Department of Building & Housing

Building and Construction Industry Task Forces

examining PRODUCTIVITY IN CONSTRUCTION





DBH overall outcome

The people of New Zealand have access to quality homes and buildings that meet their needs, reflect our environment and contribute to a sustainable New Zealand





About the Department

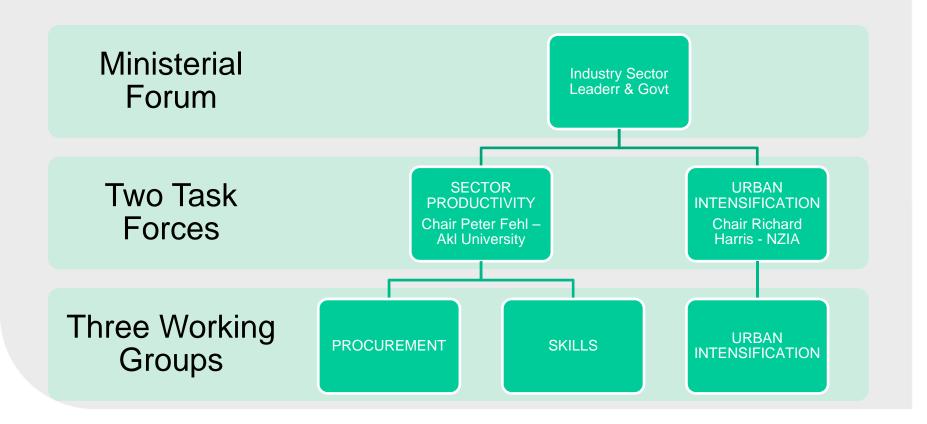
- Established November 2004
- Sector policy
- regulatory functions
- Dispute resolution services
- Information and advice
- Analysis
- Administering legislation
 - the Building Act 2004,
 - Residential Tenancies Act 1986,
 - Weathertight Homes Resolution Services Act 2006 etc







Ministerial Forum – 1st August 08 to 30 April 09







Two industry led taskforces

Sector productivity

- Also looking at procurement practice
- Chair Peter Fehl, Director Property Services, Auckland University

Urban Intensification

 Chaired by Richard Harris, President NZIA





What will the Taskforces focus on?

Sector Productivity

- Improving NZ's skill development system for this sector
- Specific skill development needs eg: specific trades, general management development
- Making the sector a more attractive place to work eg: better career paths within and across trades
- Better procurement models to reduce whole-of-life costs and potential cost-overruns

Urban Intensification

- What would make intensified housing more desirable for consumers – especially families
- Smoother process to facilitate intensification developments





Sector Productivity

Peter Fehl (Chair)

- Peter Neven (Fletchers)
- Peter Gomm (Mainzeal)
- Brett Mettrick (Master Builders)
- Richard Merrifield (CBA)
- Trevor Kempton (Naylor Love)
- Richard Michael (Contractors Fed)
- Ruma Karaitiana (BC ITO)
- Peter Mersi (Treasury)
- Nigel Bickle (DBH)
- Mark Steel (MED)

Urban Intensification

- Richard Harris (Chair)
- Martin Dale (McConnell)
- Ian Castles (Wellington Co)
- John Coop (Warren & Mahoney)
- Peter Winder (ARC)
- David Rankin (ACC)
- Leigh Auton (Manukau CC)
- Ernst Zollner (NZTA)
- Anne Carter (DIA)
- Lesley McTurk (HNZC)
- Suzanne Townsend (DBH)
- + MfE representative





Developing an improved approach to the procurement of construction projects





Background

- One Taskforce objective is to develop pragmatic options for improving procurement practices.
- Comments from August 2008 Sector Forum:
 - Cost-based model does not always deliver best result
 - User needs being neglected
 - Lack of recognition of linkages between design and construction



What the Working Group considered...

- What is the procurement scene in NZ?
- Is there a problem?
- What are the solutions?



Building and Construction Industry Productivity Taskforce

Procurement Working Group





Who was there?

| Member | Company |
|-----------------|--------------------------------------|
| lan Bond | Principal CM Ltd |
| John Hale | Fletcher Construction |
| Bob Monteith | Ex. Pres. Cert. Builders Assoc |
| Clive Tilby | Independent |
| Amanda Warren | Consultant - Constructing Excellence |
| Robert Galvin | Dept. of Corrections |
| David White | Treasury |
| Phil Weir | Ministry for Economic Development |
| Devon Diggle | Ministry of Health |
| David Stevenson | Ministry of Justice |
| Brian Mitchell | Ministry of Education |
| Kevin Doherty | NZ Transport Agency |
| Tyson Schmidt | Department of Building and Housing |



What the Working Group considered...

- What is the procurement scene in NZ?
- Is there a problem?
- What are the solutions?



What the Working Group came up with...

- What is the procurement scene in NZ?
 - Govt Procurement mixed. Some leading examples, others traditional. Agencies do not collaborate
 - 'Thinness' across industry in client and supplier ability to get greatest value from projects
- Is there a problem?
 - Yes, large gap between majority of NZ procurement and international best practice
 - Not about what proc. models go where, more about how to get best out of the model used and the quality of the businesses being procured
- What are potential solutions?
 - Short term = visibility of infrastructure projects
 - Medium term = visibility + central resource to impr. Capability and performance of both clients and industry





Govt uses a range of procurement methods...

New Zealand Transport Agency

- Uses full range of procurement methods, decide which to use at the strategic context level
- Core team of 8-9 people, annual spend in excess of \$2b

Ministry of Education

- Use design & build for larger projects, traditional methods for smaller works
- Team of 6 people, annual spend of \$500-600m

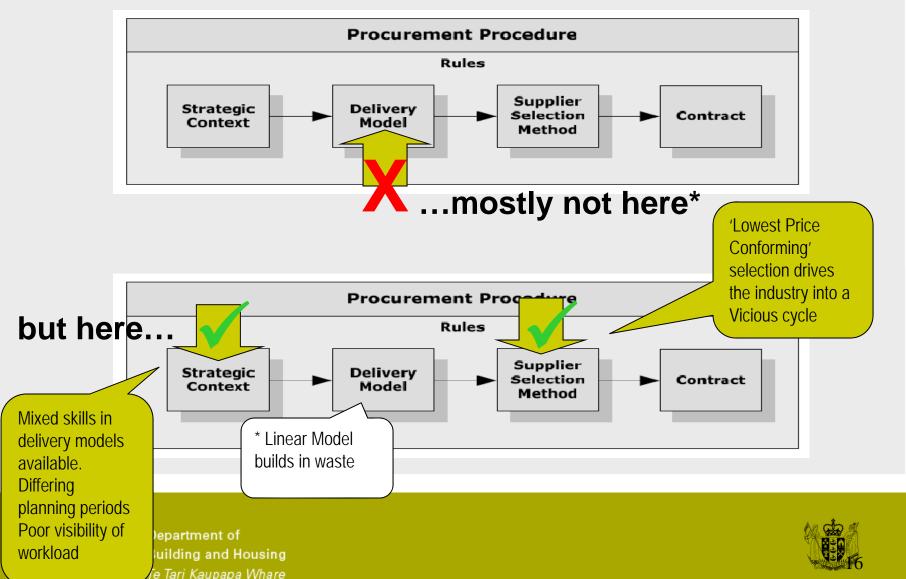
Department of Corrections

- Have tried collaborative working arrangements. Moving towards standardisation
- Lumpy profile, but annual average est. \$140m, 10 people





Where does the problem lie?



Procurement impacts on Productivity & Performance Vicious Cycle

- 'Thin' Client skills
- •Short term insular planning horizons
- •High proportion selection on Lowest Price 'Conforming' (LCP)
- •Poor differentiation other than 'Price'
- •Poor understanding of Cost vs Price
- •Linear process means design isolated from construction, more waste
- •Poor levels of performance measurement
- •Built in Waste Cost to procure
- Knowledge leaks

Procurement

X

Industry Organisation

- Dominant LCP 'devolves' risk down supply chain
- Boom Bust
- Fragmentation
- Encourages small businesses - \$277k ave T./O
- Encourages
 Win/Lose Culture

- High staff T/O
- Low investment in
- Training
- R&D
- •SCM
- QM
- Innovation
- Customer Service
- Survive on Cash Flow
- Poor Performance Measurement
- Poor differentiation other than 'price'

Business Practice

Supply Chain

- Built in Waste
- Capacity
- Fragmentation
- Linear Approach
- Disintegration of knowledge
- Product
- Corporate
- Myriad separate agendas

- Low Productivity
- Poor measurement
- No differentiation other than Prices
- Low levels of Performance time, cost quality, customer satisfaction, H&S
- Profits 'leak' from the industry
- Minimal investment in Product Development

Productivity & Performance





Procurement impacts on Productivity & Performance Virtuous Cycle

- •Intelligent Client Resource
- •Collaborative Strategic Planning
- •Integrated Design & Construction
- Quality of ServiceDifferentiation
- •Sophisticated Cost models for whole life/Sustainability
- •Appropriate delivery models
- •Endemic performance measurement
- •Minimise cost to procure
- •Knowledge capture & share

Procurement

Industry Organisation

- Compete on Quality
- Smoothed workflow
- Integration
- More medium businesses
- 'Expert businesses'
- Higher levels of profit reinvestment
- Win/Win Culture
- · Waste busting

Reduced staff T/O

- Higher investment in
- Training
- •R&D
- •SCM
- QMInnovation
- Customer Service
- · Long term planning
- Culture of Performance Measurement
- Business
 Excellence

Business Practice

Supply Chain

- Waste Busting
- Integration (vertical & horizontal)
- Fragmentation
- · Linear Approach
- Shared knowledge base:
- Product
- Corporate
- Value purchasing
- Innovation

- High Productivity
- Solid measurement
- Clear differentiation and barriers to entry
- High levels of Performance time, cost quality, customer satisfaction, H&S
- Profits reinvested into the industry
- Innovation & investment in Product
 Development

Productivity & Performance



