


Embargoed until date of next meeting

Board Paper No.	IO 2010/10/048
Submission Date	01 October 2010
Prepared by	Jack Hansby Senior Procurement Manager
Recommended by	Colin Crampton Group Manager Highways & Network Operations 
Subject	PHYSICAL WORKS SECTOR HEALTH CHECK & CAPABILITY REVIEW

Purpose

- 1 To have a direction setting conversation with the Committee on the outcomes of the Physical Works Sector Health Check and Capability Review and note opportunities to minimise the effects of the economic recession on the road construction industry. This particularly focuses on small to medium contractors, over the next two years, to preserve future capacity and capability.

Recommendations

- 2 That the Investment and Operations Board Committee:
 - a. **notes** that the outcomes from the Physical Works Sector Health Check and Capability Review result in a need for funding certainty, continuity of work within each region and opportunity for suppliers to grow in capability and capacity.

Background Information

- 3 Industry representatives approached NZTA commenting that the economic downturn in early 2008 has significantly impacted the number of small to medium size projects being tendered in the open market. Industry noted that the increased competition for NZTA projects resulted from a reduction in Local Authority and private developer works.
- 4 The increased competition has put additional pressure on established roading sector contractors, resulting in significant reduction in employee numbers (see item 10 below) and some small contractors electing to leave the industry or becoming insolvent. Local Authorities have used, and continue to use, this increased competition to their benefit.

5 In December 2009, Roading New Zealand (RNZ) and the New Zealand Contractors Federation (NZCF) wrote¹ to NZTA to explore opportunities to bring work forward to avoid:

- further redundancies in the contracting and associated industries;
- loss of critical talent off-shore;
- reduced investment in personnel training; and
- cost escalation in future tender prices due to reduced supplier capacity / capability when economic conditions improve.

Following an industry liaison meeting held in August 2010, a supplier market physical health check and capability review was initiated.

6 NZTA considers their long term (5 to 10 year) strategy as sound. The review therefore was to focus on the impact of the current market downturn and opportunities to assist industry over the next two years in line with the expected economic recovery.

7 The review has been conducted over a four week period and the findings have been based on available data from NZTA and other sources as appropriate. Some of the data is incomplete, particularly for the current 2010 year. Opportunities have been identified separately to improve the data NZTA captures.

8 A workshop was convened by NZTA in September 2010, with representatives from NZTA, Association of Consulting Engineers NZ (ACENZ), RNZ and NZCF which focused on current issues for the full range of suppliers, small to large.

Economic Environment

9 The effects of the economic downturn since the first quarter of 2008 have been well documented. The effects on the construction industry, including residential and non-residential building, has been particularly acute with the New Zealand Institute of Economic Research (NZIER) commenting that the drop in building consents may put around 20,000 construction sector jobs at risk.

10 A survey of around 400 companies undertaken by RNZ & NZCF measuring the effects of the recession on the road construction industry reported a reduction of 1400 employees in a 12 month period to December 2009 and a further reduction of 950 employees during 2010 if there was no material improvement in current work volumes.

11 Fulton Hogan's 2010 Annual Review stated that their NZ work force had reduced by 9% (300 people) due to the flat market conditions and the need to maintain a sustainable business.

Industry Feedback

12 Industry gave unanimous endorsement that the NZTA long term strategy was sound.

- 13 At the workshop, industry provided feedback and identified the following issues and where practicable, opportunities were also discussed:

Preserve Capability of Supply Market

- 14 There is insufficient work across the road construction sector (includes Local Authority) to sustain the current level of contracting resource. The result is a substantial increase in the number of tenders received for projects up to \$4.5M in value. Graph 1 (Attachment A), shows a 24% increase since 2007. Although the number of NZTA projects tendered has remained reasonably constant this increase reflects the reduction of available work across the wider sector.
- 15 The impact of this increased competition has resulted in an increasing trend of reduced and potentially unsustainable margins as suppliers endeavour to secure work volume to sustain their personnel resource. Consequently the reduction in available work volumes has seen employee numbers decrease and loss of skill to Australia and elsewhere overseas.
- 16 The issue of redundancies in large suppliers verses loss of small to medium supply companies was hotly debated. Large suppliers were concerned about losing knowledge and capacity they had built-up over the last few years while smaller suppliers provided a valuable sub-contracting resource and a competitive market for smaller regional projects.
- 17 Lead indicators predict that the economy is due to improve² and it is crucial for the future of the road construction sector that skill levels are maintained.

NZTA to Provide Certainty of their Forward Works Programme (FWP)

- 18 Industry commented that NZTA's FWP, especially for block and minor safety improvement projects, is unpredictable which in turn makes it difficult for smaller suppliers to plan and allocate appropriate resources. Regional NZTA representatives have commented that late approval for funding of block and safety improvement projects makes it difficult to procure projects prior to the traditional construction season. Graph 2 (Attachment A) clearly shows projects up to \$4.5M being procured progressively later in the calendar year. Industry identified three areas of opportunity:
- NZTA to provide a 'window' during which small to medium projects can be completed. The construction period to remain unchanged but contractors nominate when they can commence the works to enable better planning and allocation of resource.
 - NZTA to commit to funding and award of contracts for block and minor safety improvement projects earlier. This will better utilise the full construction season and enable regional suppliers to coordinate their work programs with other regional clients.
 - NZTA to improve their certainty of works and communication to the market providing information on what projects will be tendered and the programme of works. As at the 1st October 2010 on the NZTA web page, the Indicative Program for tendering new physical

works contracts for the forward 12 month period is 14 projects in total, all less than \$5M in value. One in each of Dunedin and Wellington and the remaining 12 in Napier/Gisborne, with no future projects out to tender beyond December 2010.

Supplier Selection Method

- 19 Industry tentatively welcomed the increase in limits for direct appointment and closed contest, although the NZCF were concerned this may result in an increase in work being procured through the existing maintenance contracts. The limited information gained on maintenance contracts highlighted a high proportion of variations compared to original contract value.
- 20 Industry (both large and small) indicated a preference for price quality supplier selection method (27%) over LPC (70%) as it ensured quality of supplier and further discouraged unsustainable pricing. . Currently the ratio of procuring work through PQM is 27% of contracts, 70% LPC and the remaining 3% of contracts awarded are directly negotiated.
- 21 A review of current procurement practices and the value of additional works to existing contracts should be undertaken, to ensure sufficient work is contestable in the open market and supplier selection methods are appropriate, that encapsulate the NZTA's value for money philosophy of financial prudence, a quality product in an agreed time frame, delivers the targeted level of service, achieves full asset life design, and importantly achieves a high degree of customer satisfaction.

NZTA to Influence Local Authorities

- 22 Local Authority projects have significantly reduced during the last two financial years. This is in part due to a drop in developer contributions, coupled with a pressure to keep rate rises to a minimum. In addition, the actual spend for renewals and new and improved infrastructure projects was significantly less than the original funds allocated in the National Land Transport Programme (NLTP). Table 1 (Attachment A).
- 23 Industry requested NZTA approach Local Government NZ and Local Authorities to communicate supplier issues and encourage tendering projects for which they have NZTA funding.

Sustainable Pricing

- 24 As noted in paragraph 14, competition for projects has increased significantly, resulting in potentially unsustainable tender prices. In particular, contractors would submit low prices to attain maintenance contracts and rely on additional works to return acceptable profit margins, without these additional works contractors would likely revise their tendering strategy.
- 25 Solutions such as Price Deviation Adjustment (PDA) used for Professional Services Contracts were mooted but were concluded inappropriate for Physical Works contracts. Preference was given that NZTA provide performance incentives of additional works in the contract, which would be more transparent during tendering.

Impact of RoNS Investment, Larger Value Project Packages, Canterbury Earthquake

- 26 Industry supported NZTA and Government's drive to undertake the RoNS projects. However, there is a lag in investment in physical works during the initial investigation and design stages. Graph 3 (Attachment A) shows the change between physical works and professional services contracts let between 2002 and 2009.
- 27 Industry requested that NZTA investigate opportunities to bring forward early works packages for RoNS and other significant projects to smooth investment and provide a sustainable work volume over the next two years.
- 28 There has been a propensity to aggregate quantities of work into single packages, Graph 4 (Attachment A) shows this changing trend over time. Efficiency gains have materialised with the aggregation of work and increasing the percentage of smaller packages to sustain the market needs to be carefully managed to ensure an optimum balance is achieved.
- 29 As a result of the Canterbury Earthquake the work required to re-build the damaged infrastructure will provide economic benefits for the civil contracting industry in the South Island. However, it is likely that Local Authority planned improvement projects will be deferred to allow investment in the recovery. NZTA's contribution to these improvement projects could be redistributed to other regions to aid increased investment in financially constrained areas.

Commercial Considerations

- 30 The outcome from the current recession could be perceived as a natural correction and healthy for the supply market. NZTA must be careful not to borrow growth from the future to re-establish the pre-recession trend but rather provide a transition phase to modest future growth. This will require leadership decisions against short term popular decisions.
- 31 Increasing spend on smaller regional projects will impact on efficiency gains achieved in our current packaging of works and reprioritising larger project spend will deliver short term benefits but will likely result in future funding constraints if tenders increase in value.
- 32 Increasing the proportion of PQM and reducing LPC may result in an increase in tender prices. However, it is expected that the final out-turn cost will be similar taking into account the increased cost associated with quality issues and additional MSQA.
- 33 NZTA does not influence how commercial organisations structure their supply chain. A number of large suppliers utilise multiple sub-contractors so ensuring sub-contractors nominated in tender submissions are actually those used in the contract is where NZTA may be able to have the greatest effect.

Conclusion

- 34 Regional block projects and minor safety improvement projects are a vital component of the small to medium suppliers. There will be a need to weigh up the impact of completing larger national projects in favour of regional projects to satisfy regional supply capabilities.
- 35 Regions need to improve the robustness of their cash flow information for existing works to allow earlier confirmation of further funding for block projects and minor safety improvement projects. Ensuring early confirmation of funding will allow small and medium suppliers to better plan for upcoming works.
- 36 Regions need to ensure the majority of 2011/12 approved block projects and minor safety improvement projects are contestable and out to tender earlier. Allowing small to medium suppliers the ability to contest a number of projects and better manage their work program.
- 37 The NZTA needs to improve the level of communication with the full range of suppliers on NZTA's Forward Works Programme to enable regional markets to better plan and coordinate work programs with other regional clients.
- 38 The NZTA management should continue to consider smoothing the increased investment and pressure on resources over the next 3 years for physical works from RoNS and other significant projects. Enabling works and smaller packages of contestable works provide opportunities for a variety of different sized suppliers but will compromise the efficiencies likely to be gained through larger packages of work.
- 39 The NZTA management should review the proportion of Price Quality Method (PQM) versus Lowest Price Conforming (LPC) method of procurement. Evidence confirms that price is still the primary mechanism for suppliers winning contracts irrespective of using LPC or PQM supplier selection methods. The use of PQM allows for further emphasis to be placed on proposed methodology, supplier's capability and proven ability (track record), to complete the task at hand. Thereby improving certainty of achieving value for money outcomes.
- 40 The NZTA management should review the current levels of additional work procured through existing network maintenance contracts and whether this offers NZTA optimal value for money. Consideration should also be given to performance incentives as a mechanism for delivering quality and sufficient transparency when tendering, to ensure sustainable pricing.
- 41 A review should be undertaken to evaluate the potential for redistributing the NZTA contributions into smaller improvement projects, which are likely to result from deferring the Canterbury Local Authorities planned improvements projects as a consequence of the Canterbury earthquake, to other financially constrained areas.

Attachments

- 42 Attachment A – Supporting Data
 - Graph 1 – Number of Tenders Received and Number of Contracts Awarded (<\$4.5M).

- Graph 2 – NZTA Physical Works Contracts Awarded Nationally by Month.
- Graph 3 – NZTA Physical Works and Professional Services Contracts Awarded.
- Table 1 – Allocated Funds and Actual Spend, SH & Local Roads.

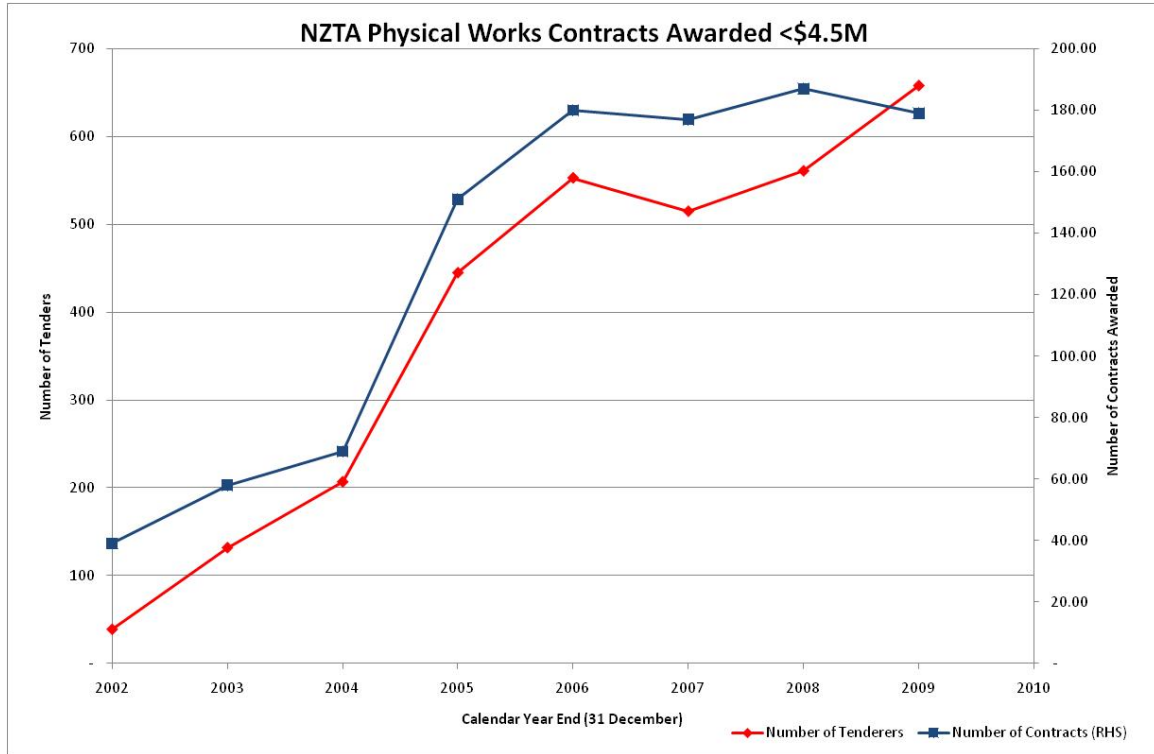
References

¹Briefing Paper to NZTA, Roothing New Zealand / Contractors Federation, 08 December 2009.

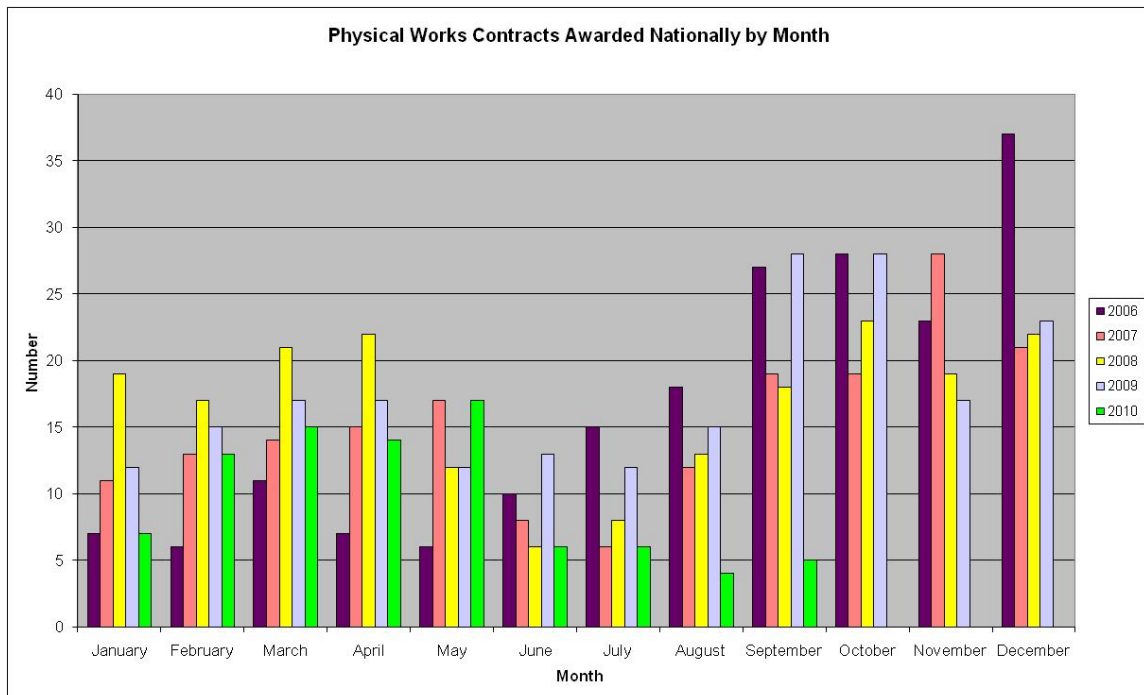
²Construction Sector Outlook, Department of Labour, September 2009.

Attachment A – Supporting Data

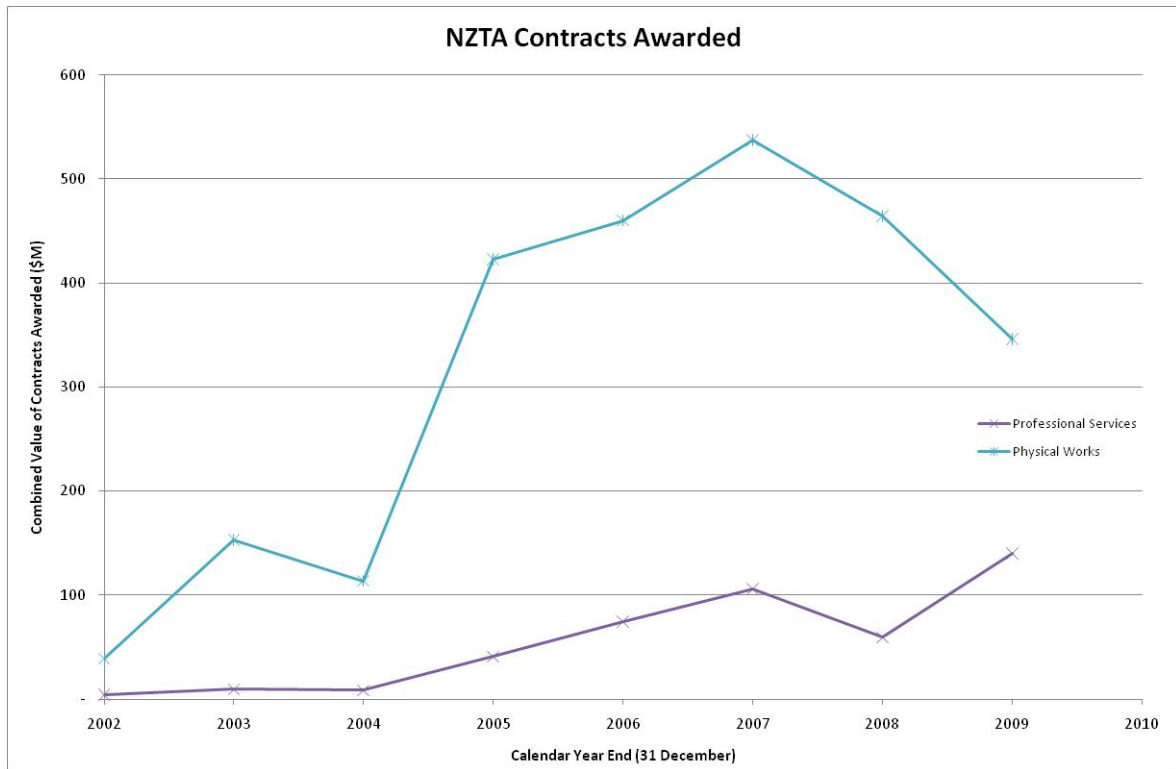
Graph 1 – Number of Tenders Received and Number of Contracts Awarded (<\$4.5M)



Graph 2 – NZTA Physical Works Contracts Awarded Nationally by Month



Graph 3 - NZTA Physical Works and Professional Services Contracts Awarded



Graph 4 - NZTA Physical Works Contracts Awarded by Dollar Band

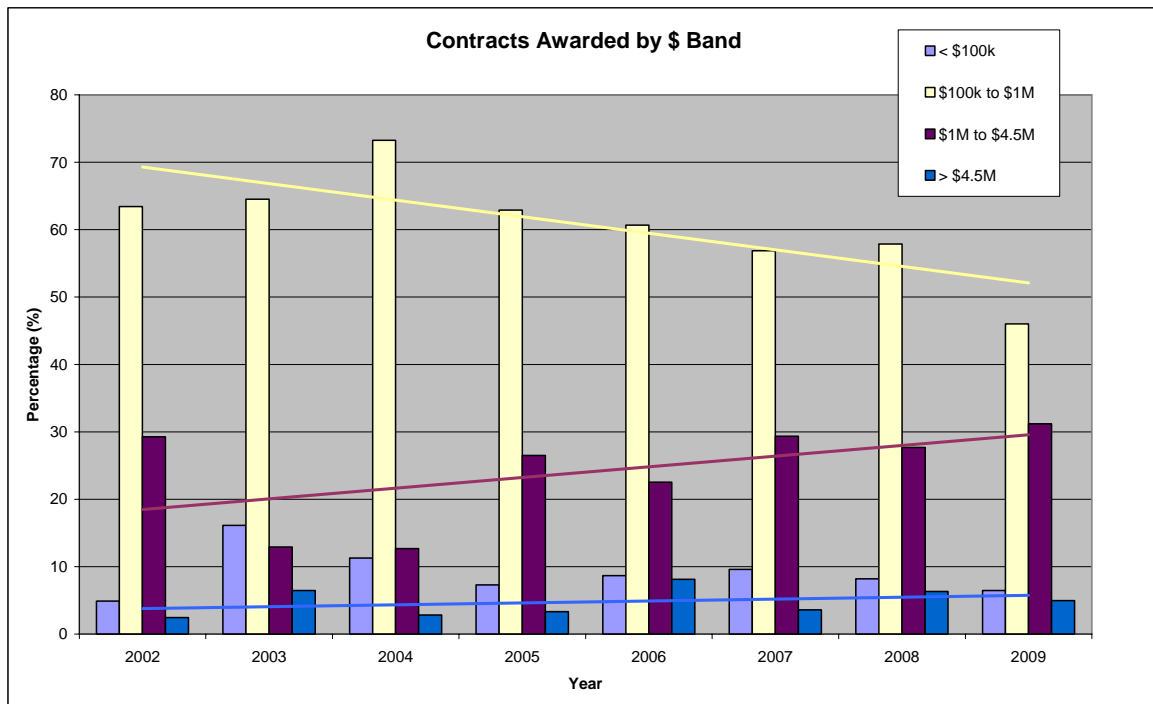


Table 1 - Allocated Funds and Actual Spend, SH & Local Roads (\$M)

Category		08/09 Allocation	08/09 Actual Spend	Difference	09/10 Allocation	09/10 Actual Spend	Difference	10/11 Allocation
Maintenance & Operations	Local	243	239	4	244	224.3	19.7	248
	SH	279	319.9	140.9	298	306.6	8.6	299
Renewals	Local	210	199.8	10.2	228	204.8	23.2	232
	SH	191	180	11	229	231.7	2.7	202
New & Improved	Local	222	164	58	184	165.2	18.8	160
	SH	791	956	165	1003.5	1101.8	98.3	1035