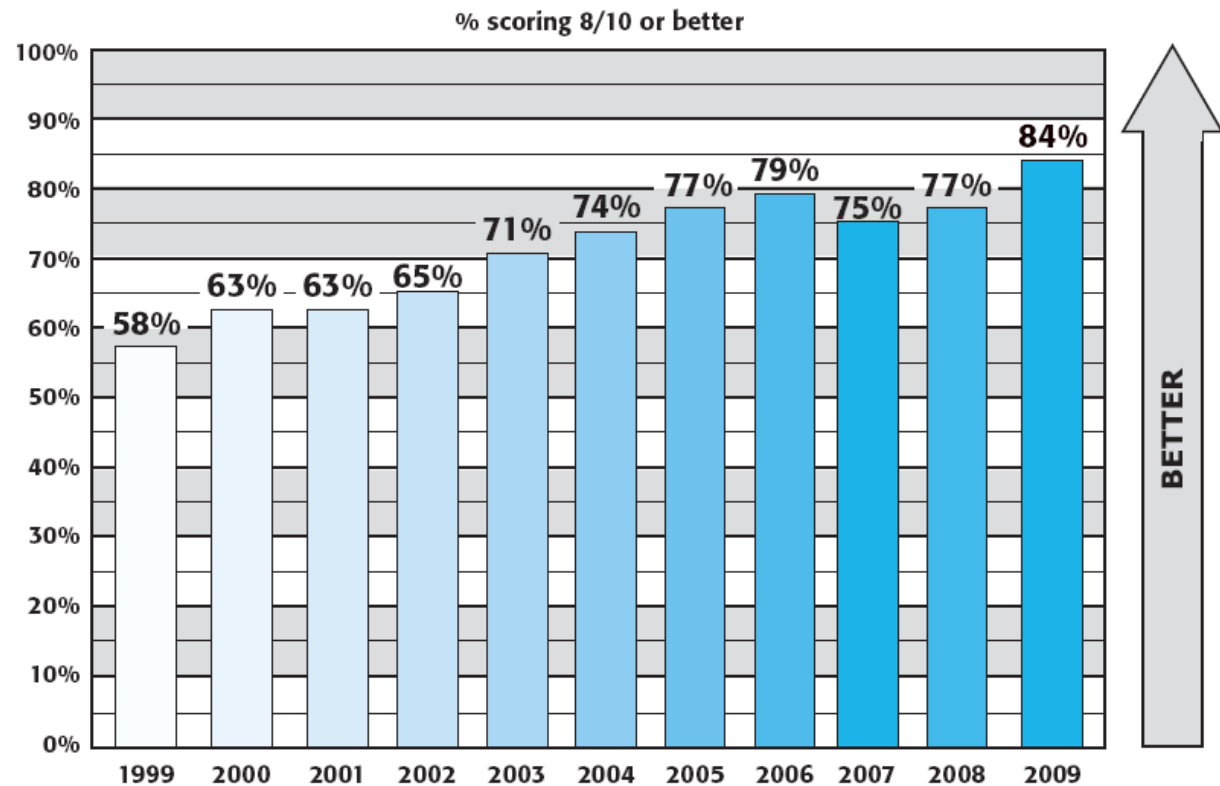
Industry Demos

Industry	Demos
✗	✓
✗	✓
✗	✓
✓	✓
✓	✓
✓	✓
✓	✓



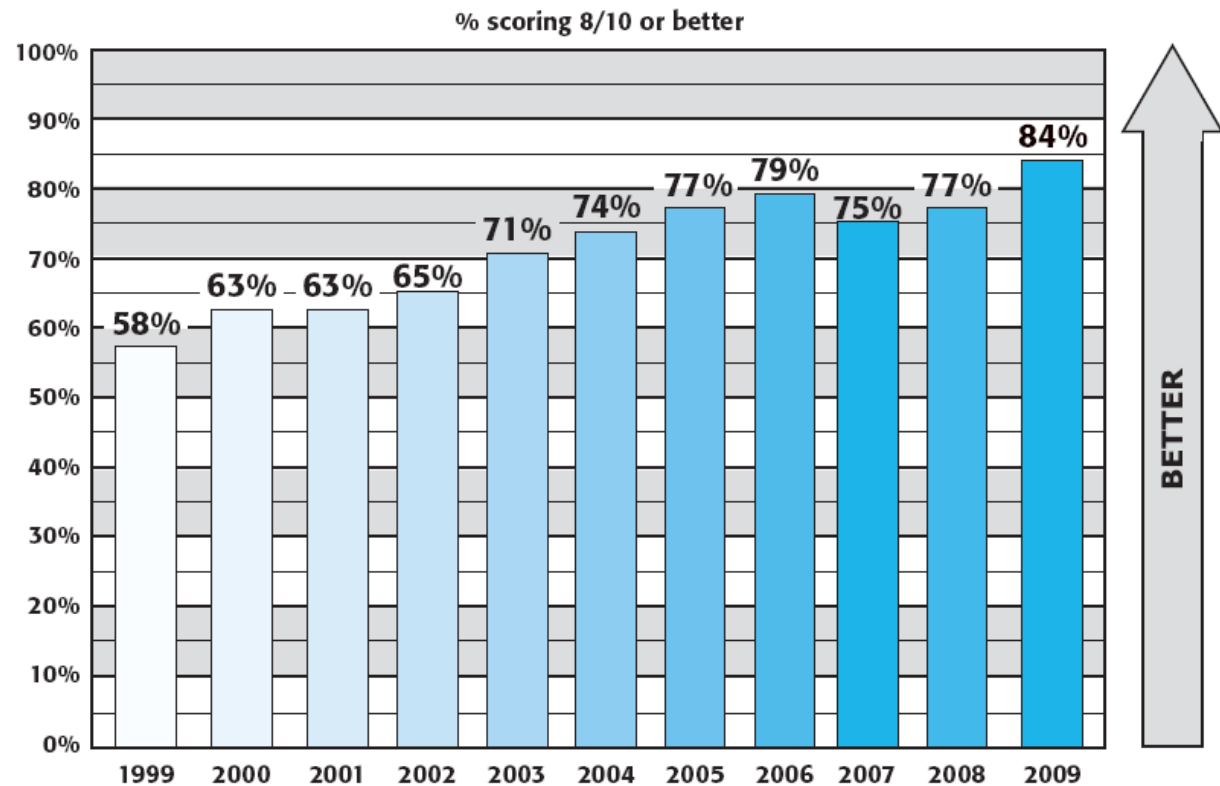
How do your projects perform?

Client Satisfaction - Service



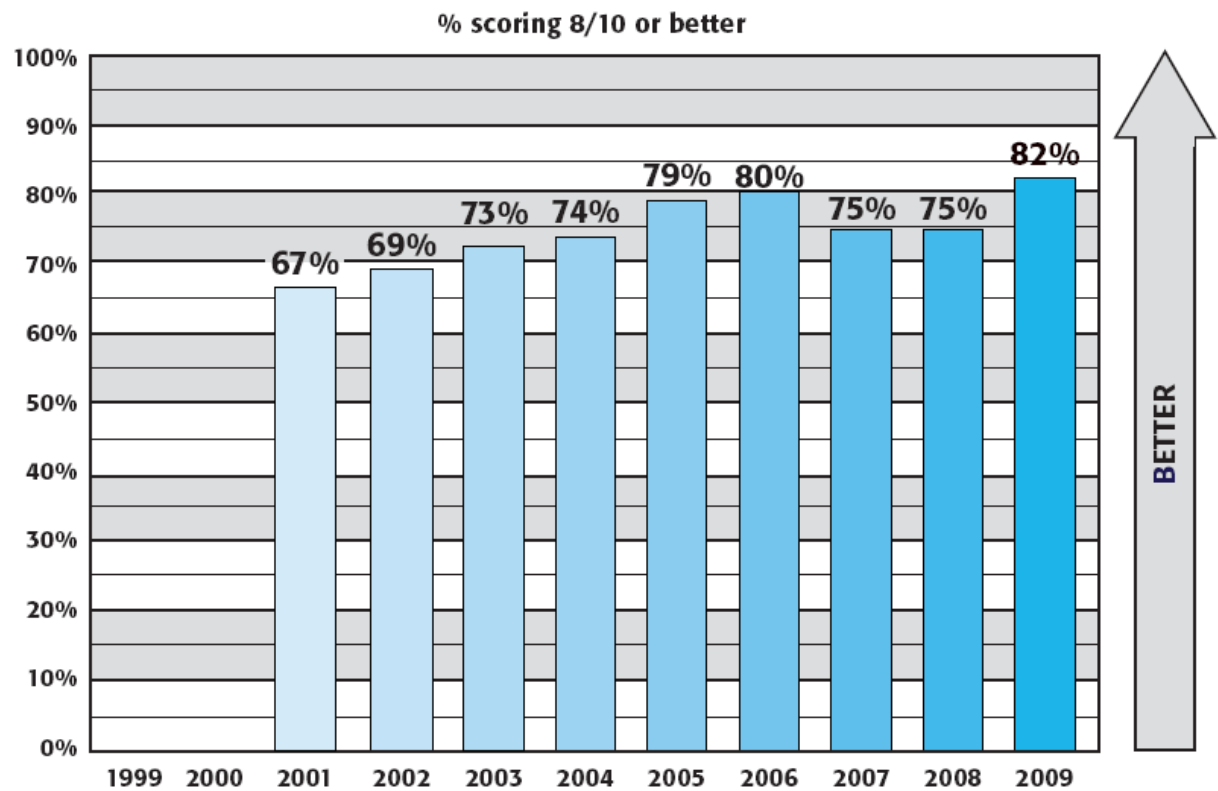
How do your projects perform?

Client Satisfaction - Service



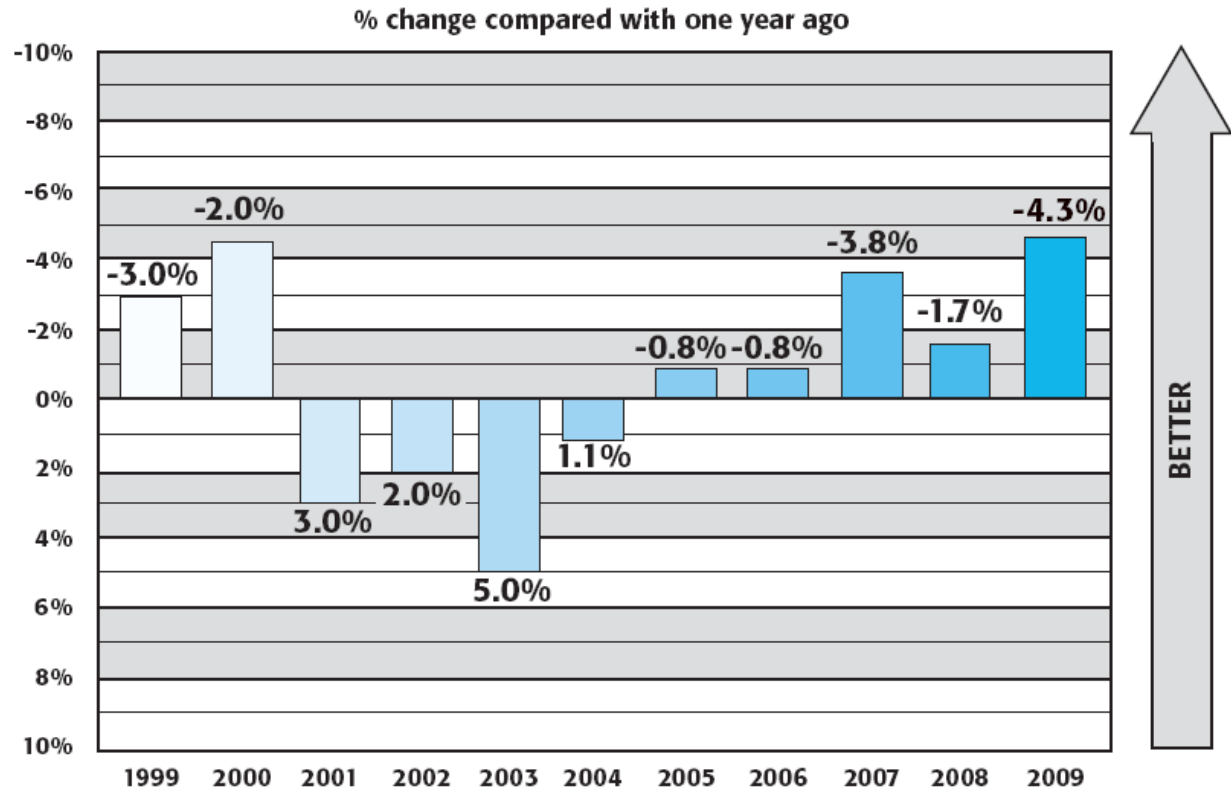
How do your projects perform?

Client Satisfaction - Value for Money



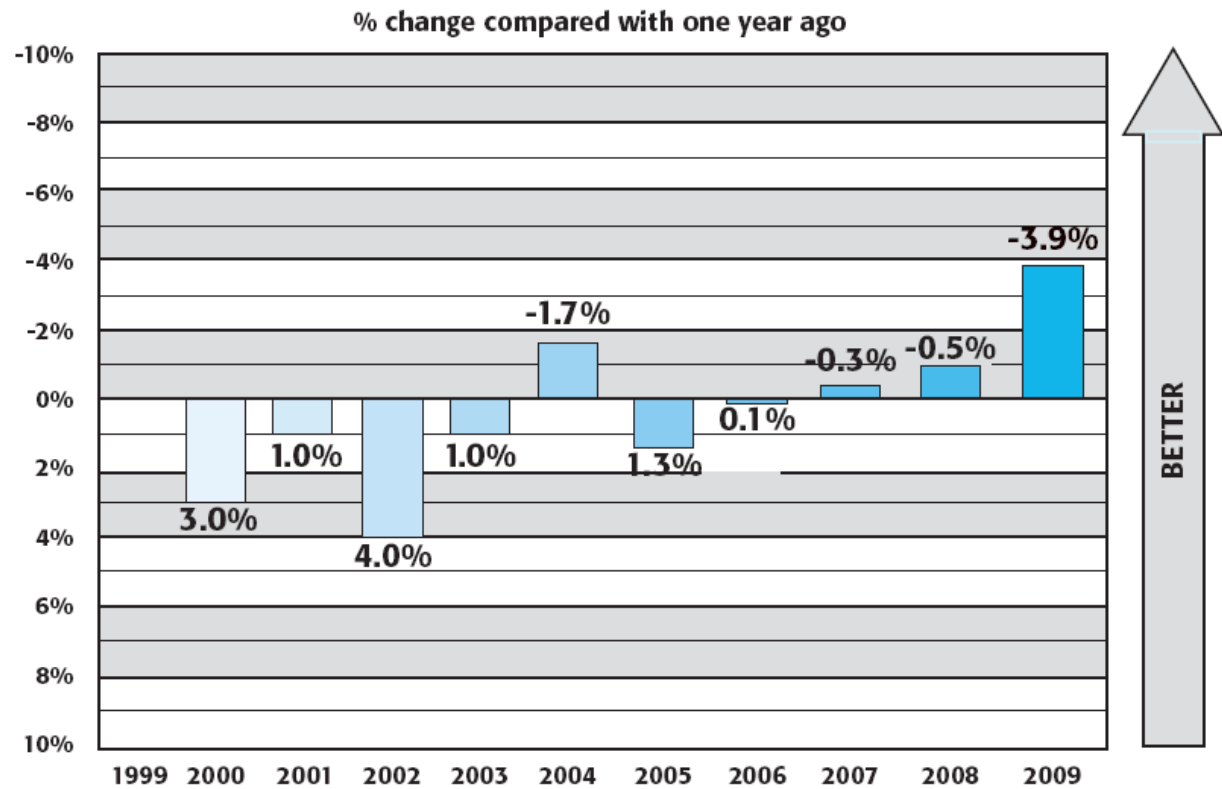
How do your projects perform?

Construction Cost



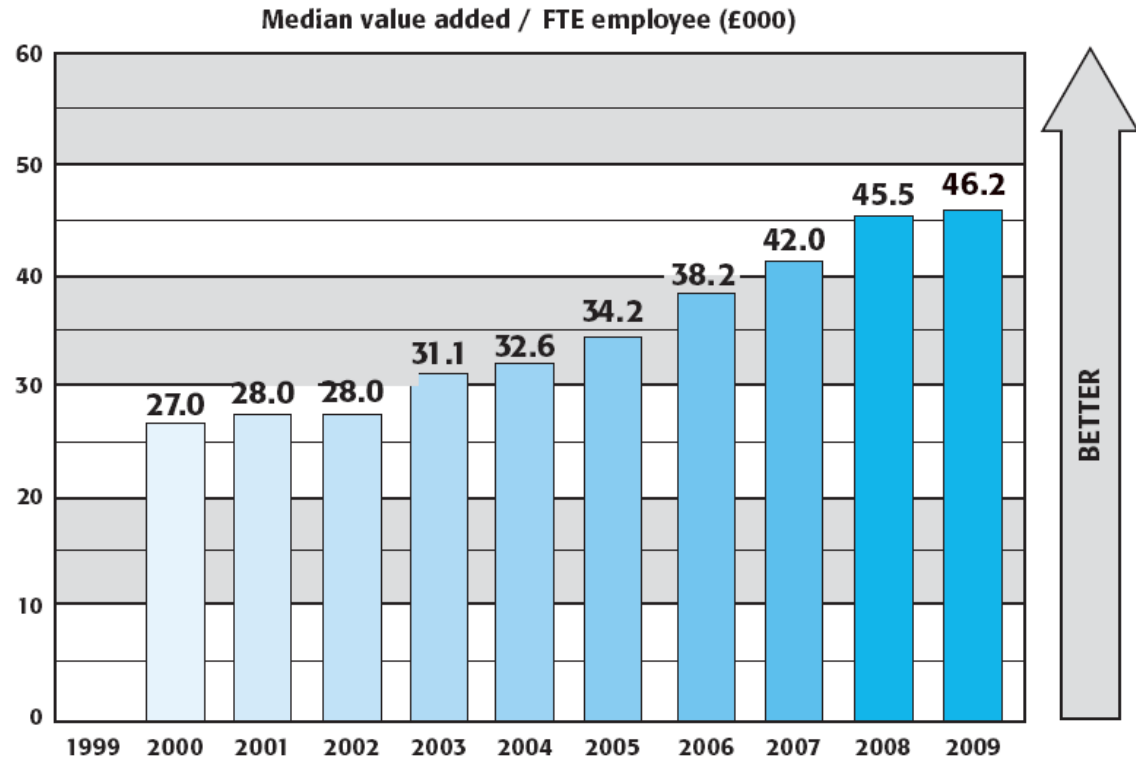
How do your projects perform?

Construction Time



How do your projects perform?

Productivity - (VAPH Current Values)



The measure for this KPI was changed in 2000, 1999 data therefore not reported. In order to regularise the volatile mix of financial data by company size from year to year, in 2006 a standard method of weighting by number of employees was adopted in line with other international financial KPIs. This method was applied retrospectively to past years and, where applicable, their results were revised.

Benchmarking Clubs

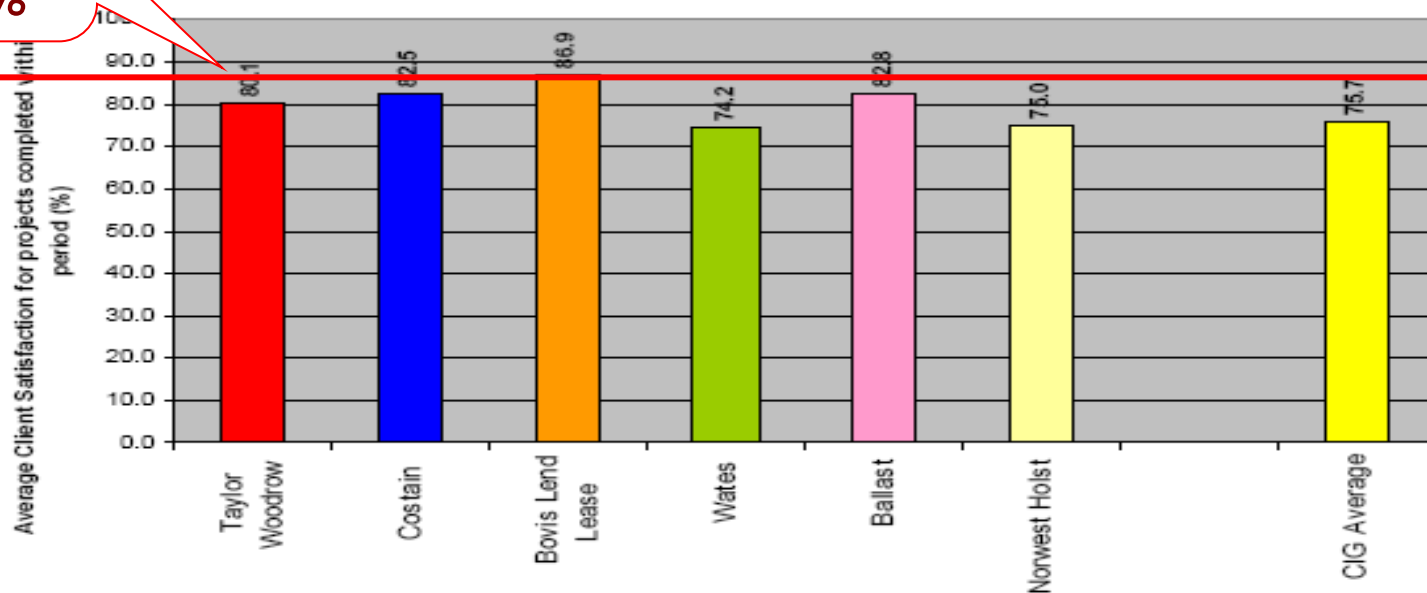
CCG visit to
Costain 2006



Construction Improvement Group

Best in
Class =
89.9%

Client Satisfaction





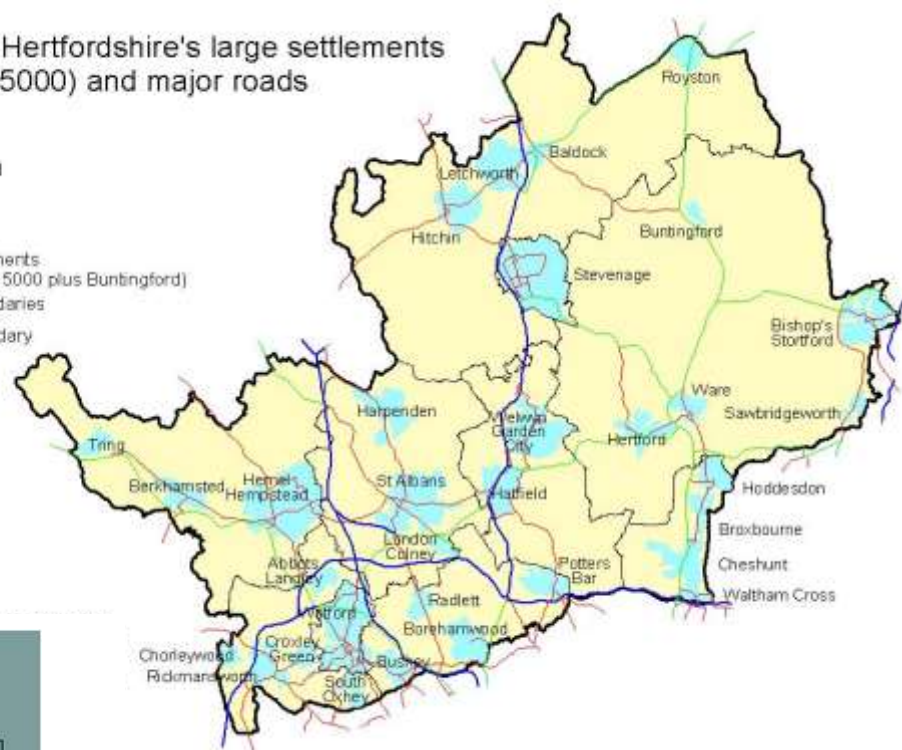
Hertfordshire

1 million people
£1 billion gross budget

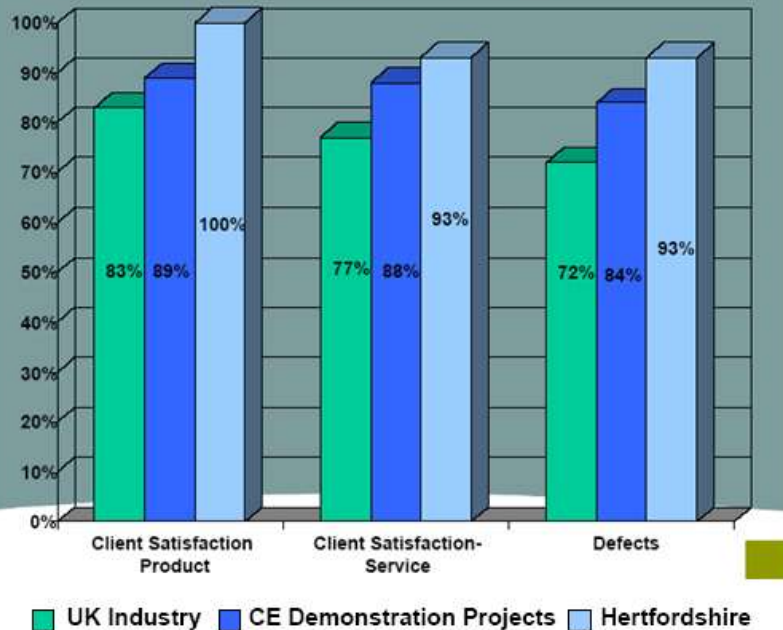
Map showing Hertfordshire's large settlements (population > 5000) and major roads

KEY:

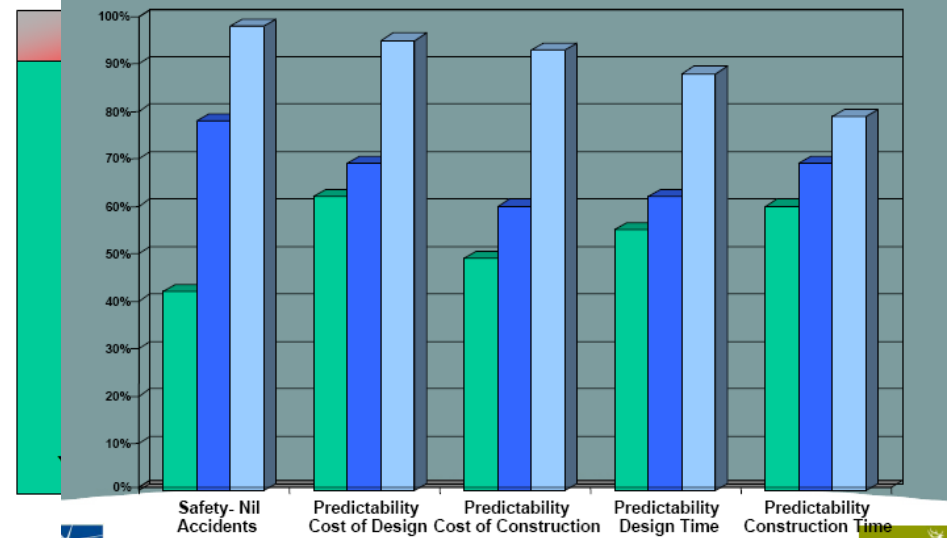
- Primary Road
- A Road
- Motorway
- Large Settlements (population > 5000 plus Buntingford)
- District Boundaries
- County Boundary

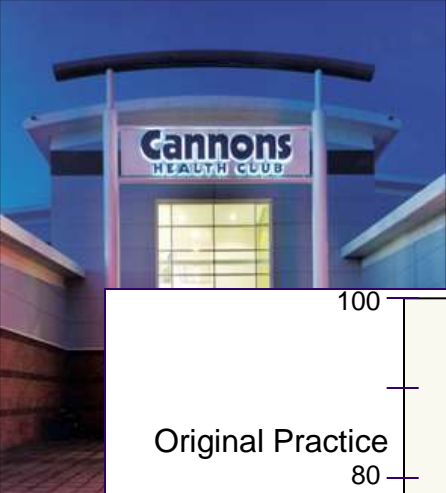


Hertfordshire Capital Programme
Year 3 KPI Results

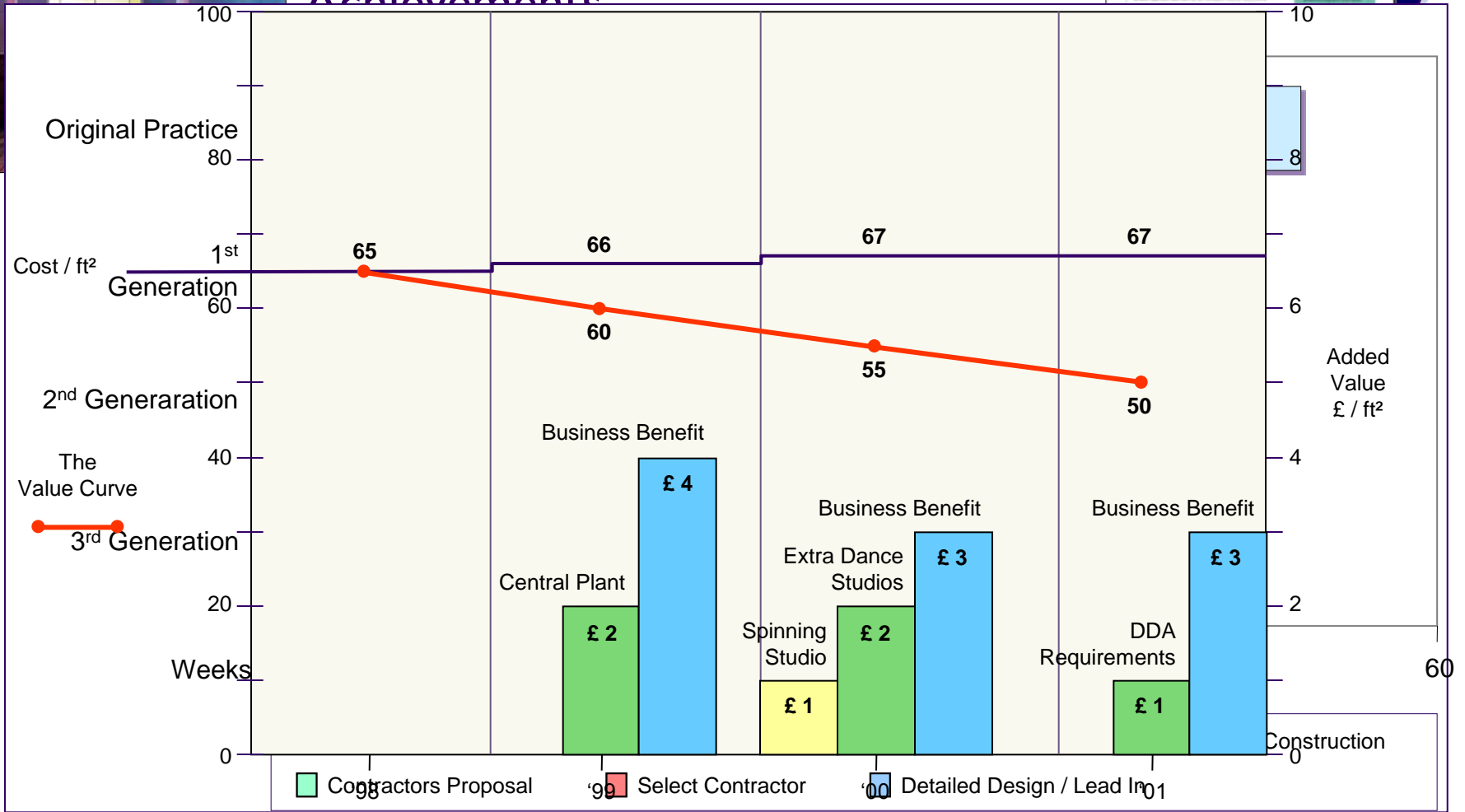


Hertfordshire Capital Programme
Year 3 KPI Results





Achievements



How?

The O₂

e O₂

the



An aerial photograph of a complex highway interchange with multiple overpasses and ramps. The surrounding area includes various urban buildings, some with distinctive architectural features like a tall blue tower, and green spaces with trees. The overall scene is brightly lit, suggesting a clear day.

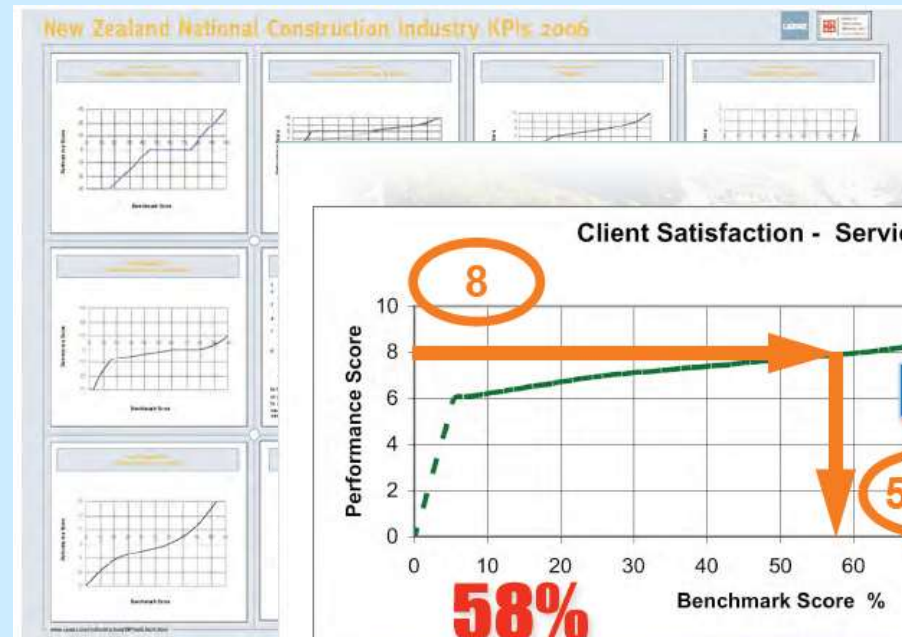
How Do New Zealand Projects Perform?

NZ circa 2004
Freeflow Alliance

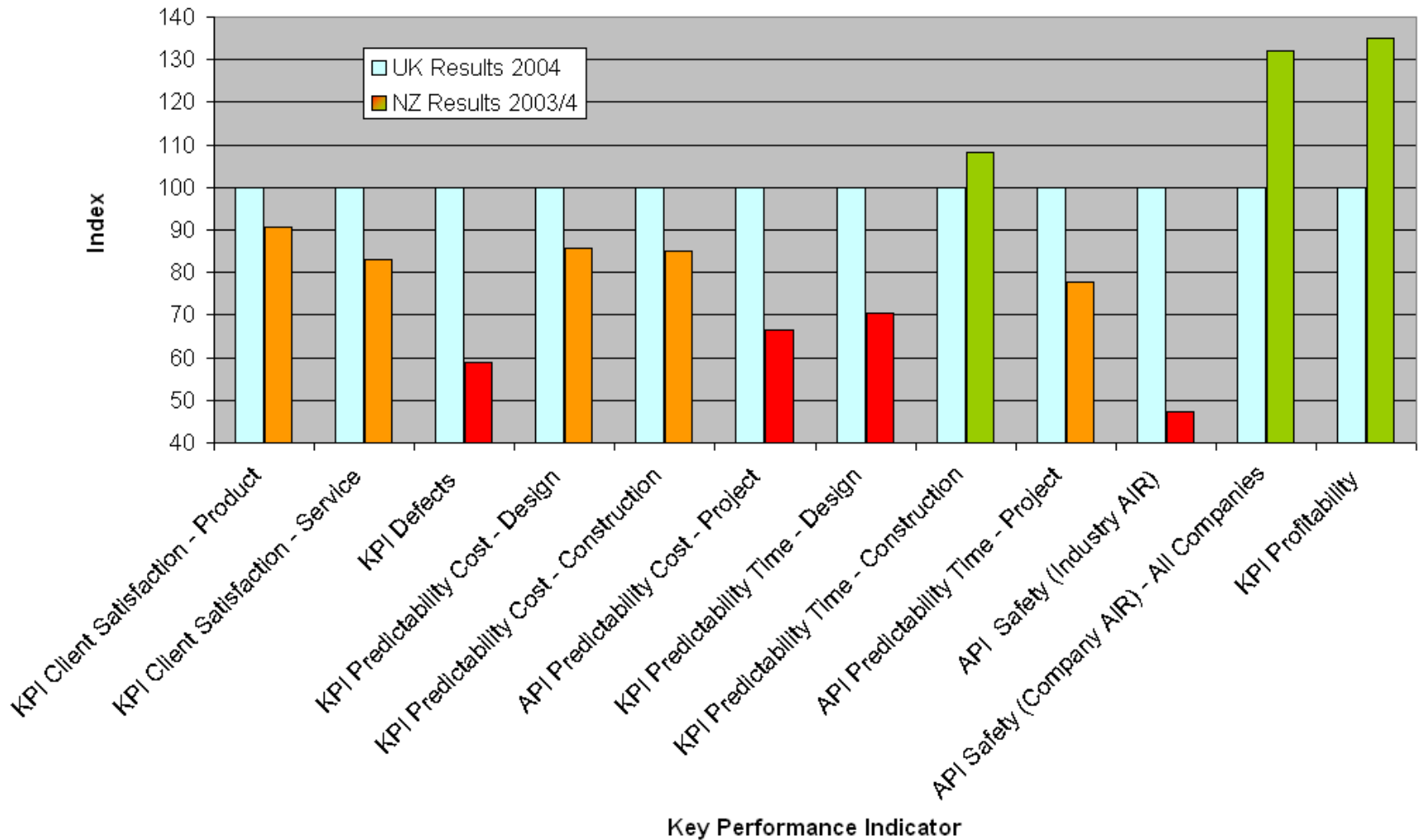


▶ 2005 - The National KPI Project

- ▶ Measure NZ performance
- ▶ National Client & Contractor Survey
- ▶ 2004 to 2006 projects
- ▶ Compare internationally – UK
- ▶ \$400M Projects
- ▶ Modelled on UK KPIs
- ▶ Covers all Construction



NZ KPIs & APIs - COMPARISON to UK (UK Results = 100)





▶ 2005 - The National KPI Project

▶ 3 Years Data from 2004 to 2006

▶ Fell away in 2007...Why?

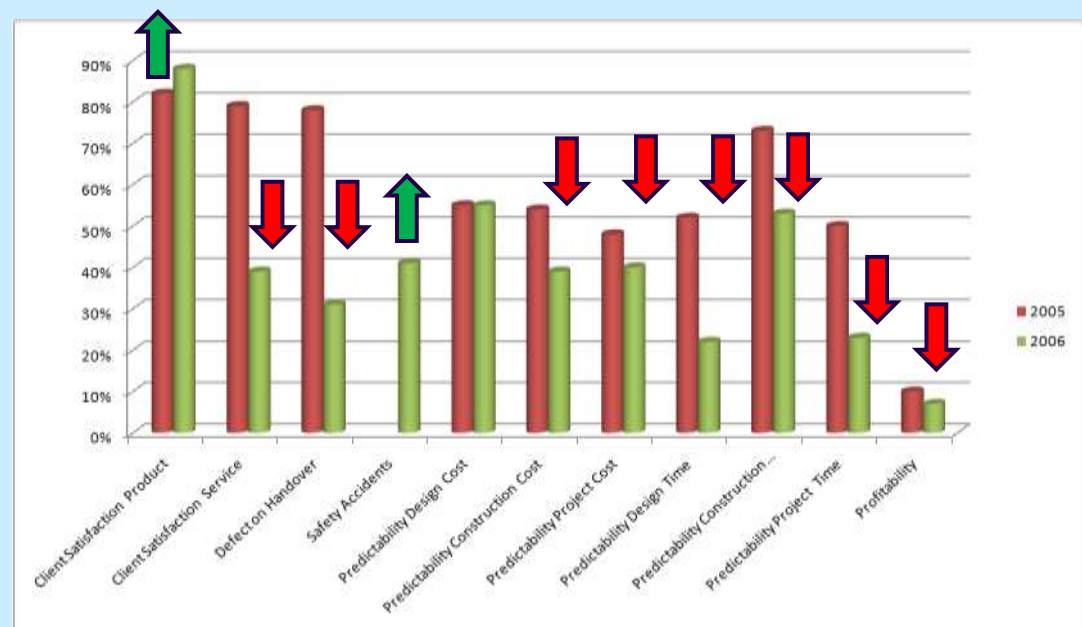
▶ Boom

▶ Annual Survey

▶ Clients Only

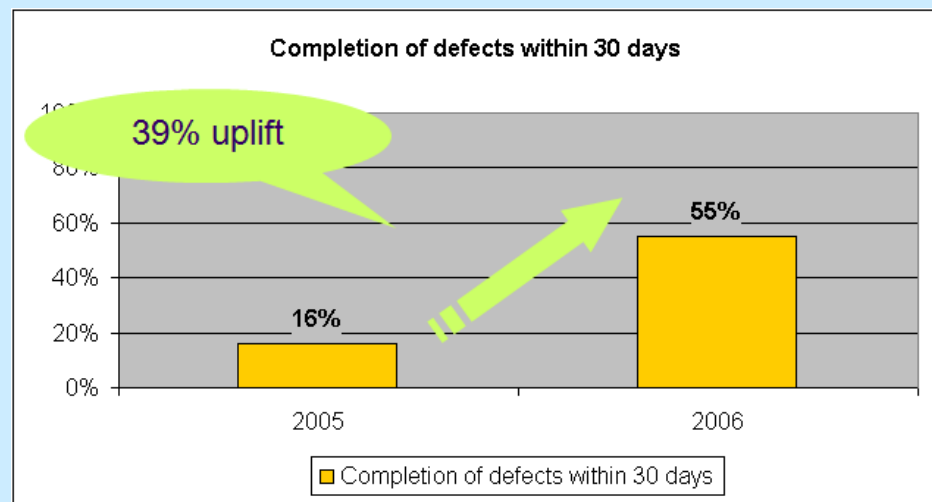
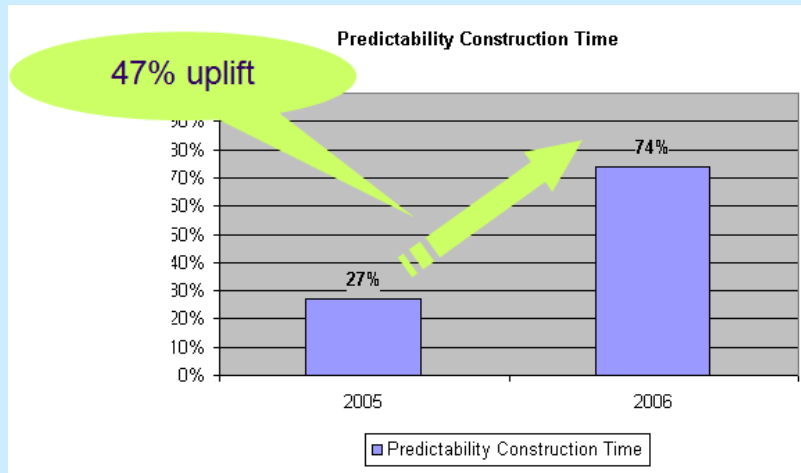
▶ Lack of Engagement

▶ Ahead of its time?





- ▶ However...
 - ▶ The Pioneers persevered...
 - ▶ Naylor Love





▶ However...

▶ The Pioneers persevered...

▶ **Auckland Transport Road Maintenance**

– Overall 5% improvement across all indicators in 1 year

5%
Improvement
across all
Measures in
1 Year

All suppliers - this period



All suppliers - Rolling 12 Month



S1 Consultant Service	HSE2 Accredited Safety Scores	T1 Predictability Time: Design	C1 Predictability Cost: Design	Q1 Client satisfaction
S2 Contractor Service	HSE3 Accredited Environmental Scores	T2 Predictability Time: Construction	C2 Predictability Cost: Construction	Q2 Defects at handover
S3 Delivery Team Service		T2.1 Predictability PC	C3 Predictability Cost: Project	Q3 Defects Clearance Period
S4 Client Team		T3 Project Time		
S4.1 Contractor - Consultant				
S4.2 Client - Consultant				
S4.3 Consultant - Contractors				



- ▶ However...
 - ▶ The Pioneers persevered...
- ▶ **Arrow International**
 - ▶ Dramatic uplift from year 1 measurement to year 2
 - ▶ Time to clear defects – 75% uplift
- ▶ **ARCG, now Auckland Supercity**
 - ▶ 8 Regions benchmarking
- ▶ **Central Districts Best Practice Club**
 - ▶ formed 2011
- ▶ **NZTA**
 - ▶ Began the Benchmarking Journey 2010 measuring Block Projects
- ▶ **Downer, Whangerau**
- ▶ **McMillan & Lockwood, Central North Island**

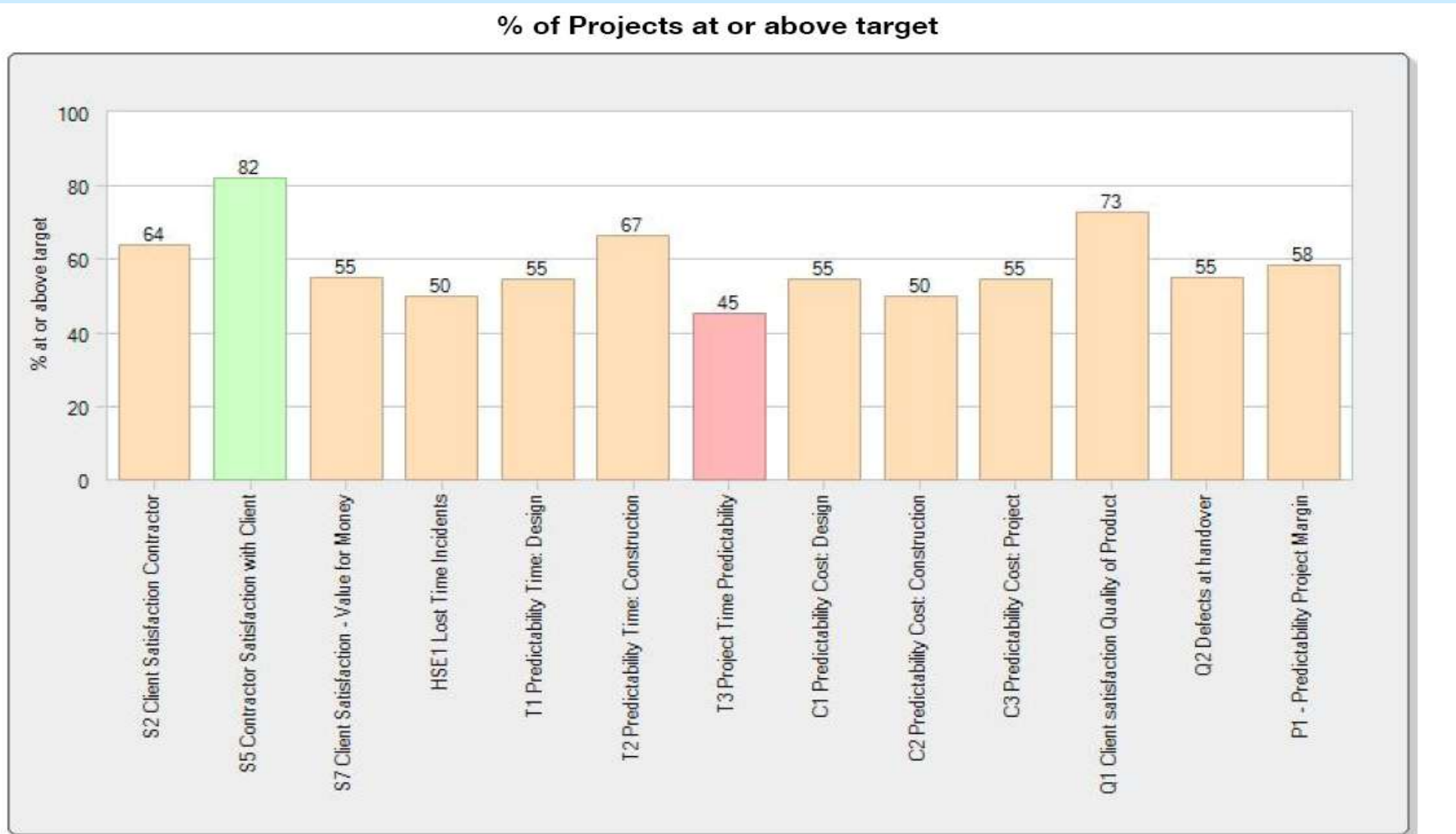
Current NZ Construction Industry KPIs



The NZ Construction Industry KPIs

Sample Reports

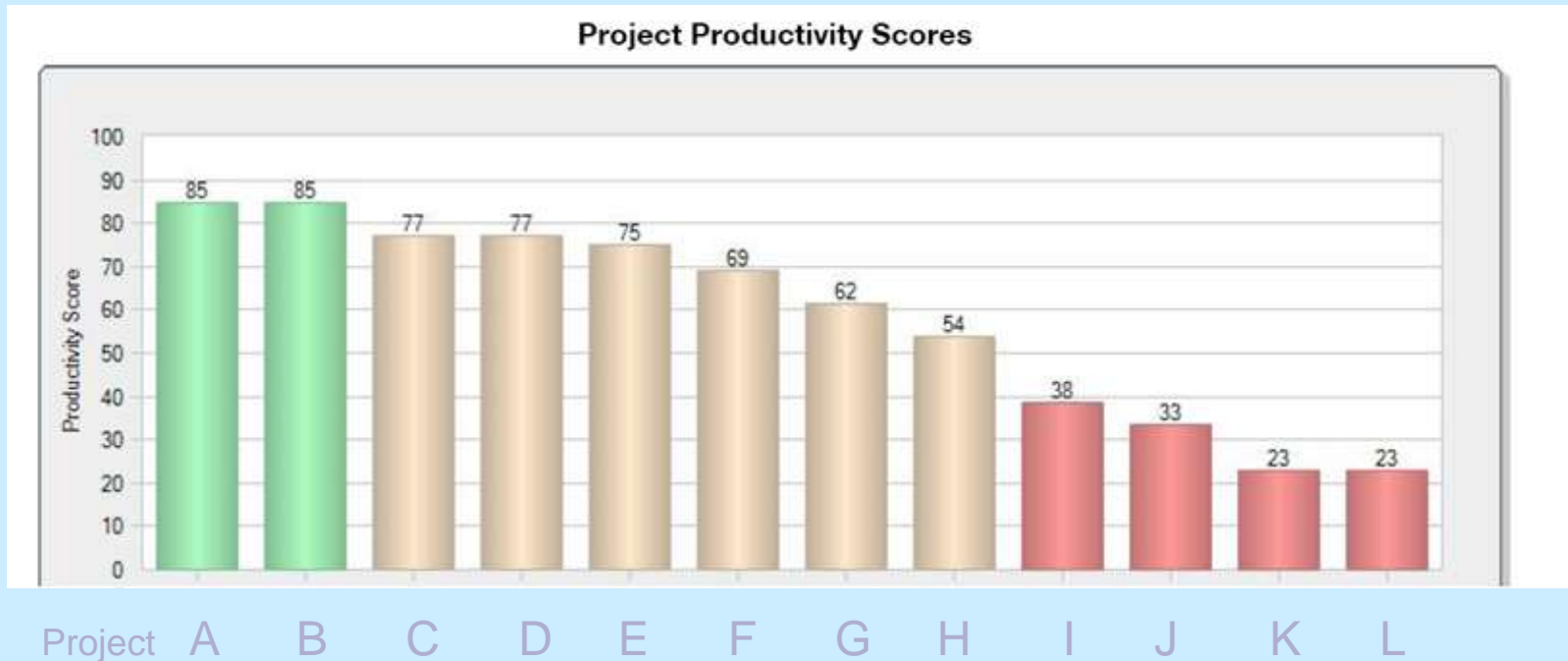
- ▶ Immediately view those areas of performance that need attention



The NZ Construction Industry KPIs

Sample Reports

- ▶ Highlight the highest and lowest performing projects
- ▶ Create discussion and learning on best practice

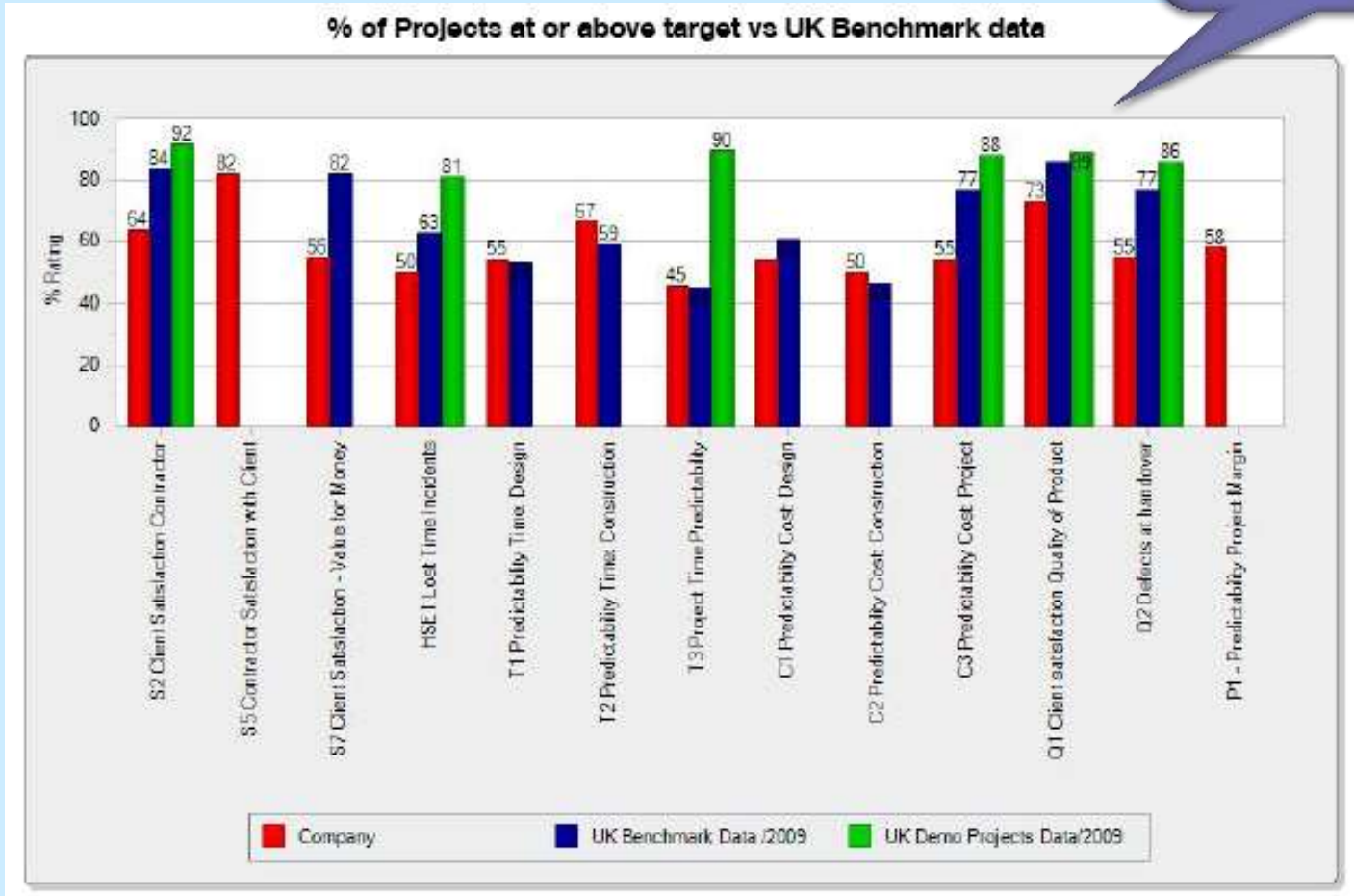


The NZ Construction Industry KPIs

Sample Reports

- ▶ Benchmark Nationally & Internationally

“See what’s possible overseas”



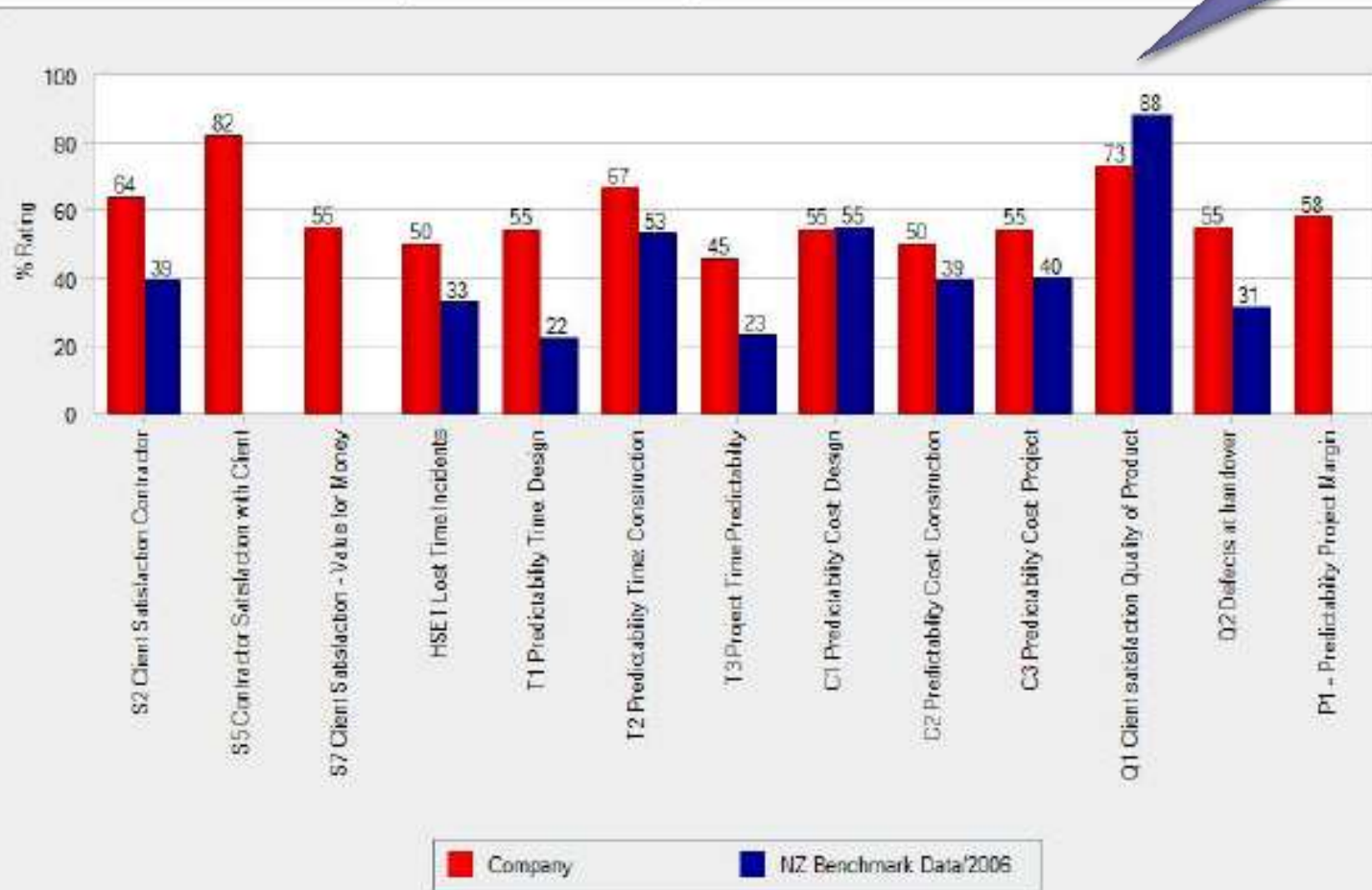
The NZ Construction Industry KPIs

Sample Reports

- ▶ Benchmark Nationally & Internationally

“Ensure Project Performance is above the NZ norm”

% Projects at or above target vs NZ Benchmark data 2006



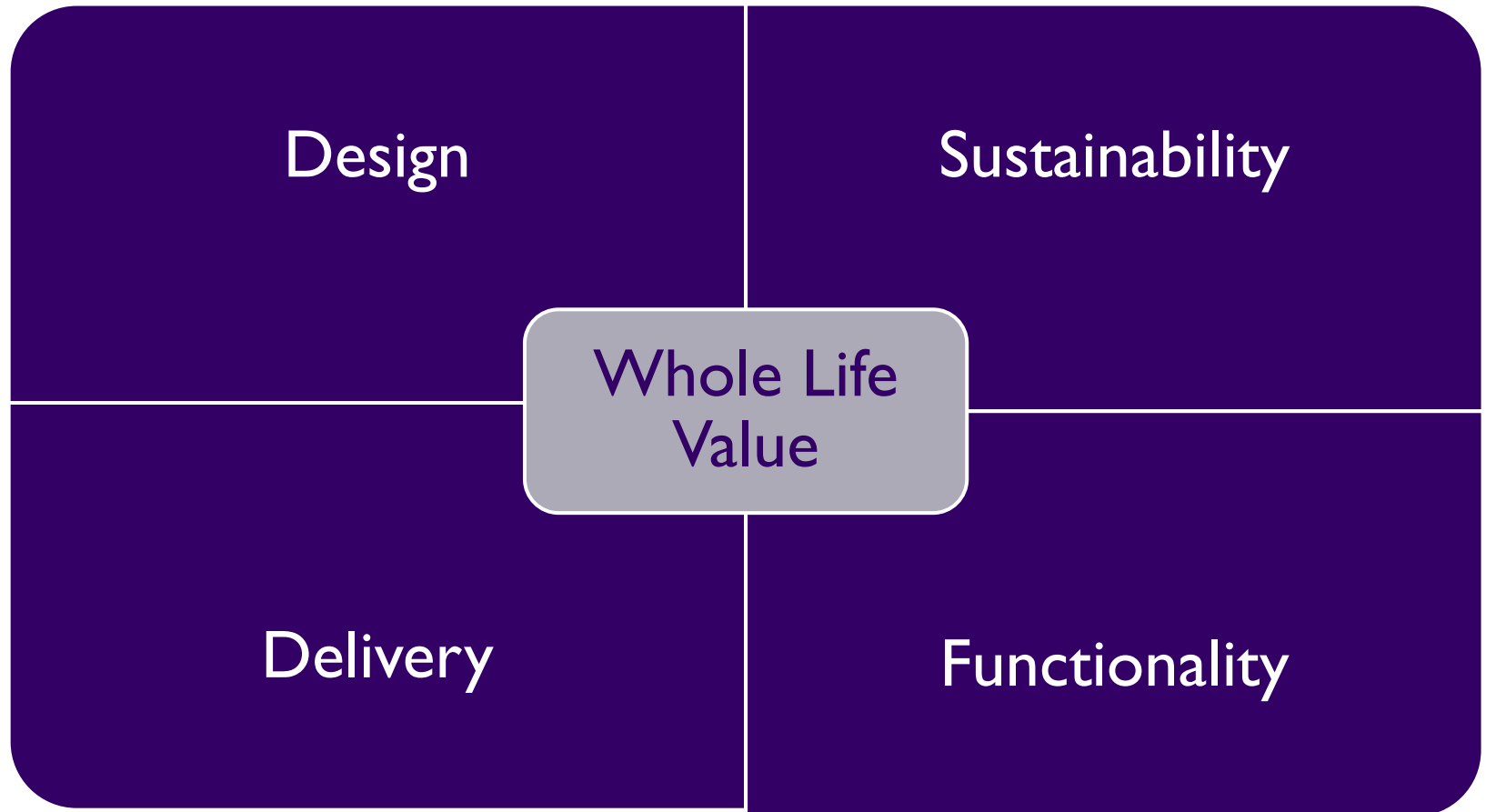
The NZ Construction Industry KPIs

Achieving the Targets

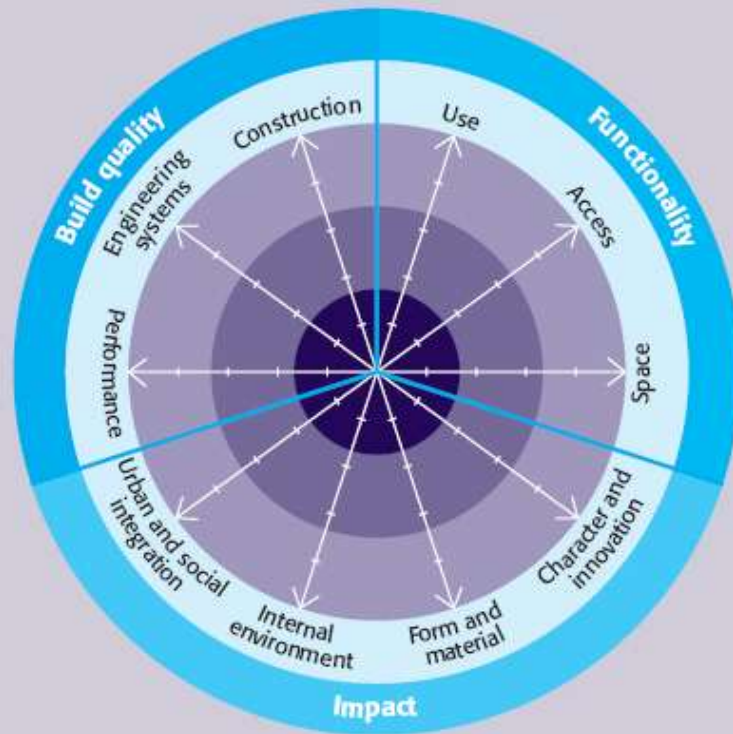
KPI	Measure	Year 0	Year 1 TARGET	Year 1 ACTUAL	Year 2*	Year 3	Year 4	Year 5
Client Satisfaction Product	% scoring 8/10 or better	50%	65%	80%	73%	79%	85%	90%
Client Satisfaction Service	% scoring 8/10 or better	57%	62%	80%	65%	76%	80%	85%
Defects on handover	% scoring 8/10 or better	36%	50%	80%	58%	74%	86%	100%
Safety Accidents	Mean Accident Incidence rate per 100k employed	No Data	900	0	863	650	495	300
Predictability Construction Cost	% on target or better	39%	46%	100%	50%	67%	75%	80%
Predictability Construction Time	% on target or better	36%	52%	50%	61%	76%	80%	85%
Predictability Design Cost	% on target or better	17%	47%	100%	63%	73%	81%	85%
Predictability Design Time	% on target or better	41%	44%	100%	46%	60%	81%	85%
Construction Cost	Change compared with one year ago	No data	N/A	N/A	TBA	0%	-2%	-5%
Construction Time	Change compared with one year ago	No data	N/A	N/A	TBA	0%	-8%	-15%



Total Value Measurement



The Design Quality Indicator



- Fundamental
- Added value
- Excellence

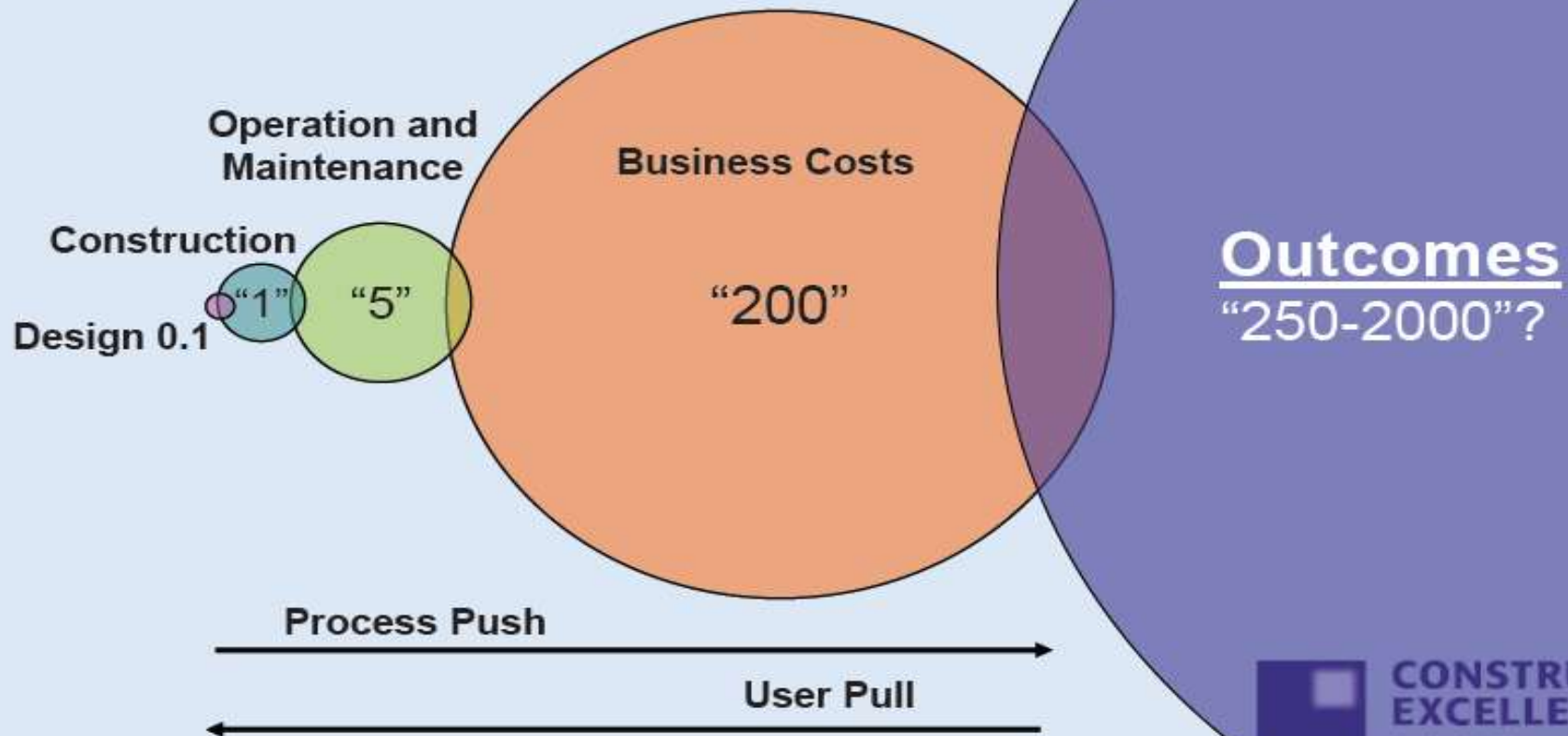
1. Functionality is concerned with the way in which the building is designed to be useful and is split into use, access and space.

2. Build quality relates to the performance of a building fabric and is split into to performance, engineering and construction.

3. Impact refers to the building's ability to create a sense of place, and to have a positive effect of the local community and environment. It is split into character and innovation, form and materials, internal environment and urban and social integration.

Measuring Outcomes

What the customer really needs



**CONSTRUCTING
EXCELLENCE**
in the built environment



**Construction
Clients' Group**
CONSTRUCTING EXCELLENCE

Share, Learn, Innovate
...Together

CCG Annual Members Event 2011



**Construction Industry Client
Performance Survey**



Call to Action March 2011

client logo



Construction Clients' Group
CONSTRUCTING EXCELLENCE

Construction Clients' Charter

company name

in working with the construction supply chain undertakes

1. Demonstrate LEADERSHIP by

- ✓ Communicating a clear vision of the client's requirements and drivers
- ✓ Operating in a manner to foster a culture of openness, honesty and trust
- ✓ Developing and operating best practice structure, systems and procedures to demonstrate:
 - understanding and management of risk
 - development of beneficial relationships
 - effective communication
 - mitigation of conflict
 - understanding of client strengths and opportunities to improve
- ✓ Engaging and developing appropriately skilled people with a competent understanding of the construction process
- ✓ Creating a co-operative environment supported by a 'no blame' culture
- ✓ Ensuring the ability to practice timely decision making
- ✓ Delivering a consistency of management, systems and personnel

2. Promote a SAFETY CULTURE

3. Foster commitment to SUSTAINABILITY

4. Explore, promote and implement RELATIONSHIP CONTRACTING where appropriate

5. Invite the supply chain to MEASURE CLIENT PERFORMANCE in line with these principles

6. Offer FEEDBACK TO SUPPLIERS on their performance

7. Measure the project performance using the NATIONAL CONSTRUCTION INDICES

Signature _____ Date _____

Innovation ■ Best Practice ■ Productivity



Construction Clients' Group
CONSTRUCTING EXCELLENCE

New Construction



Establishing an industry record and fosters strong working relationships

Compiled by Client
Ben Eitelberg & Kate
Peter Harris & John Sutcliffe



Construction Clients' Group
CONSTRUCTING EXCELLENCE

Construction Industry Client Survey

This survey is based on The NZ Construction Clients' Group Client Protocols Framework.

Clients: Please feel free to use this survey to gain feedback on your performance as a client

Suppliers: Please feel free to use this survey to offer feedback to your clients on their performance

Please score the Client's from your experience of working with them on all projects. Please use a score 1 to 10 where 1 = Very strong disagreement and 10 = Very Strong agreement

Client to be Scored:

Contractor Scoring:

	The client consistently:	Score
1	Communicates a CLEAR VISION of their requirements & drivers	
2	Operates in a manner to foster a culture of OPENNESS, HONESTY & TRUST	
3	Develops and operates BEST PRACTICE STRUCTURE, SYSTEMS & PROCEDURES to demonstrate:	
3.1	Understanding & management of risk	
3.2	Development of beneficial relationships	
3.3	Effective communication	
3.4	Mitigation of Conflict	
3.5	Understanding of client's own strengths & opportunities to improve	
4	Engages & develops APPROPRIATELY SKILLED people WITH a competent UNDERSTANDING OF THE CONSTRUCTION PROCESS	
5	creates a COOPERATIVE ENVIRONMENT supported by a 'NO BLAME CULTURE'	
6	ensures the ability to Practice TIMELY DECISION MAKING	
7	delivers CONSISTENCY of management, systems & personnel	
8	promotes a SAFETY CULTURE	
9	fosters commitment to SUSTAINABILITY	
10	explores the promotion & implementation of RELATIONSHIP CONTRACTING where appropriate	
11	Invites the supply chain to MEASURE CLIENT PERFORMANCE in line with these principles	
12	offers FEEDBACK TO SUPPLIERS on their performance	



CONSTRUCTING EXCELLENCE
IN NEW ZEALAND

Our Offer

- ▶ You invest your time...
 - ▶ Distribute to your suppliers to return to us
- ▶ We invest our time
 - ▶ Distribute an ANONYMOUS report to industry on Client Performance
- ▶ Together we use the results to plan improvements

Sample Output

