

THE ENGAGEMENT OF PROFESSIONAL SERVICES

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EXECUTIVE SUMMARY

1. Introduction

The costs of applying Transit New Zealand Competitive Pricing Procedures (CPP) (brought into operation in 1991) to the letting of contracts for the engagement of professional services for Transit New Zealand-funded roading work are evaluated, based on a study of the financial year 1991-92, and carried out in 1992-93.

2. Costs

Costs obtained and evaluated for a range of fee contract sizes, include:

- costs of administering the Competitive Pricing Procedures, introduced in 1991, to Transit New Zealand and to local authorities,
- costs of bid preparation to the consultant,
- total cost of applying CPP to the letting of a professional services contract.

Evaluation of costs of letting professional services contracts

Value of contract	Cost of letting contract
\$40,000 or less	unacceptably high
greater than \$40,000 - \$100,000	relatively high

3. Competition

Competition has been evaluated from

- the number of bids received,
- the consultants' success rates over the year 1991-1992,
- questionnaires and interviews.

The evaluation showed that:

- an initial flourish of competition occurred when CPP commenced,
- no clear indication was obtained that the level of competition had declined significantly,
- a reduction in the number of bidders had occurred in two Transit New Zealand regions,
- the present level of competition was expected to decline.

4. Procedures

The procedures associated with CPP have been reviewed.

Recommendations (listed below in 6) for changes to CPP procedures have been made so that:

- quality service will be provided,
- competition will be encouraged, and
- unproductive costs related to the present bidding system will be reduced.

5. Conclusions

• Selection of consultants

Selection of consultants should be made using quality-based procedures for most Transit New Zealand-funded work.

• Procedures

Quality-based procedures, based on Brook's law, should be used for fully funded works.

However, other procedures may need to be developed to meet the special needs of the local authority tendering requirements.

• Size of contracts

Professional services contracts should be parcelled into larger packages, and should be for defined periods to reduce administration costs, both before acceptance and during progress of the work.

• Training programmes

Training programmes should be implemented in the preparation of:

- requests for tender briefs,
- tender evaluation procedures, and
- negotiation skills for staff of Transit New Zealand, and of local authorities.

6. Recommendations

- The operation of the Transit New Zealand time-recording system, WAR (Work Activity Recording), should be reviewed, and the activity/time information that is required by the managers at both Regional Offices and Head Office should be precisely determined, so that costs can be obtained.
- The use of the expedited procedure for awarding fee contracts should be encouraged. The detail of the expedited procedure in the CPP manual could be improved.

- Priority should be given to completing the current task of reviewing the CPP as they relate to the engagement of professional services.
- No special provisions should be made in the CPP to encourage new entrants.
- For all fee contracts greater than \$40,000, open tendering should be used with advertising.
- For fee contracts of \$40,000 or less let under CPP, selection should be made from the current register of professional services consultants.
- Professional services contracts for projects of similar type should be parcelled into larger packages where practicable.
- Professional service contracts lasting for a defined period, e.g. for one year and up to three years where appropriate, should be created.
- Training programmes should be implemented as soon as possible in the preparation of Request for Tender briefs for professional services, for tendering authority staff.
- Better dialogue between tendering authority staff and consultants, together with improved documentation by both parties, should be encouraged to help reduce the costs of making tender submissions.
- For important, and for all critical, complex work, the number of members of the Tender Evaluation Team should remain at three.
- For straightforward routine work, the number on the Tender Evaluation Team could be reduced to two.
- For low value fee contracts, i.e. \$40,000 or less, one evaluator is enough for the task. The evaluation of the submissions should be documented and reviewed by a senior officer before approval.
- No further changes should be made to the present CPP relating to attributes and weighting.
- If a procedure similar to the present attributes and weighting system is to be retained, then the system should allow the spread of the values of the non-price attributes to be balanced directly with the value of price.

- Pre-letting discussions with the top non-price attribute bidder, or the two top non-price attribute bidders, should be considered as part of the letting procedure (subject to certain conditions).
- Wherever possible, selection of the consultants should be made using quality-based procedures, i.e. Brook's law, with price to be negotiated.
- Selection of consultants can be made using price as an element in the selection for projects which are technically straightforward and routine, tightly briefed, and of minimum impact on public safety and project cost.
- Local authorities should consider using quality-based procedures for selecting those consultants that still comply with the intent of their open tendering rules.
- Training programmes should be implemented in the preparation of Request for Tender briefs, tender evaluation procedures, and negotiation skills for staff of Transit New Zealand and of local authorities.

ABSTRACT

The costs of applying Transit New Zealand competitive pricing procedures (CPP) (brought into operation in 1991) to the letting of contracts for the engagement of professional services for Transit New Zealand-funded roading work are evaluated, based on a study of the financial year 1991-92, and carried out in 1992-93.

Conclusions from the study include:

- Selection of consultants should be made using quality-based procedures for most Transit New Zealand-funded roading work.
- Quality-based procedures, based on Brook's law, should be used for fully funded works. However, other procedures may need to be developed to meet the special needs of the local authority tendering requirements.
- Professional services contracts should be parcelled into larger packages, and should be for defined periods to reduce administration costs, both before acceptance and during progress of the work.
- Training programmes should be implemented in the preparation of requests for tender briefs, tender evaluation procedures, and negotiation skills for staff of Transit New Zealand and of local authorities.

Recommendations have been made for changes to CPP procedures so that quality service will be provided, competition will be encouraged, and unproductive costs related to the present bidding system will be reduced.

1. RESEARCH METHOD

This research project was divided into five tasks.

Task 1 - to study and review the Competitive Pricing Procedures (CPP) brought into operation in 1991 by Transit New Zealand. Preliminary discussions were held with staff of the Transit New Zealand Hamilton Regional Office, with two local authorities, and with two consultants.

Task 2 - to prepare and issue three specific questionnaires for all seven Transit New Zealand Regional Offices, for local authorities who had made use of CPP, and for all consultants who had tendered for Transit New Zealand state highway work over the financial year 1991-1992. Copies of the three questionnaires are included as Appendices 4, 5, 6.

The Association of Consulting Engineers of New Zealand (ACENZ), Works Consultancy Services Limited, the New Zealand Local Government Association (LGA) and the Institution of Professional Engineers of New Zealand (IPENZ) were advised of the research project, and their views and inputs were obtained.

Statistics of questionnaire responses are given in Appendix 2. The information provided by each consultant is confidential and is not presented in this report.

Task 3 - to follow up the questionnaires with interviews with selected staff of Transit New Zealand Regional Offices, local authority staff and consultants. Interviews were held with members of ACENZ and the LGA. Those interviewed are listed in Appendix 3.

Task 4 - to obtain information on time taken for and costs of preparation and evaluation of contracts, from Transit New Zealand Regional Offices and from local authorities.

Task 5 - to analyse and review the data obtained, and to prepare a report with recommendations.

2. COSTS OF THE COMPETITIVE PRICING PROCEDURES

2.1 Costs of Engaging Professional Consultants

Costs relating to the present procedures for the engagement of professional consultants to carry out Transit New Zealand-funded roading work were obtained from Transit New Zealand Regional Offices, from local authorities and from consultants. These costs were largely based on the time taken to carry out the procedures when engaging a professional consultant.

2.1.1 Information from Transit New Zealand

Obtaining this information was expected to be a straightforward task, using the staff work activity/time recording system (WAR) kept by Transit New Zealand Regional Offices. However WAR was not entirely the source of information that was required. To obtain reasonably accurate information, the seven Transit New Zealand Regional Offices were asked instead to record, over the six week period of the study, the following information:

- time spent on CPP tasks for professional services contracts,
- time spent on preparing each individual brief, and
- time spent on evaluating the tenders for each contract.

Five of the Regional Offices were able to provide the required information.

Information held by Transit New Zealand Regional Offices on briefs and tender evaluations that had been completed recently before the study period was also included to provide a larger sample size. The accuracy of some of these data was questionable and also a regional bias was indicated. The sample size for the time spent on preparation and evaluation was, overall, statistically acceptable but the size was deficient in the number of contracts for fee values less than \$20,000.

The information on costs of awarding contracts for Transit New Zealand Regional Offices is given in Tables 2.1 to 2.9.

2.1.2 Information from Local Authorities

The time recording systems used by the local authorities taking part in the study were not helpful. Of eleven authorities who had let a significant number of professional services contracts under CPP, only one was able to provide actual cost information. Even this was coded under one broad item, "*total costs of administering professional services work*".

A number of local authorities expressed concern at the cost of the procedures, but they had not established what these costs were. Table 2.8 (based on information supplied by one local authority only) shows that, for 10 contracts with a total fee value of \$220,000, the total administration cost was \$50,600 or 23% of the fee value. This cost includes management of the consultants.

2.1.3 Information from Consultants

Consulting firms however were able to provide detailed information on their costs for preparing bids. As their costs related to their initial assessment of the effort needed to secure the work, the costs were generally understated because:

- Unpaid overtime was not always included in the costs, and
- Actual salary costs were used by some consultants for calculating the bid costs, rather than using appropriate charge out rates.

Bidding is an overhead for consultants. As valuing bid preparation time at charge out rates is to double count some of the cost, then valuing such time at actual salary costs might be more appropriate. Time spent on preparing bids for Transit New Zealand work was considered by consultants to be excessive for the fee value and meant they were forgoing productive work.

2.1.4 Recommendation

- The operation of the Transit New Zealand time-recording system, WAR (Work Activity Recording), should be reviewed, and the activity/time information that is required by the managers at both Regional Offices and Head Office should be precisely determined, so that costs can be obtained.

2.2 Costs of CPP Administration

2.2.1 Costs to Transit New Zealand and Local Authorities

The costs to Transit New Zealand and local authorities of the administration process of awarding contracts using the procedures relating to CPP were separated into:

- Brief preparation, i.e. preparing the Request for Tender (RFT),
- Printing,
- Advertising,
- Tender evaluation.

These are actual salary costs. They are not the total costs relating to the tender-awarding procedures and do not include the costs of the contracts clerk, or the administration relating to acceptance, or to the later management of the consultant.

Although a brief is always necessary and is common to any selection procedure, the costs of brief preparation depend on whether the selection procedures are based on price or on quality.

For example, if price is a dominant factor in the selection of the consultant, the brief must be very carefully prepared so that the consultant knows precisely what they have to do and what has to be priced.

Alternatively, if the quality of the consultant and of their proposal are the dominant factors in the selection, and price is to be negotiated later, the brief and its meaning (or lack of it) can be clarified and mutually agreed upon during the negotiations and before the price is settled.

2.2.2 Costs of Brief Preparation

Costs for the preparation of the brief depend on the quality of the brief, and the effort put into its preparation.

The cost of preparing a brief will decrease as the procedures become streamlined. The study year (1991-1992) appeared to have been very much a period of learning and, with experience, the cost of administration can be expected to level out at a lower value.

For example, one Transit New Zealand Regional Office return showed two brief preparation costs assessed at \$31,178 (8.6% of total costs) and \$23,000 (1.2% of total costs) for contracts with fee values of \$360,000 and \$1.99M(million) respectively.

Although this particular Regional Office produced the best briefs according to consultants, their higher costs did not correlate well with the costs assessed by other authorities. Therefore their costs were excluded from the data used in the detailed analysis of brief preparation costs. The explanation was given later, but after the analysis had been carried out, that a large part of these costs had been expended on development to streamline brief production and to obtain consistently high quality in the future.

The analysed data for costs of brief preparation are presented in Tables 2.1, 2.2 and 2.3. Table 2.1 shows that the average cost of preparation of briefs costing less than \$10,000 was \$3,160. Table 2.2 shows that, for a price range of fees, an accepted fee value of say \$36,000 had brief preparation costs averaging \$2,280. This cost increased to \$4,540 when the fee value was more than \$1 million. As a percentage of the accepted fee, the brief preparation cost ranged as high as 10% for low value fee contracts (say \$12,000), to a low 0.27% for high value fee contracts (greater than \$1M).

Table 2.3 supplies grouped costs for brief preparation where only the total costs for a group of briefs were available. These have been included as support for the costs given in Table 2.1.

Table 2.1 Costs for preparation of briefs for professional services.

Number of briefs costed	All Briefs 43	Briefs costing < \$10,000 41 ^(a)
Range of brief preparation costs		
- upper value	\$31,178	\$9,066
- lower value	\$400	\$400
Average brief preparation cost	\$4,270	\$3,160
Fees accepted for professional services (PS)		
- total value	\$23.3M	\$20.9M
- average value	\$542,000	\$510,000
Av. brief preparation cost Av. fee accepted for PS	0.8%	0.6%

^(a) Two brief preparation costs not included because they did not correlate well, as they included costs expended on development for future brief production.

Table 2.2 Costs for preparation of briefs compared with fee values for professional services.

Range of fee values for professional services	\$10,000 - \$20,000	\$21,000 - \$50,000	\$51,000 - \$100,000	\$101,000 - \$200,000	\$201,000 - \$1M	> \$1M
Number of briefs costed	1	11	6	7	8 ^(a)	9 ^(a)
Range of brief preparation costs						
- upper value	-	\$6,450	\$3,750	\$9,070	\$6,000	\$8,000
- lower value	-	\$400	\$599	\$900	\$2,250	\$1,040
Average brief preparation cost	\$1,200 ^(b)	\$2,280	\$1,420	\$4,000	\$3,790	\$4,450
Fees accepted for professional services (PS)						
- total value	\$12,000	\$400,000	\$382,000	\$1M	\$4.0M	\$15.1M
- average value	-	\$36,000	\$64,000	\$147,000	\$499,000	\$1.7M
Av. brief preparation cost Av. fee accepted for PS	10%	6.3%	2.3%	2.7%	0.8%	0.27%

^(a) One brief preparation cost not included because it did not correlate well, as it included costs expended on development for future brief preparation.

^(b) One result only.

> greater than; < less than

Table 2.3 Grouped costs for preparation of briefs for professional services
(as individual costs were not available).

Number of briefs in group	28	9
Average brief preparation cost	\$1,230	\$890
Fees accepted for professional services (PS)		
- total value	\$1.7M	\$414,000
- average value	\$61,000	\$45,000
<u>Av. brief preparation cost</u> Av. fee accepted for PS	2.0%	2.0%

2.2.3 Costs of Printing and Advertising

Information obtained on costs of printing briefs and advertising for tenders is included in Table 2.4.

Table 2.4 Costs of printing briefs and of advertising for tenders,
over a similar range of fee values.

Number analysed	Briefs printed 20	Tenders advertised ^(a) 22
Range of fees accepted for professional services (PS)		
- upper value	\$2.75M	\$2.75M
- lower value	\$12,000	\$12,000
Range of costs		
- upper value	\$1,300	\$720
- lower value	\$20	\$100
Average cost per tender	\$365	\$280

^(a) Advertising costs were not incurred when the register of consultants was used.

2.2.4 Costs of Tender Evaluation

Costs for evaluating tenders depend upon the number of tenders received, the complexity of the work to be undertaken, and whether the evaluation process could be combined with concurrent tenders. With concurrent tendering, evaluations for two and even three contracts were processed at the same time, thus reducing the individual contract evaluation costs.

As a general rule the cost for evaluating tenders was 50% of the cost for preparation of briefs. For example, Table 2.5 shows that the average cost of tender evaluations costing less than \$10,000 was \$2,100.

One costing was excluded from Tables 2.5 and 2.6 because it was the total administration cost. This cost was worth \$11,600 for a fee value of \$144,000. Of this, the evaluation cost component was \$2,100.

Table 2.6 shows that for the lowest average accepted fee value, in this case \$38,000, tender evaluation costs average \$1,460. From a minimum fee value the evaluation cost increases relatively slowly with the rapidly increasing fee value. The analysis shows that, while more time was directed into the evaluation of the important and higher value work, the cost of tender evaluation had, nevertheless, a base minimum. This minimum is a significant cost for contracts of low fee value when it is calculated as a percentage of the fee value. Table 2.7 supplies grouped costs for tender evaluation where only the total costs for a group of evaluations were available. Table 2.8 records the total costs of administration for contracts kept by one local authority.

Table 2.5 Costs for tender evaluations for professional services.

Number of tender evaluations costed	All Tender Evaluations	Evaluations Costing < \$10,000
	38	37 ^(a)
Range of tender evaluation costs		
- upper value	\$11,160 ^(b)	\$6,840
- lower value	\$360	\$360
Average tender evaluation cost	\$2,340	\$2,100
Fees accepted for professional services (PS)		
- total value	\$19,200,000	\$17,200,000
- average value	\$505,000	\$465,000
<u>Av. tender evaluation cost</u>		
Av. fee accepted for PS	0.4%	0.5%

^(a) One tender evaluation cost not included as it did not correlate well, because it included other administration costs.

^(b) Tender evaluation cost of \$11,160 included total administration costs.

> greater than; < less than

Table 2.6 Costs for tender evaluations compared with fee values for professional services.

Range of fee values for professional services	\$10,000 to \$20,000	\$21,000 to \$50,000	\$51,000 to \$100,000	\$101,000 to \$200,000	\$201,000 to \$1M	> \$1M
Number of tender evaluations costed	1	9	5	7	9	6 ^(a)
Range of tender evaluation costs						
- upper value	-	\$3,150	\$1,920	\$2,100	\$6,840	\$4,150
- lower value	-	\$360	\$360	\$410	\$950	\$1,660
Average tender evaluation cost	\$960 ^(b)	\$1,460	\$1,100	\$1,510	\$3,480	\$2,320
Fees accepted for professional services (PS)						
- total value	\$12,000	\$344,000	\$315,000	\$1M	\$4.4M	\$11.1M
- average value	-	\$38,000	\$63,000	\$147,000	\$489,000	\$1.8M
<u>Av. tender evaluation cost</u>						
Av. fee accepted for PS	8%	3.8%	1.7%	1.0%	0.7%	0.13%

^(a) One tender evaluation cost not included because it did not correlate well.

^(b) One result only. > greater than; < less than .

Table 2.7 Grouped costs for tender evaluation for professional services (as individual costs were not available).

Number of tender evaluations in group	37
Average tender evaluation cost	\$1,080
Fees accepted for professional services (PS)	
- total value	\$2,100,000
- average value	\$58,000
<u>Av. tender evaluation cost</u>	
Av. fee accepted for PS	1.9%

Table 2.8 Total costs for administration^(a) of professional service contracts for one local authority^(b).

Number of professional services (PS) contracts let	10
Total value of accepted fee	\$220,000
Average value of accepted fee	\$22,000
Total cost of administration (to 26.6.92)	\$50,600
<u>Total cost of administration</u> Total value of fee accepted for PS	23%

^(a) Total administration includes:

1. preparation of briefs
2. printing and advertising
3. evaluation of tenders
4. letting of contracts
5. management of the consultants.

^(b) One local authority kept the total costs of administering its group of professional service contracts let under CPP.

2.2.5 Costs of CPP Bidding

The average costs of bidding under CPP to consultants are shown on Figure 2.1, and a detailed analysis is tabulated in Appendix 1. The cost of bidding was significant and in proportion to the size of the fee value, though it may have been somewhat overstated as some consultants had calculated their costs as hours at chargeable rates.

Whatever basis was used, the percentage cost of bidding, as a proportion of the fee value, became high at fee values of \$40,000 and less.

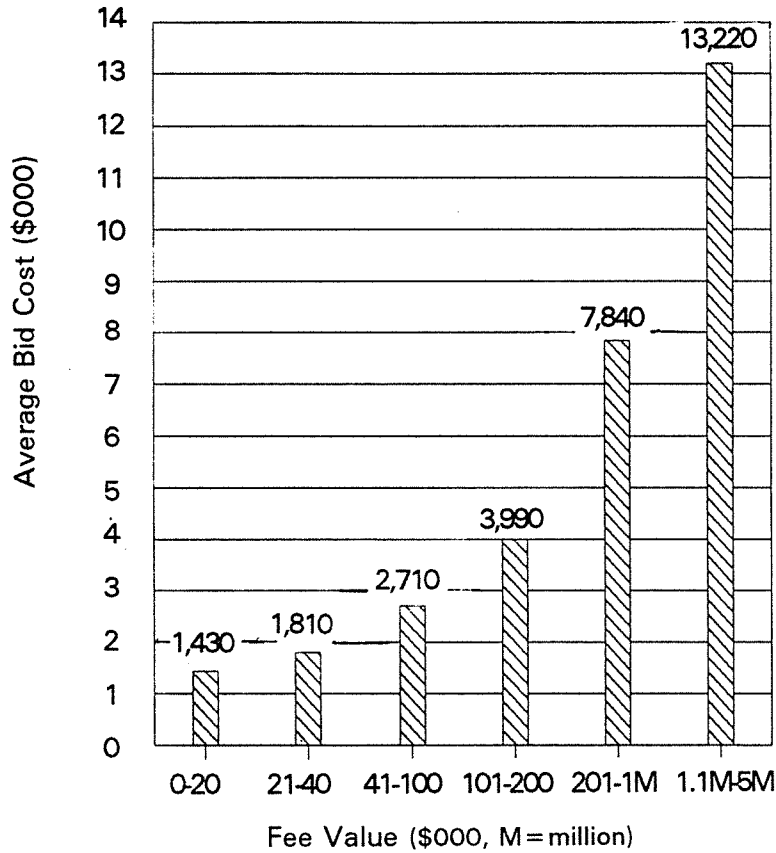
2.2.6 Total Costs of Tenders

Using the average costs of preparation of briefs, of printing, advertising, bidding and evaluating tenders, the likely total cost of tenders was calculated, and shown in Table 2.9, for two, three, and five bidders against a range of contract fee values.

These totals show that the present (1991) CPP system was creating, at the time of the study, excessive administration costs to the client for contracts of fee value of \$40,000 or less, as well as creating excessive costs in bid preparation, printing and advertising. They show too that the consultant's bidding costs were having an inordinate effect. The value of \$40,000 or less is also the level below which the expedited procedures in the CPP manual are applied.

Figure 2.1 Average bidding costs compared with fee values of professional service contracts.

Graph drawn from information obtained from questionnaire responses from 42 consultants (see Appendix 1 for detailed analysis).



Even if these high percentage costs could be balanced against the lower percentage costs for the higher fee value contracts, in the most part they cannot be recovered and are therefore unacceptable.

If a target of holding the total tender administration and bid preparation costs to less than 15% of the fee value would be considered acceptable, then for lower fee value contracts, i.e. less than \$100,000, the procedures for the bid preparation by consultants would need to be simplified.

These costs however were those incurred during the first year that CPP was operating, when client systems and experience were still developing. Client performance and efficiency in administering the CPP process could be expected to improve as further experience is gained. Costs are therefore expected to decrease.

Table 2.9 Number of bids possible for a range of fee values if total costs for administration and bid preparation for professional services are to be 15% or less of the fee value.

Fee value for professional services (PS)	\$12,000	\$37,000	\$64,000	\$147,000	\$500,000	\$1.7M
Total tender cost^(a)						
- for 2 bids	\$5,670	\$8,000	\$8,600	\$14,100	\$23,600	\$34,100
- for 3 bids	\$7,100	\$9,800	\$11,300	\$18,100	\$31,400	\$47,500
- for 5 bids	\$10,000	\$13,400	\$16,700	\$26,100	\$47,100	\$73,500
15% of fee value	\$1,800	\$5,600	\$9,600	\$21,200	\$75,000	\$255,000
No. bids possible if total cost < 15% fee value	none	1	2	3	5 or more	5 or more

^(a) Total tender costs included the average costs of brief preparation, printing, advertising, bidding, and evaluation of tenders.

> greater than; < less than

2.2.7 Conclusions

The recently amended financial levels for contract fee values of \$10,000 and \$40,000 are considered realistic. The problem of the proportionally high bidding costs for fee contracts less than \$100,000 should be discussed with the consultants when they make their bid.

2.2.8 Recommendation

- The use of the expedited procedure for awarding fee contracts should be encouraged. The detail of the expedited procedure in the CPP manual could be improved.

3. COMPETITIVE PRICING PROCEDURES AND QUALITY OF PROFESSIONAL SERVICES

3.1 Influence of CPP on Quality

3.1.1 Responses to Questionnaires

At the time the study was carried out (1992-93), CPP had been in use for the engagement of professional services for all Transit New Zealand work for at least one year. Wide differences in opinions were expressed in the questionnaire responses and subsequent interviews about the use of CPP and its efficiency and effectiveness for allocation of funds available for roads. The main concern expressed was the quality of the service it engendered.

The following responses were received to the question *"Do you consider that the CPP as required by Transit New Zealand affects the quality of the professional service and advice provided by consultants?"*

Source	No change	Adverse	Favourable
TNZ Regional Offices	-	5	1
Local authorities	8	2	1
Consultants	4	34	-

3.1.2 Views from Transit New Zealand

Projects initiated by Transit New Zealand were attracting keen interest from consultants because civil engineering work was scarce. Transit New Zealand expressed surprise at the keenness of prices received and the reduction in expected costs based on past experience.

A number of Transit New Zealand staff considered these reductions to be cost savings because direct benefits would be gained from price competition for professional services through CPP.

Concern was expressed that Transit New Zealand may have been moving away from the principal attribute of price when selecting tenders. Other staff questioned whether the present fierce competition would be healthy for the future.

A minority expressed concern at the problems created by a low price, such as lower quality and reduced level of service with minimum input. In particular, their concern was that the quality of both the engineering advice and contract supervision had declined. One response referred to an increased workload because the office staff had to lead the consultant.

3.1.3 Views from Local Authorities

Local authorities had made only limited use of CPP, and most gave their professional engineering work direct to their own business units. (The reasons for this preference of local authorities to use their business units was outside the scope of this study. However the reasons why local authorities were showing this preference may be worth investigating.)

Local authorities who had used CPP considered that they were now getting real value for money and were surprised by both the intense competition and the low prices being offered.

Forced competition does not provide quality service however, because work was awarded to the consultant who could reduce the input and therefore reduce costs to the minimum that had been stated in the brief in the Request for Tender (RFT). This reduction in cost can be achieved by cutting corners when accepting design considerations, e.g. by minimising site inspections or design effort by taking the conservative approach. As a result, the long-term total costs are generally greater.

Local authorities did not express concern for the future viability of the consultancy market that serves the road network.

3.1.4 Views from Consultants

Consultants had strongly divided opinions on CPP. Initially, most consultants welcomed CPP as it appeared to provide an opportunity to enter either a new or a previously closed market. At the time of the study however, they generally agreed that the effect of price was so dominant that consultants have become merely contractors providing a service rather than professionals providing the best advice, despite price having only a maximum weighting of 20% in the present selection procedures.

To secure work, very low bid prices were being offered that can be achieved only by reducing inputs to a minimum. As the required outputs are surveys, designs, drawings, and completed jobs, all of which have to meet certain standards, the only areas left for reducing inputs are in engineering and supervision.

Yet the concern of most consultants, of one Transit New Zealand Regional Office, and as strongly emphasised by ACENZ, was of the quality of the engineering and supervision put in at the beginning of a project, as that quality determines the lifetime cost-effectiveness. If inputs into a project were being dictated by the low tender price, the quality of the outputs in terms of what finishes up on the road would suffer, and could mean increased and continuing maintenance costs.

Because the cost of the professional services input will generally be lower with CPP, savings in engineering and supervision are not automatically reflected in a lower total project cost.

Performance to price also means that less time is available to spend on alternatives and often the result is to consider only one option, generally the conservative one. Thus innovation is often stifled.

3.2 Influence of Price on Quality

3.2.1 Views from Respondents

Price is clearly a dominant influence in the CPP procedures for engaging professional services.

Most management staff of Transit New Zealand and local authorities (the clients) appear to be influenced by the cost savings that can be made if the professional service was limited by price. They indicated that the price competition was a significant advantage of CPP.

Competition as set out in the Transit New Zealand Act 1989 is interpreted differently by different people. While the requirement is to have regard to "*the desirability of encouraging competition ...*", other aspects that the Transit New Zealand Authority must have regard to include "*the efficient application of the Account*".

A public body is under an obligation to spend its funds in a business-like manner with reasonable care, skill and caution and with due regard to the safety and other interests of the public. Thus quality and total price of the project must be considered by the client, i.e. Transit New Zealand or local authority, under the Transit New Zealand Act.

The dominance of price in the supply of professional services may be a gain to the client in the short term. However in the long term, limiting the engineering input of the project could result in increased total project costs because quality may have suffered, as suggested in Section 3.1. The result may mean that future maintenance costs will be increased and the service life of the road work will be shortened.

3.2.2 Recommendation

- Priority should be given to completing the current task of reviewing the CPP as they relate to the engagement of professional services.

4. COMPETITIVE PRICING PROCEDURES AND COMPETITION

4.1 Competition for Supply of Professional Services

4.1.1 Responses to Questionnaires

The responses to the question "*Do you consider that the CPP as required by Transit New Zealand for professional services encourage competition for the supply of these services*" were:

Source	Yes	No	Undecided
TNZ Regional Offices	4	1	2
Local authorities	9	2	3
Consultants	20	16	6

4.1.2 Views from Respondents

Clearly most of those involved with CPP for professional services expressed the view that the procedure encourages competition. However, many qualified their answers and a strong opinion, particularly from consultants, was that the competition will be between a few set contenders because other consultants will find bidding too costly and the chance of winning a contract will be too slim.

CPP was seen as a price-dominated system that favours both large consultants and one consultant more particularly than the others. Such a system was perceived to be not equal, and also to present difficulties for new contenders when they enter the market, particularly if they have to use attributes that cannot be priced in order to win the contract.

4.2 Bidding

4.2.1 Initial Bidding Pattern

When CPP was first introduced in 1991, an initial flourish of bidding came from consultants interested in new opportunities. A prime reason for participation was to keep their businesses operating in what was, and still is to some extent, a depressed market for consulting engineers.

Data relating to the numbers of consultants bidding for contracts tendered in the first year of operation of CPP were not complete as the numbers presented by Transit New Zealand Head Office and its Regional Offices showed some discrepancy. Also no data were available for June 1992, and the figures for May 1992 were available from only three Regional Offices.

This information provided by Transit New Zealand and by nine local authorities has been analysed and is presented in Figures 4.1 and 4.2, and in Appendix 7, Figures A7.1–A7.14.

The total number of bids made for 113 Transit New Zealand contracts (excluding May and June 1992) was 507, giving an average of 4.5 bids for each contract (Figure 4.1). A total of 287 bids were made for 47 local authority contracts, giving an average of 6 bids for each contract (Figure 4.2).

Responses indicated that, as more work that is traditional to each consultant's practice becomes available, a move away from CPP-type contracts will occur.

Comment from Transit New Zealand was made *"that respondents are saying with one breath that price is dominant, and with the next breath that non-price attributes dominate selection. The view that price is dominant is clearly not unanimous."*

4.2.2 Subsequent Bidding Pattern

Although interest was keen and relatively high numbers of consultants had tendered in the initial year of CPP, the number bidding at the time of the study was comparatively low. Figure 4.1 illustrates the national trend for Transit New Zealand over the year 1991-1992, but the pattern varies greatly from one Regional Office to another (Appendix 7, Figures A7.1–A7.14). The pattern may relate to the time that contracts were let and to the type of contract (i.e. Network Maintenance Management contracts, traffic counting).

Concern was expressed at the declining number of bids for each contract, compared to the numbers when CPP was first introduced. Transit New Zealand staff would prefer a greater number to bid. One Transit New Zealand Regional Office recorded that where seven or eight consultants had been invited to bid, only two or three were responding to the invitation in 1991-92. Consultants however were not surprised by the drop in the number and suggested that the numbers will go even lower.

Local authority data did not allow a detailed breakdown to be made for each month and only the numbers of bids received were available. Figure 4.2 shows that, although the average was 6 bids for each contract, the distribution was skewed and usually only 3 to 4 bids had been made for each contract. According to questionnaire responses and interviews, local authorities were satisfied with the current numbers that were bidding.

Both Transit New Zealand and local authority staffs would feel safer if they either invited all consultants on their registers to bid, or advertised each contract.

4.2.3 Selection of Bids

Transit New Zealand staff felt that their task was to engage the most appropriate consultant, not to keep consultants employed. They were influenced by price in their selection, and generally Transit New Zealand regional managers wanted price to be a factor in competition.

Many consultants agreed that CPP encouraged competition but only on price and not on expertise and quality. They also stated that the CPP system means that the tendering authority gets what it pays for, with the attendant risk that quality may suffer.

Several consultants felt that a bias existed in favour of one of the large consultancies and they had a perception that that consultant was always at an advantage. This feeling, together with the apparent high cost of bidding, had deterred smaller practices in particular from bidding.

Other consultants were of the opinion that at the time of the study the evaluation system was unsatisfactory and, with its heavy weighting of particular non-price attributes, can mean that selection relied on subjective "marking" of a tenderer's self-evaluation.

One consultant also said that the system was easily manipulated to ensure that a particular tenderer obtained the contract. In reaction, that consultant's firm now makes their own assessment whether to tender or not for a contract, basing that assessment on the wording of the tender documents; the attributes to be scored, and the actual office letting the tender. As a result his firm now bids on very few contracts.

On the positive side, one consultant thought that competition had been encouraged by making more roading work available to bidders and that roading authorities have generally parcelled work to obtain the benefits of competition. When a number of competitors of equal experience have become established, CPP will probably encourage competition although at present it favours the incumbent.

Overall the average number of bids received has been high considering the cost incurred to the consultant by each bid. To receive two or three bids denotes good competition for the supply of professional services.

After the initial enthusiasm, the nationwide figures from Transit New Zealand regions showed no obvious decline in bidding numbers, although a declining trend in bidding numbers was indicated in the Hamilton and Wanganui regions. It was not known at the time of the study if the bidding numbers had stabilised.

Figure 4.1 Average number of bids received nationwide by Transit New Zealand for professional services for each month over the study period, June 1991 - April 1992.

This graph and those in Appendix 7, Figures A7.1-A7.14, use data provided by Transit New Zealand, Head Office and its seven Regional Offices, for the period that records were available, June 1991 - April/May 1992. For this period 507 bids for professional services were received for 113 requests for tender. The overall average is 4.5 bids per request for tender.

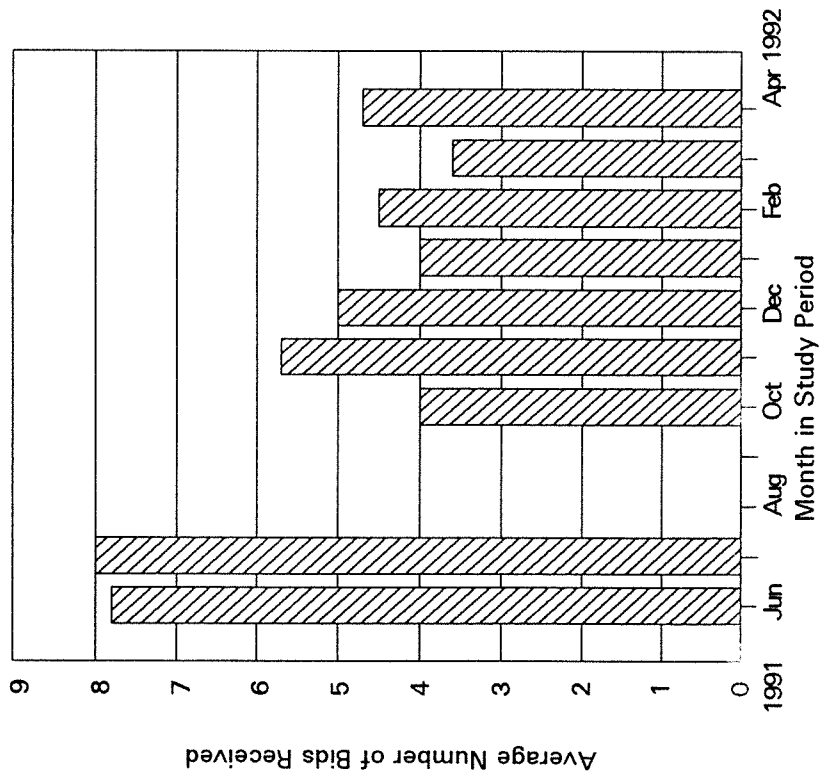
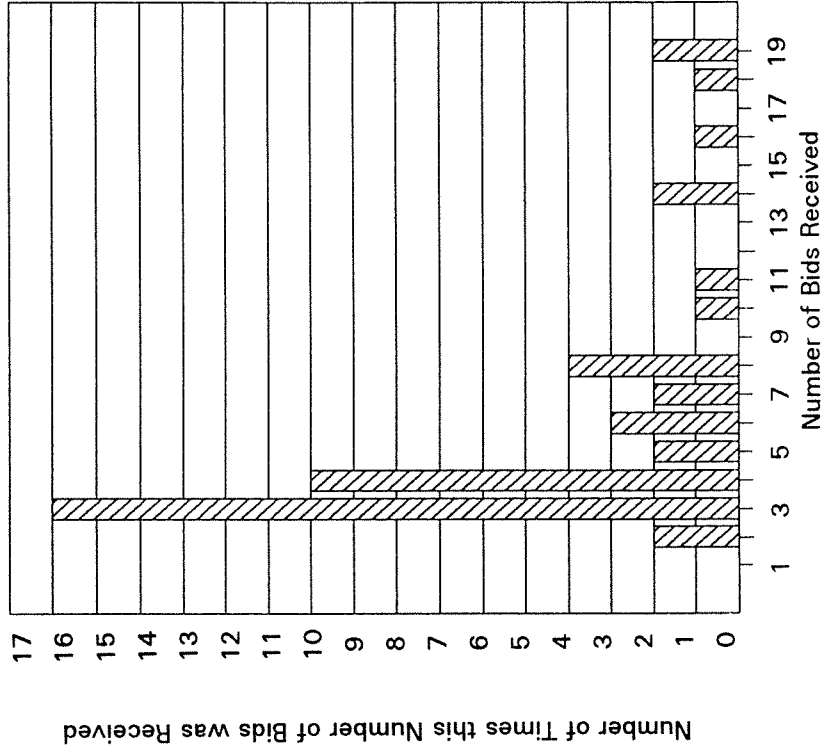


Figure 4.2 Numbers of times a number of bids were received by Local Authorities for professional services over the study period, June 1991 - May 1992.

The graph uses data provided from 9 Local Authorities actively using CPP. A total of 287 bids for professional services was received for 47 requests for tender. The overall average is 6 bids per request for tender.



4.3 New Entrants

4.3.1 Views from Transit New Zealand

Many opinions were offered for introducing new entrants to the market, especially by Transit New Zealand staff who wished to increase the number that are bidding.

The view of one Transit New Zealand regional manager was that new consultants could cause problems, and a working relationship with a known consultant was worthwhile. Other views stated that for consultants to get into the Transit New Zealand market, they could either gain staff with the right experience or combine with other consultants.

4.3.2 Views from Local Authorities

Local authorities did not express any strong views about new entrants, as supported by their apparent satisfaction with the number that were currently bidding. Local authorities are entitled to develop appropriate CPP to encourage broader competition in consultation with industry, and to obtain approval from Transit New Zealand if they have concern about numbers of bids. However this would be a major departure and no local authority had followed this course at the time of the study.

4.3.3 Views from Consultants

Consultants were the most divided in their viewpoints on new entrants. Some consultants believed that to get into the market one has to offer a price that cannot be ignored. Others asked how a new entrant could get selection on merit. Consultants from smaller practices suggested that a percentage of work should be made available for new entrants. Those from larger practices suggested again that a consultant who wants to get Transit New Zealand work could either gain staff with the right experience, or combine with other consultants.

One suggestion was to include an entry provision for new entrants by evaluating on methodology and price only. Another suggestion was to give an extra score for a new entrant as another attribute. However, such suggestions would tend to distort the market.

4.3.4 Conclusions

The numbers of consultants bidding for professional services work are adequate, and who will enter should be decided by the demand for professional services.

4.3.5 Recommendation

- No special provisions should be made in the CPP to encourage new entrants.

5. FUTURE OF PROFESSIONAL SERVICES IN ROADING

5.1 Present Levels of Competition

A number of consultants expressed their concerns about the long-term future of the roading sector of their business. Although much more work was going out to bid and more consultants were involved at the time of the study, competition was intense and the prices for the engineering were considered to be low.

The information supplied by those consultants who responded to the questionnaire was used to produce Figure 5.1. It shows the relative success rate for bids submitted during the financial year 1991-1992 for all Transit New Zealand-funded work. Works Consultancy Services provided a complete set of total bids, but the other totals are for only those consultants who supplied figures on their success rate.

Works Consultancy Services, as the incumbent consultant before the introduction of CPP, has had a good success rate while the success rate for the other consultants, both large and small, may not be sustainable in the long term.

The responses to the question *"Do you consider that the present level of competition for professional services for Transit New Zealand-funded work will change as the health of the New Zealand economy improves?"* were :

Source	Will increase	No change	Will decrease
TNZ Regional Offices	1	2	4
Local authorities	-	5	6
Consultants	3	7	31

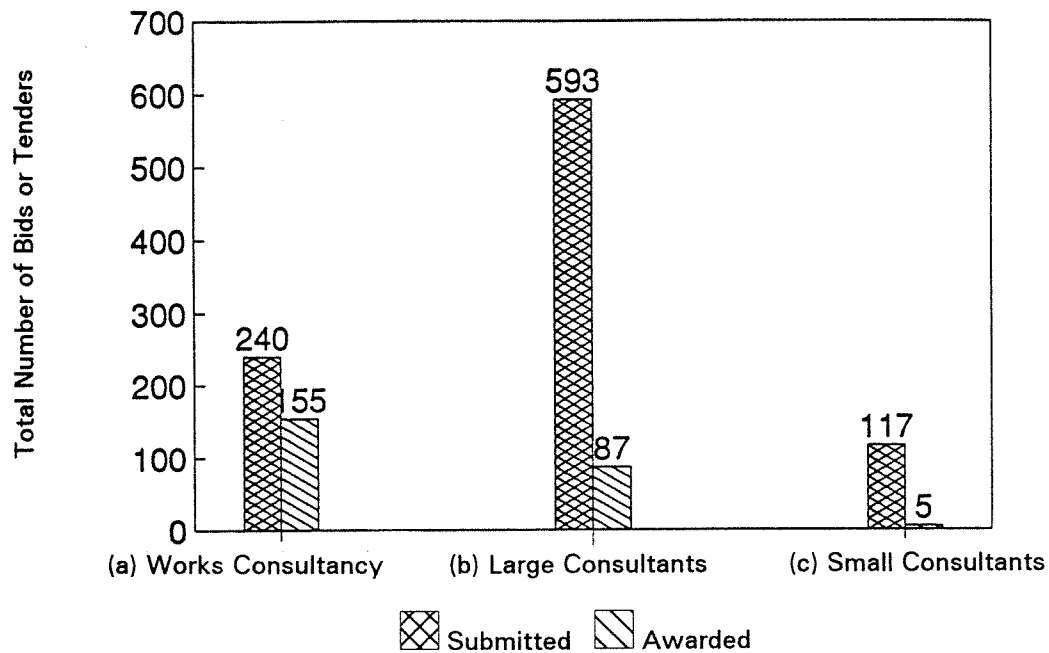
5.2 Future Levels of Competition

A significant proportion of the consultants considered that the present level of competition will decline because of the low success rate and the high cost of bidding.

Other consultants said that their businesses had been subsidising the move into Transit New Zealand work. However the market was not stable at the time of the study and the justification for making the necessary long-term investment was difficult. As a result they would have to decide if they would bid for any more Transit New Zealand work. If they did continue to bid, they would be very selective.

With time the level of competition will be set by the demand for professional services but it will be less than those recorded at the time of the study, and any improvement in the economy will merely hasten the decline.

Figure 5.1 Number of bids for professional services contracts and tenders submitted from Works Consultancy Services Limited^(a), large consultants^(b), and small consultants^(c), for financial year June 1991 - May 1992.



(a) Works Consultancy Services - combined bidding at all fee levels during 1991-1992 for all Works Consultancy Services Limited offices.

(b) Large Consultants - consultants who bid for projects having fee values of more than \$100,000 or more during 1991-1992.

(c) Small Consultants - consultants who bid for projects having fee value of less than \$100,000 during 1991-1992.

$$\text{Success Rate 1991-1992 \%} = \frac{\text{Number of Tenders Awarded}}{\text{Number of Bids Submitted}}$$

Works Consultancy Service	Success rate = 65%
Large Consultants	Success rate = 15%
Small Consultants	Success rate = 4%

Based on information provided by consultants who responded to the questionnaire. The relative totals are not comparable as only the totals for Works Consultancy Services are complete.

5.3 Maintaining the Professional Input

In the past, new developments in roads and bridging were introduced through the Ministry of Works and Development, which also invested in training staff.

Consultants who invested in training their staff could turn out higher quality work and, as a result, would gain higher non-price attribute grades in the CPP evaluation. They could also win contracts at higher prices and thereby recover their training investment.

This may happen in the future, but at the time of the study little investment was being made in training staff for roading work, and the present price cutting allows no finance for training or replacement of staff.

6. PROCEDURES FOR ENGAGING PROFESSIONAL SERVICES

6.1 Selection of Applicants

The selection of applicants for professional services is largely based on Section 19 (2)(c) and (d) of the Transit New Zealand Act 1989 which, in relation to *"a competitive pricing procedure ... shall have regard to -*

"(c) The desirability of encouraging competition in the sector of industry likely to supply goods or services in relation to the project or the class of project:

"(d) The undesirability of excluding from competition for the project or the class of project any party who might otherwise be willing and able to compete: ..."

To identify concerns relating to the selection of applicants using the CPP system under the Act, the Regional Offices of Transit New Zealand, local authorities, and consultants were asked:

"Do you favour a selective tendering system with selection from:

(a) The register of consultants maintained by the tendering authority

(b) A short-listing of consultants with the assessed attributes for the work drawn from the register of consultants

(c) A short-listing by registration of interest?"

Responses were:

Source	(a)		(b)		(c)	
	Yes	No	Yes	No	Yes	No
TNZ Regional Offices	6	0	4	2	5	0
Local authorities	5	6	5	6	8	2
Consultants	23	8	24	9	23	8

Those who answered "Yes" were asked to indicate what number of consultants should be invited to tender for a range of work values. Their responses were:

Source	Value of Work			
	\$10,000-\$20,000	\$20,000-\$50,000	\$50,000-\$100,000	Over \$100,000
TNZ Regional Offices	1-2	1-3	3-5	3 >5
Local authorities	2-3	3-4	4	>4
Consultants	2-3	3	3-4	>4

Because of the apparently different interpretations placed on Section 19 of the Transit New Zealand Act, all respondents qualified their answers to this question on the selective tendering system.

6.2 Register of Professional Services Consultants

6.2.1 Concerns

A register of professional services consultants is maintained by each tendering authority of consultants available for roading projects within their area of responsibility.

Concerns relating to the register included the risks of unintentionally excluding a potential bidder, of pre-assessment not being based on a specific project, and of the high cost of keeping the register updated. Selection was difficult to operate where work packages and consultant numbers were low.

At interview most consultants said they would accept the register system if they themselves were not excluded from any bid opportunity. The same condition applied to the recommended number of bidders for the various values of work. Therefore if the questionnaire responses indicated two to greater than four bidders over the range of fee values, every consultant wanted to be included in that number.

Also at interview, both Transit New Zealand and local authority staffs said they were required to get as many bids as possible to create competition. Nevertheless, experience had shown that, where a number of consultants were invited to bid, only a few would actually submit a tender.

The low number of bidders was attributed to the ease with which consultants could find out how many had been invited to bid. If their chances of winning were not great, they would not submit a tender because of the high cost of bidding. A suggestion was that only those consultants with a high chance of winning should be selected in the first place.

The wording of Section 19 of the Transit New Zealand Act, and the problems associated with the selection of consultants to be invited to bid, means that any selection system will be unacceptable and fraught with dispute.

6.2.2 Recommendations

- For all fee contracts greater than \$40,000, open tendering should be used with advertising.
- For fee contracts of \$40,000 or less let under CPP, selection should be made from the current register of professional services consultants.

6.3 Project Packages for Contracts

6.3.1 Concerns

A great number of relatively small professional services projects were let over the financial year 1991-1992. This number proved costly in all aspects of administration (Table 2.9) and incurred increased costs of management of the separate contracts and different consultants. Consultants expressed a desire not to be involved in competitive bidding for work of a fee value under \$10,000, and a strong preference for packages of value up to \$100,000.

6.3.2 Conclusions

Additional work that arises during the contract period should be offered in the first instance to the incumbent consultant. If the authority is not happy with the proposal offered and has no success in negotiating this, then the contract should be advertised for open bidding with the incumbent consultant excluded.

6.3.3 Recommendations

- Professional services contracts for projects of similar type should be parcelled into larger packages where practicable.
- Professional service contracts lasting for a defined period, e.g. for one year and up to three years where appropriate, should be created.

6.4 Briefs for Requests for Tender

6.4.1 Concerns

The quality of the contract briefs for RFTs varies greatly, according to the questionnaire survey and interviews. To the majority of the consultants the quality was less than satisfactory. On the other hand, some local authorities present very good briefs and one Regional Office of Transit New Zealand had received praise for the quality of its briefs by more than one consultant.

Consultants were asked *"Is the brief as supplied by the tendering authority adequate to assess the extent of the work required of the consultant?"* and responses were:

Yes	12	No	27
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Of those who indicated "No", 26 said the inadequacy of the brief added to their bidding costs.

Throughout New Zealand, the format of the brief showed great variation, and the specific requirements and extent of the contract in the brief were not always clear and open to different interpretations. As well the client may be reluctant to discuss or clarify the scope of the work with a consultant during the tender period.

These issues resulted in a wider range of tender prices, and higher bidding costs for tenderers than expected. The need was expressed overall for well formatted, succinct briefs, with clear instructions to the consultant about the information they are to provide in their tender submission.

Where price is used as a selection factor, clarity is most important as any misunderstanding in the scope of the brief can result in the work being priced incorrectly.

Where quality is the selection factor, and the price is negotiated, i.e. applying Brook's law (Section 7), any misunderstandings about the scope of the work can be resolved before the price is agreed.

6.4.2 Recommendation

- Training programmes should be implemented as soon as possible in the preparation of Request for Tender briefs for professional services, for tendering authority staff. (See also recommendations in Section 8.)

6.5 Submissions to Requests for Tender

6.5.1 Concerns

Concern was expressed by tendering authorities (i.e. the clients) about the size of documents submitted in response to RFTs. Information that is not relevant to the specific contract increased the time spent on its evaluation. For example, the consultant's all-round skills may have been emphasised, rather than their skills and attributes relevant to the particular project and to their handling of the project.

The problem probably lies with both the tendering authorities and the consultants. As discussed in Section 6.4.1, tender documentation and briefs need to be well formatted, with clear instructions to the consultants about the information they are to submit.

If the consultants, particularly new entrants, are inexperienced in bidding for work under the CPP scheme, they should discuss their submissions with the client after the contract has been let. Even if they were unsuccessful, at least they would find out how they might improve their future submissions.

6.5.2 Recommendation

- Better dialogue between tendering authority staff and consultants, together with improved documentation by both parties, should be encouraged to help reduce the costs of making tender submissions.

6.6 Evaluating Professional Services Tenders

6.6.1 Responses to Questionnaires

Evaluating a professional services tender is a very subjective judgement of a consultant's broad competence for that work, despite Transit New Zealand's use of objective (complex and matrix type number) rating systems.

Both Transit New Zealand and local authority staffs recommended the number rating system as a way to show that an honest judgement had been made. It can be documented and held on file, irrespective of whether that judgement was right or wrong. This documentation provides a back-up if a request for a review or a legal challenge to the selection process is raised.

Responses to the questionnaires by Regional Offices of Transit New Zealand and local authorities when asked "*Do you consider the procedure for evaluating professional services tenders is very good, satisfactory, unsatisfactory?*" were:

Source	Very Good	Satisfactory	Unsatisfactory
TNZ Regional Offices	-	5	1
Local authorities	-	11	-

6.6.2 Concerns

One Regional Office thought the procedures varied between satisfactory and unsatisfactory. Another regional office considered the procedures to be unsatisfactory, because they were unwieldy, expensive, time-consuming and overly restrictive. A number of local authorities said they were using the procedures for other than roading work.

The interviews, however, gave less clear support for the evaluation procedure and many local authority staffs suggested alternative procedures. The rules were considered too rigid, and instead flexibility was needed in the procedure for lower value and less important work. A well defined, quick evaluation procedure was required.

6.7 Tender Evaluation Team

6.7.1 Concerns

The tender evaluation teams (TET) at Transit New Zealand should be reduced to two members. For low value fee contracts (i.e. \$40,000 or less) a single evaluator was considered appropriate, followed with a peer review by a senior manager, e.g. the regional manager.

For high value fee contracts, the regional manager should be a member of the TET. Transit New Zealand has made use of local authority staff as well as consultants as members of evaluation teams.

The competence of the Transit New Zealand staff who undertook the evaluations was of concern to a small number of consultants. One suggestion was that the evaluation teams should be comprised of only consultants, because consultants had the experience needed to judge attributes.

The opposite argument was also presented, that the evaluators should be independent with no associated commercial interest. In their positions as evaluators, consultants would have access to their competitors' bid documents and could use this information for commercial advantage.

The present TET was considered a necessary cost of a selection system if the system was to be clear and open, and if the procedures were to be documented to satisfy any subsequent challenge. The whole aim of evaluating tenders is to ensure that the most appropriate consultant who will meet the needs of the project is chosen. Thus limiting the input into the selection process could well prove counterproductive.

6.7.2 Conclusions

The members of the TET should be the most competent, up-to-date, and experienced people available in the Transit New Zealand region or local authority district. They should not be commercially involved in tendering for Transit New Zealand-funded roading work.

6.7.3 Recommendations

- For important, and for all critical, complex work, the number of members of the Tender Evaluation Team should remain at three.
- For straightforward routine work, the number on the Tender Evaluation Team could be reduced to two.
- For low value fee contracts, i.e. \$40,000 or less, one evaluator is enough for the task. The evaluation of the submissions should be documented and reviewed by a senior officer (the regional manager or local authority executive) before approval.

6.8 Weighted Attribute Method

6.8.1 Responses to Questionnaires

Responses from local authorities and Regional Offices of Transit New Zealand to the question "*Do you consider the weighting system is fair to all tenderers?*" were:

Source	Yes	No
TNZ Regional Offices	4	3
Local authorities	7	3

6.8.2 Concerns

Comments on the attribute weighting system (CPP Manual, Part C, 4.8) used to evaluate attributes were extensive and many opposing views were expressed. A selection of the concerns obtained from the comments is given here.

Influence of consultancy size The large consultancies, and in particular Works Consultancy Services with their experience, were favoured by the attribute weighting system. Small and new firms were disadvantaged as they must submit a low price to win a bid.

Need for experience and skills If they wanted to be considered, the new or small consultant should obtain the skills required for the task. They could gain these skills by recruiting staff with the experience, or combine on a joint-venture basis with other consultants who already have the experience and skills.

Flexibility The procedures need to be flexible, and in particular to be able to alter the weightings. The weighting for price should receive a much greater rating than 20%.

Effect of price The prominence given to price in the present attribute weighting percentages causes very low value fee prices to skew the results, and this may not be in the best interests of Transit New Zealand.

The effect of price could be reduced by using a weighting lower than 20% or by adjusting the sensitivity of the non-price attributes, thereby increasing the spread of ratings.

Relativity The weighted attributes system needs the right relativity to ensure that a reasonable surcharge was added to the price, over those proposals that have higher non-price attributes.

Marking interval The marking interval is extremely important in establishing the sensitivity of the non-price attributes relative to the price attribute. The marking interval, out of a possible grade of 4.0, was generally of the order of 0.1 to 0.2 but up to 0.5 has been used in some parts of New Zealand.

- The range of marking of non-price attributes could be reduced to narrow the competition and to allow new entrants into the roading market.

However, a reduction in differentiation was tending to cause non-price attributes to close up. If that happens, then selection would depend entirely upon price.

6.8.3 Suggestions

Apart from devising a completely new system, other suggestions for improving the present procedures and to reduce the costs were made.

- The fail point of zero was considered inappropriate. Instead the fail rate of any attribute should be at least 40% of the maximum possible for that attribute. For small value contracts a yes/no pass on each attribute was suggested.
- The evaluation system could base selection on price from those consultants having non-price attributes of say 80% of the maximum possible.
- The evaluation system could allow the price envelope to be opened for only the top three consultants, who are decided by their non-price attributes.
- The non-price attributes of a consultant could be evaluated once using the register of professional services consultants, and that evaluation remains the standard until it is reviewed or challenged.

6.8.4 Examining the Method

- The non-price attribute scoring pattern of various consultants, obtained by Transit New Zealand Regional Offices, was examined, and it showed that the non-price attributes excluding methodology varied only slightly. For example, one consultant with 14 bids had non-price attributes excluding methodology with a coefficient of variation of only 1.1%, and for another with 9 bids the coefficient was 3.5%. Including methodology for the same two consultants gave the higher coefficients of variation of 7% and 14%. All these bids had been from the same Transit New Zealand region and had the same weightings.

This pattern suggested that the non-price attributes excluding methodology should be possible to evaluate at registration, and then merely to review this evaluation regularly. If this system for evaluation was possible, the lengthy submissions required from the consultants with each bid would not be required, and the evaluation costs would be reduced. Significant savings should be possible.

However, such a change in procedure has severe limitations because, as a principle, the attributes should always be relevant to the RFT for the particular project being considered. They should not be applied as a standard to all classes of work.

Cut-off percentage A cut-off percentage for evaluation was also examined. If a bidder did not score 80% of the non-price attributes of the top bidder, then that bid should be discarded from further consideration. This procedure would deter a consultant, who is clearly unsuitable, from "buying" the work by submitting a low bid.

Marking The marking of non-price attributes excluding methodology was examined. It showed a different spread between the three Transit New Zealand Regional Offices participating in the survey as follows:

- One region rated the top three bidders all with a grade of better than 98% of the top bidder's grade, for 75% of the 12 contracts examined;
- The second region rated the top three bidders all at better than 92% of the top bidder's grade, for 75% of the 17 contracts examined;
- The third region could only rate their top three bidders at better than 86% of the top bid, for 75% of the 21 contracts examined.

This divergence in spread may have been related to the different capabilities of the top three bidders in each of the three regions, or to a different range of marking. With such a divergence in marking, any sensible cut-off could be difficult to set.

With any system of evaluation, consistency in marking is necessary, and the spread of the non-price attributes should allow their relative values to be balanced by the price attribute. Benchmarks are needed against which the subjective evaluation of non-price attributes can be checked.

6.8.5 Conclusions

Once the evaluation procedures are confirmed, a suitable training programme in the tender evaluation process should be arranged by Transit New Zealand for its own staff and for those of local authorities. This will help to achieve consistency in application of the attribute weighting system. See recommendations in Section 8.

6.8.6 Recommendations

- No further changes should be made to the present CPP relating to attributes and weighting.
- If a procedure similar to the present attributes and weighting system is to be retained, then the system should allow the spread of the values of the non-price attributes to be balanced directly with the value of price.

6.9 Pre-letting Interviews

6.9.1 Concerns

Communication between the client and consultant could be improved. For example, consultants who, with their present attributes, had no chance of success for particular types of work need to be told of their shortcomings.

However, where price was a factor, details of the requirements of the RFT were generally only reluctantly discussed with a consultant during the tender period. Where Brook's law (Section 7) was used this reluctance was less of a problem.

Pre-letting interviews with the consultant before letting were supported, particularly because the consultant could make a visual presentation, and the client could gain additional information on the consultant's non-price attributes. Such interviews should be only with the short-listed consultants. When these interviews should take place, whether before or after the authority opens the price envelope, was not clear from the responses.

The value of these interviews were of questionable value, particularly where the attributes of the preferred consultant were well known. Interviews are difficult to document for audit purposes, which was a concern for Transit New Zealand.

A joint meeting of all potential tenderers during the tender process was not promoted because of the obvious risk of collusion once the number of serious bidders were known.

Following the interview, price could be considered under either Brook's law or by the weighted attributes evaluation method. Practical difficulties may be experienced, according to Transit New Zealand, if this approach was adopted when using the weighted attribute evaluation method. For example, the two top non-price attribute bidders may not have the top overall grades once price had been taken into account. If this did happen, then a third interview could be arranged.

6.9.2 Recommendation

- Pre-letting discussions with the top non-price attribute bidder, or the two top non-price attribute bidders, should be considered as part of the letting procedure where:
 - a value can be gained by the consultant giving a visual presentation,
 - a new consultant is involved, or
 - there are doubts about any matter, or
 - the intent from the brief or methodology is unclear.

7. QUALITY-BASED SELECTION PROCEDURES AND APPLICATION OF BROOK'S LAW

7.1 Introduction

Brook's law, derived from the 1972 Brook's Act passed by the US Federal Government, is being followed by most US State governing bodies. The Act was amended in 1987 so that quality-based selection procedures are now required to be used on all highway projects where Federal grant funds are involved. The Asian Development Bank and the World Bank use similar procedures.

Brook's Act "declares it to be policy of the Federal Government to publicly announce all requirements for architectural and engineering services, and to negotiate contracts for architectural and engineering services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices." (Section 902)

The procedure to be followed is set out in Sections 903 and 904 of Brook's Act. This procedure, often referred to as Brook's law or Brook's rules, requires:

- Evaluation of current statements of qualifications and performance on file or as submitted for the proposed project.
- Discussion with not less than three firms regarding anticipated concepts and alternative methods of approach for furnishing the required service.
- Selection in order of preference based on the established and published criteria of not less than three firms considered to be most highly qualified to provide the service required.
- Negotiation of a contract with the highest qualified firm at compensation that is fair and reasonable to the Government. This determination shall take into account the estimated value of the services to be rendered, the scope, complexity and the professional nature. Failing agreement, negotiations to be terminated with the firm considered to be the most qualified.
- Negotiation of a contract with the second highest qualified firm.
- Negotiation of a contract with the third highest qualified firm.
- Selection of additional firms in order of their competence and qualifications and continue negotiations until an agreement is reached.

7.2 Application of Brook's Law in New Zealand

7.2.1 Present Use

Although Brook's law is included in the CPP manual (Part C, 4.7 Tender Evaluation - Brook's Law Method), it had not been widely used in New Zealand at the time of the study and tendering authorities were generally reluctant to apply it.

In the main, Transit New Zealand staff believed that Brook's law should be reserved for professional service work where quality of service is paramount and where the scope of the service to be delivered is difficult to define.

Local authorities generally did not favour or use Brook's law for work carried out under CPP. As far as could be ascertained, no local authority had at the time of the study awarded a contract using Brook's law.

Larger consulting practices and ACENZ supported the awarding of fee contracts under Brook's law. However smaller practices felt disadvantaged.

7.2.2 Disadvantages of its Use

The general reluctance of most Transit New Zealand Regional Office staff to use Brook's law was attributed to a number of concerns. Concerns include:

- Transit New Zealand would be moving away from the principle of price as an element in selection. With consultants of almost equal competence, Brook's law does not give the advantage of price differences to the client.
- Commercial experience and negotiation skills held by Transit New Zealand staff, especially needed for negotiating prices, was lacking.
- Negotiation was a lengthy and time-consuming process.
- Consultants with the necessary background experience can have success over other bidders.
- Greater input into the non-price attributes and their evaluation was needed.

The direct use of Brook's law could raise problems where the tendering procedure was in conflict with the prescribed tendering rules being used by most local authorities. Local authorities, either individually or collectively, needed to consider using quality-based procedures for selecting consultants that still comply with the intent of their open tendering rules.

7.2.3 Support for its Use

Consultants, in the main, supported the use of Brook's law and made the following comments:

- Consultants were able to proffer a higher quality of service for a corresponding acceptable price, providing the client negotiated on a reasonable basis.
- Brook's law promoted better engineering solutions which would benefit the client in both the short and long term. Alternative methods of approach could be considered and negotiated.
- In the future, after five years of CPP experience, Brook's law may be the fairest system for all types of work.
- Brook's law should be used only if a more flexible interpretation of non-price attributes was adopted.
- Brook's law was considered suitable for larger consultants with proven track records and relevant experience.
- Smaller consultancy practices would have less chance of winning a contract under the Brook's law method. However they had as little chance of winning under the evaluation procedures currently used.

With a combination of Brook's law and larger work packages, administration costs and time should reduce. Thus funds would be more efficiently and effectively used because the number of tenders being let would be reduced.

Using Brook's law would allow development of consistency in procedures and contract processing, particularly in contract negotiations and interviews.

Incentives would be created because, if the consultant did not perform, then that consultant would be less likely to win the next contract package, i.e. they cannot "buy" a continuation.

Increased opportunities would also be possible for developing better long-term relationships between client and consultants. Thus better management of Transit New Zealand-funded work would result.

However training programmes for both Transit New Zealand and local authority staffs in negotiation skills would need to be implemented to apply Brook's law (see Section 8).

A policy move to apply Brook's law would provide a stability to the process for engagement of consultants and an incentive for serious consultants to continue in the roading market. With Brook's law, quality of the service provided would become the dominant factor, which overall would result in better solutions and service.

7.2.4 Recommendations

- Wherever possible, selection of the consultants should be made using quality-based procedures, i.e. Brook's law, with price to be negotiated.

- Selection of consultants can be made using price as an element in the selection for projects which are:
 - technically straightforward and routine,
 - tightly briefed, and
 - of minimal impact on public safety and project cost.

- Local authorities should consider using quality-based procedures for selecting those consultants that still comply with the intent of their open tendering rules.

8. TRAINING FOR IMPLEMENTING COMPETITIVE PRICING PROCEDURES

8.1 Training Requirements

Three areas relating to the implementation of CPP require training inputs for Transit New Zealand and local authority staff. They are:

1. Request for Tender (RFT) brief preparation (Section 6.4),
2. Tender evaluation procedures (Section 6.6),
3. Negotiation skills (Section 7).

8.1.1 RFT Brief Preparation

Clearly the quality of the briefs for RFTs varies greatly and needs to be improved.

8.1.2 Tender Evaluation Procedures

Although these may appear to be satisfactory, they need flexibility to meet particular circumstances. Clearer guidelines for applying the procedures are needed to achieve consistency in evaluating tenders.

8.1.3 Negotiation Skills

Lack of experience and training in negotiation (in both personal and financial terms) is a problem recognised by client staffs and by consultants.

With use of Brook's law, interview and negotiating skills are an essential and critical part of the evaluation procedure. However, with any tender method, interviews and negotiations can establish a better understanding of client needs. The result will be a better engineering solution for a fair and agreed price.

8.1.4 Recommendation

- Training programmes should be implemented in
 - preparation of Request for Tender briefs,
 - tender evaluation procedures, and
 - negotiation skillsfor staff of Transit New Zealand and of local authorities.

9. RECOMMENDATIONS

The recommendations made in the relevant sections of the report (and referenced to the right of the page) are drawn together here for ready reference.

- The operation of the Transit New Zealand time-recording system, WAR (Work Activity Recording), should be reviewed, and the activity/time information that is required by the managers at both Regional Offices and Head Office should be precisely determined, so that costs can be obtained. Section 2.1.4
- The use of the expedited procedure for awarding fee contracts should be encouraged. The detail of the expedited procedure in the CPP manual could be improved. Section 2.2.8
- Priority should be given to completing the current task of reviewing the CPP, as they relate to the engagement of professional services. Section 3.2.2
- No special provisions should be made in the CPP to encourage new entrants. Section 4.3.5
- For all fee contracts greater than \$40,000, open tendering should be used with advertising. Section 6.2.2
- For fee contracts of \$40,000 or less let under CPP, selection should be made from the current register of professional services consultants. Section 6.2.2
- Professional services contracts for projects of similar type should be parcelled into larger packages where practicable. Section 6.3.3
- Professional service contracts lasting for a defined period, e.g. for one year and up to three years where appropriate, should be created. Section 6.3.3
- Training programmes should be implemented as soon as possible in the preparation of Request for Tender briefs for professional services, for tendering authority staff. Section 6.4.2, also Section 8
- Better dialogue between tendering authority staff and consultants, together with improved documentation by both parties, should be encouraged to help reduce the costs of making tender submissions. Section 6.5.2

- For important, and for all critical, complex work, the number of members of the Tender Evaluation Team should remain at three. Section 6.7.3
- For straightforward routine work, the number on the Tender Evaluation Team could be reduced to two. Section 6.7.3
- For low value fee contracts, i.e. \$40,000 or less, one evaluator is enough for the task. The evaluation of the submissions should be documented and reviewed by a senior officer before approval. Section 6.7.3
- No further changes should be made to the present CPP relating to attributes and weighting. Section 6.8.6
- If a procedure similar to the present attributes and weighting system is to be retained, then the system should allow the spread of the values of the non-price attributes to be balanced directly with the value of price. Section 6.8.6
- Pre-letting discussions with the top non-price attribute bidder, or the two top non-price attribute bidders, should be considered as part of the letting procedure (subject to certain conditions). Section 6.9.2
- Wherever possible, selection of the consultants should be made using quality-based procedures, i.e. Brook's law, with price to be negotiated. Section 7.2.4
- Selection of consultants can be made using price as an element in the selection for projects which are technically straightforward and routine, tightly briefed, and of minimum impact on public safety and project cost. Section 7.2.4
- Local authorities should consider using quality-based procedures for selecting those consultants that still comply with the intent of their open tendering rules. Section 7.2.4
- Training programmes should be implemented in the preparation of Request for Tender briefs, tender evaluation procedures, and negotiation skills for staff of Transit New Zealand and of local authorities.
Section 8.1.4, also Section 6.4.2

APPENDICES

CONTENTS

1. Bidding costs supplied by consultants compared against the professional services fee
2. Summary of statistics from questionnaire responses
3. Persons interviewed for project
4. Questionnaire for Transit New Zealand Regional Offices, with numbers of responses to specific questions
5. Questionnaire for local authorities, with numbers of responses to specific questions
6. Questionnaire for consultants, with numbers of responses to specific questions
7. Numbers of bids received by Transit New Zealand for professional services

**APPENDIX 1. BIDDING COSTS SUPPLIED BY CONSULTANTS
COMPARED AGAINST THE PROFESSIONAL SERVICES FEE**

Professional Services Fee Range (\$)	Number of Bids	Average Bidding Cost (\$)	Median Bidding Cost (\$)	Bid Range (\$)
0 - 20,000	11	1,431	1,219	200-4,300
20,000-40,000	15	1,809	1,440	500-3,331
40,000-100,000	18	2,707	2,547	632-5,000
100,000-200,000	13	3,990	3,328	1,087-9,402
200,000 - 1M	12	7,844	5,500	1,765-20,000
1M - 5M	7	13,222	15,000	6,000-19,053

M = million

**APPENDIX 2. SUMMARY OF STATISTICS FROM
QUESTIONNAIRE RESPONSES**

Source	Questionnaire response		
	No. out	No. in	% response
Transit New Zealand Regional Offices	7	7	100
Local authorities	16	14	88
Consultants	66	43*	65

* 23 nil replies were recorded. Copies of questionnaires were sent to branch offices of the same consultants that had put in bids. Not all branches responded because they had submitted a joint reply with their head office.

The overall response by consultants to the questionnaire was lower than hoped for. In part this was related to the limited follow up that was possible within the nine week period set for undertaking this research project. Much work was needed to gain the 100% response from Transit New Zealand Regional Offices and the 88% response from local authorities.

APPENDIX 3. PERSONS INTERVIEWED FOR PROJECT

Formal interviews for the project were held with the following persons, listed with their affiliations:

Martyn Bloxham	Murray North & Partners, Hamilton
Peter Beilby	Hamilton City Council
Rod McAdam	Hamilton City Council
Ray Firth	Waikato District Council
Tim Cavanagh	Waikato District Council
Graeme Taylor	Transit New Zealand Regional Office, Hamilton
John Douglas	Works Consultancy Services, Auckland
Noel Hawkins	Works Consultancy Services, Auckland
Martin Leak	Works Consultancy Services, Auckland
Peter Hay	Beca Carter Ferner & Hollings, Auckland
Chris Jenkins	Beca Carter Ferner & Hollings, Auckland
Gary Hadfield	Beca Carter Ferner & Hollings, Auckland
Philip Sutton	Transit New Zealand Regional Office, Auckland
Geof Excell	Bruce Henderson, Tauranga
Bill Mitcheson	Mitcheson McGregor, Tauranga
Mark McGregor	Mitcheson McGregor, Tauranga
Terry Brown	Transit New Zealand Regional Office, Auckland
Chris Graham	Barrett Fuller, Hamilton
Ian Watson	Barrett Fuller, Hamilton
Roly Frost	Works Consultancy Services, Hamilton
Dave Jennings	Works Consultancy Services, Hamilton
Simon Hunt	Works Consultancy Services, Hamilton
John Carter	Carter, Keuke and Latham, Hamilton
Doug Inch	Transit New Zealand Regional Office, Wellington
Ian Cox	Transit New Zealand Regional Office, Wellington
Barry Chamberlain	Duffill Watts & King, Dunedin interviewed in Wellington
John Howse	Fraser Thomas, Auckland interviewed in Wellington and Auckland
Harold White	ACENZ, Wellington
Bill Barclay	The Hutt City Council
Peter Wilcox	Works Consultancy Services, Wellington
Ken Jackson	Local Government Association, Wellington
Shafiq Islan	Porirua City Council
Colin Knaggs	Transit New Zealand Regional Office, Hamilton

**APPENDIX 4. QUESTIONNAIRE FOR
TRANSIT NEW ZEALAND REGIONAL OFFICES,**
with numbers of responses to specific questions

Appendix 4 Questionnaire for Transit New Zealand regional offices, with numbers of responses to specific questions. NUMBER _____

COMPETITIVE PRICING PROCEDURES FOR PROFESSIONAL SERVICES

QUESTIONNAIRE FOR TNZ REGIONAL OFFICES

1. Do you consider that the CPP as required by TNZ for professional services encourage competition for the supply of these services?

Yes 4 No 1

Comment Two responses were both yes & no.

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2. Do you consider that the present level of competition for professional services for TNZ funded work will change as the health of the NZ economy improves?

Will Increase 1 No Change 2 Will Decrease 4

Comment

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3. Do you consider that the CPP as required by TNZ affects the quality of the professional service and advice provided by Consultants?

None 0 Adverse 5 Favourable 2

Comment

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4. Do you consider that there are an adequate number of consultants bidding for TNZ work who have the necessary specialised experience?

Yes 4 No 3

If 'NO', in what areas are there deficiencies? How could the number be increased?

Comment

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5. Do you consider some consultants are "buying" work with a low price merely to gain the experience?

Yes 6 No 1

If 'YES', what problems does this cause?

Comment

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6. Do you consider the administrative cost of CPP to the value of the professional service is:

Excessive 4 Average 2 Minimal

One response was between excessive & average
How could the procedures be improved upon, in particular, for the evaluation of tenders as required for the so called "Large Projects (Brookes Rule)" and for the "other than large projects" to reduce the administrative cost?

Comment

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7. Do you favour a selective tendering system with selection from:

(a) The register of consultants maintained by the Tendering Authority

Yes 6 No 0

(b) A short-listing of consultants with the assessed attributes for the work drawn from the register of consultants

Yes 4 No 2

(c) A short-listing by registration of interest

Yes 5 No 0

If the answer is "YES", what number of consultants should be invited to tender for the following range of work values?

VALUE OF WORK	NUMBER OF CONSULTANTS SELECTED
\$10,000 - \$20,000	1 to 2
\$20,000 - \$50,000	1 to 3
\$50,000 - \$100,000	3 to 5
Greater than \$100,000	3 to at least 5

Comment

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8 With CPP, for what types of Professional Services would you favour using the following systems?

(a) Brookes Rules (Large Projects)
i.e. attributes assessed and the price negotiated

Types of Professional Services:

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- (b) Evaluation with Price factor (Other than Large Projects)
 - i.e. Non-price attributes assessed with the tender price included.

Types of Professional Services:

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Comment

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- 9. Do you consider the procedure for evaluating Professional Services tenders is:

Very Good 0 Satisfactory 5 Unsatisfactory\

How could it be improved upon?

Comment

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- 10. The CPP uses a weighting system to evaluate the attributes of tenderers for professional services. Do you consider the weighting system is fair to all tenderers?

Yes 4 No 3

Comment

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11. Please provide an analysis of the professional services contract information for the financial year commencing 1 July 1991 as follows. (Up to 20 contracts).

Contract Type (Briefly)	Value	No of Tenders Received	Range of Tender Prices
e.g. Investigations and reporting			

Total number of contracts let

Comment

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12. Please provide a summary of actual costs for the preparation of briefs, printing of documents, advertising and evaluation of tenders for various types of professional service contracts let.

Contract Type (Briefly)	Preparation Cost		Printing Cost	Advertising Cost	Evaluation Cost		Total Admin Cost	Contract Value
	In House	Consul- tant			In House	Consul- tant		

(If the individual costs are not known for a particular contract, then show the total. If the costs are assessed say so. Include in the cost for any unpaid overtime).

13. Please return with the completed questionnaire copies of the "brief", i.e. Schedule A, scope of services for two large and two small different types of contract for professional services.

14. Any general comment on the administration of CPP for Professional Services?

Comment

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APPENDIX 5. QUESTIONNAIRE FOR LOCAL AUTHORITIES,
with numbers of responses to specific questions

Appendix 5 Questionnaire for local authorities, with numbers of responses to specific questions.

NUMBER _____

COMPETITIVE PRICING PROCEDURES FOR PROFESSIONAL SERVICES

QUESTIONNAIRE FOR LOCAL AUTHORITIES

1. Do you consider that the CPP as required by TNZ for professional services encourage competition for the supply of these services?

Yes 9

No 2

Comment

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2. Do you consider that the present level of competition for professional services for TNZ funded work will change as the health of the NZ economy improves?

Will Increase 0

No Change 5

Will Decrease 6

Comment

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3. Do you consider that the CPP as required by TNZ affects the quality of the professional service and advice provided by Consultants?

None 8

Adverse 2

Favourable 1

Comment

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4. Do you consider the administrative cost of CPP to the value of the professional service is:

Excessive 3 Average 6 Minimal 1

If your answer is 'Excessive', how could the procedures be improved upon, in particular, for the evaluation of tenders as required for the so called "Large Projects (Brookes Rule)" and for the "other than large projects" to reduce the administrative cost?

Comment

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5. Do you favour a selective tendering system with selection from:

(a) The register of consultants maintained by the Tendering Authority

Yes 5 No 6

(b) A short-listing of consultants with the assessed attributes for the work drawn from the register of consultants

Yes 5 No 6

(c) A short-listing by registration of interest

Yes 8 No 2

If the answer is "YES", what number of consultants should be invited to tender for the following range of work values?

VALUE OF WORK	NUMBER OF CONSULTANTS SELECTED
\$10,000 - \$20,000	2 to 3
\$20,000 - \$50,000	3 to 4
\$50,000 - \$100,000	4
Greater than \$100,000	> 4

Comment

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6. With CPP, for what types of Professional Services would you favour using the following systems?

- (a) Brookes Rules (Large Projects)
i.e. attributes assessed and the price negotiated

Types of Professional Services:

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- (b) Evaluation with Price factor (Other than Large Projects)
i.e. Non-price attributes assessed with the tender price included.

Types of Professional Services:

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Comment

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7. Do you consider the procedure for evaluating Professional Services tenders is:

Very Good Satisfactory Poor

Comment

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8. The CPP uses a weighting system to evaluate the attributes of tenderers for professional services. Do you consider the weighting system is fair to all tenderers?

Yes 7 No 3

Comment

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9. As your authority has let 5 or more contracts for professional services, would you please provide an analysis of the contract information as follows.

Contract Type (Briefly)	Value	No of Tenders Received	Range of Tender Prices

Comment

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10. Does your authority have in place a time recording system so that the actual cost of preparation of briefs, printing of documents, advertising and evaluation of tenders is known at least in total, for each contract let?

Yes 0 No 11

If your answer is yes, would your authority be prepared to make a summary of the cost information available as follows?

Contract Type (Briefly)	Preparation Cost	Printing Cost	Advertising Cost	Evaluation Cost	Total Admin Cost

(If the individual costs are not known for a particular contract, then show the total. If the costs are assessed say so).

11. Any general comment on the administration of CPP for Professional Services?

Comment

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APPENDIX 6. QUESTIONNAIRE FOR CONSULTANTS,
with numbers of responses to specific questions

Appendix 6 Questionnaire for consultants, with numbers of responses to specific questions.

NUMBER _____

COMPETITIVE PRICING PROCEDURES FOR PROFESSIONAL SERVICES

QUESTIONNAIRE FOR CONSULTANTS

1. Do you consider that the CPP as required by TNZ for professional services encourage competition for the supply of these services?

Yes 20

No 16

Comment

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2. Do you consider that the present level of competition for professional services for TNZ funded work will change as the health for the NZ economy improves?

Will Increase 3

No Change 7

Will Decrease 31

Comment

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3. Do you consider that the CPP as required by TNZ affects the quality of the professional service and advice provided by Consultants?

None 4

Adverse 34

Favourable

Comment

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4. Do you consider the CPP as required by TNZ are fair to all Consultants?

Yes 6
No 35
Comment

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5. Is the "Brief" as supplied by the Tendering Authority adequate to assess the extent of the work required of the Consultant?

Yes 12 No 27

If your answer is "NO", does the inadequacy of the "Brief":

(a) Add to your bidding cost?

Yes 26 No 2

(b) Increase the range of prices received by the Tendering Authority?

Yes 29 No

Comment

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6. Are the "delivery dates" as set in the Brief realistic?

Yes 18 No 17

Comment

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7. Do you favour a selective tendering system with selection from:

(a) The register of consultants maintained by the Tendering Authority

Yes 23 No 8

(b) A short-listing of consultants with the assessed attributes for the work drawn from the register of consultants

Yes 24 No 9

(c) A short-listing by registration of interest

Yes 23 No 8

If the answer is "YES", what number of consultants should be invited to tender for the following range of work values?

VALUE OF WORK	NUMBER OF CONSULTANTS SELECTED
\$10,000 - \$20,000	2 - 3
\$20,000 - \$50,000	3
\$50,000 - \$100,000	3 - 4
Greater than \$100,000	> 4

Comment

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8. To achieve maximum economy in the cost of bidding, what sizes of project packages for Professional Services would best suit your business for the various classes of work?

CLASS OF WORK VALUE

- (a)
- (b)
- (c)
- (d)
- (e)

Comment

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11. Can you give actual examples of your total bidding costs for TNZ funded work against the contract value for the work?

BIDDING COSTS \$ CONTRACT VALUE \$ or YOUR BID VALUE \$

(a)
(b) refer to A1.1
(c)
(d)

Comments

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12. What is the success rate for your business in gaining TNZ funded work for Professional Services?

Number of bids submitted - _____

Number of contracts awarded - _____
(for the same period)

13. Any general comment on the administration of CPP for Professional Services?

Comment

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**APPENDIX 7. NUMBERS OF BIDS RECEIVED BY
TRANSIT NEW ZEALAND FOR PROFESSIONAL SERVICES**

Figures A7.1 – A7.14

Figure A7.1 Auckland Region - Transit New Zealand

Number of times a number of bids were received for professional services.

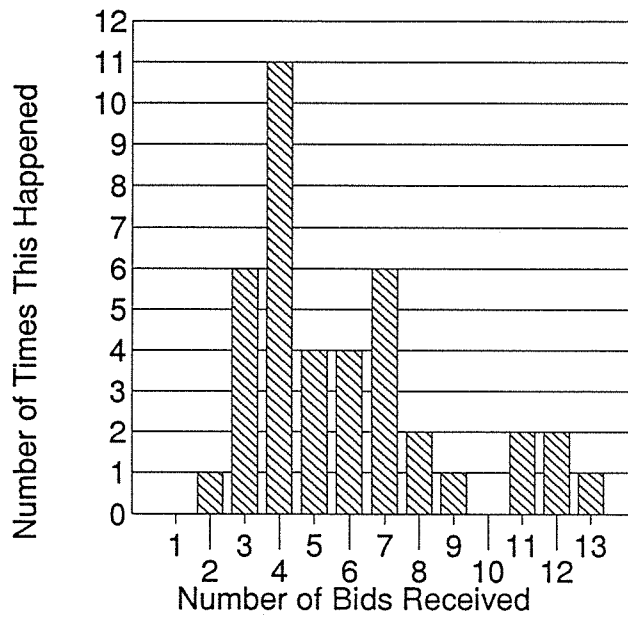


Figure A7.2 Auckland Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, Jun 1991-May 1992.

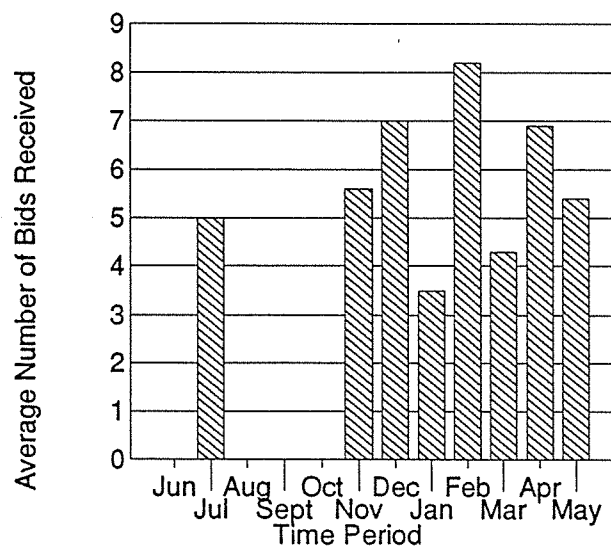


Figure A7.3 Hamilton Region - Transit New Zealand

Number of times a number of bids were received for professional services.

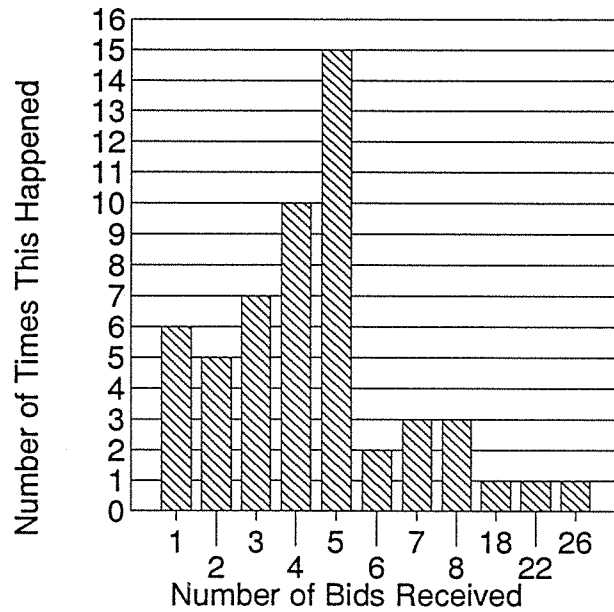


Figure A7.4 Hamilton Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, Jun 1991-May 1992.

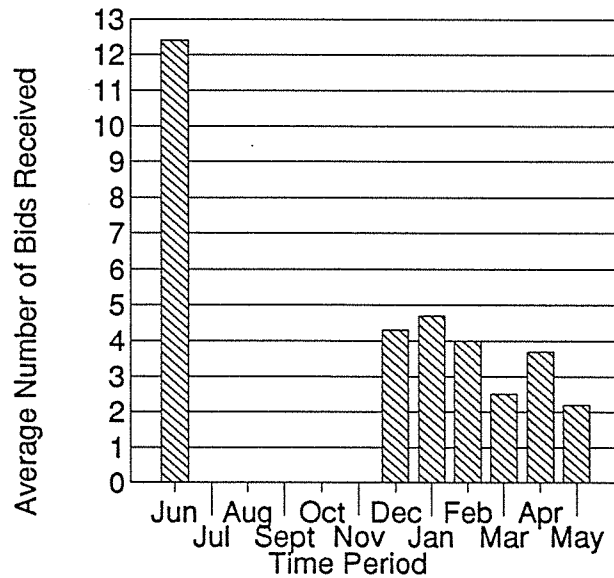


Figure A7.5 Napier Region - Transit New Zealand

Number of times a number of bids were received for professional services.

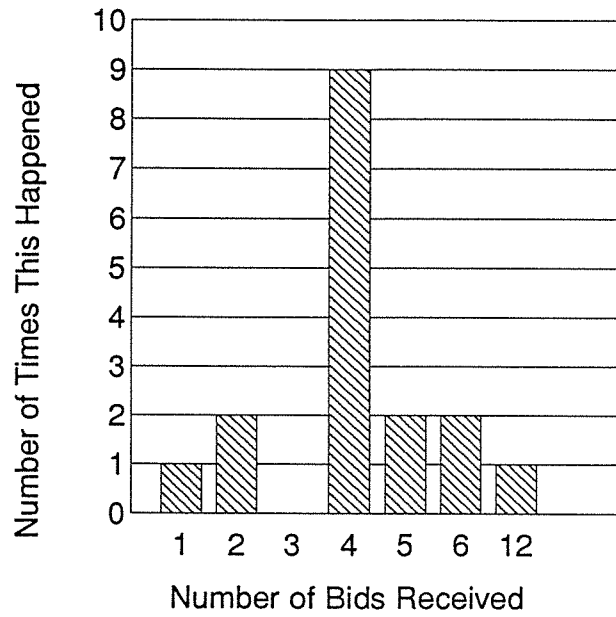


Figure A7.6 Napier Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, June 1991-April 1992.

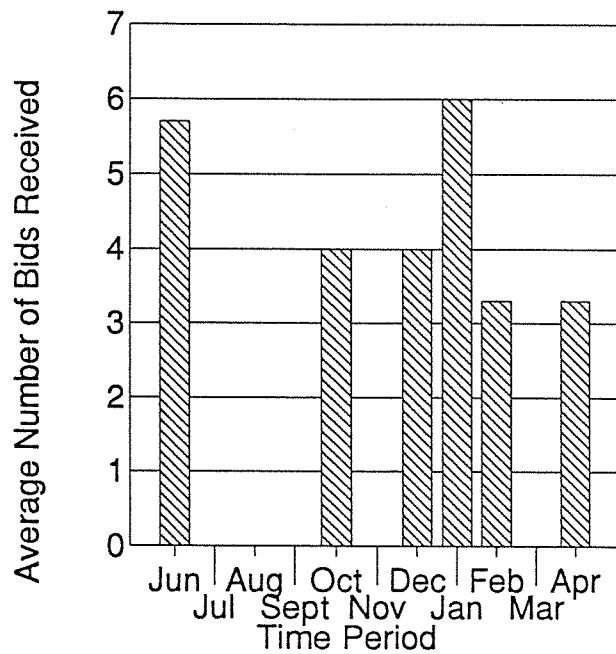


Figure A7.7 Wanganui Region - Transit New Zealand

Number of times a number of bids were received for professional services.

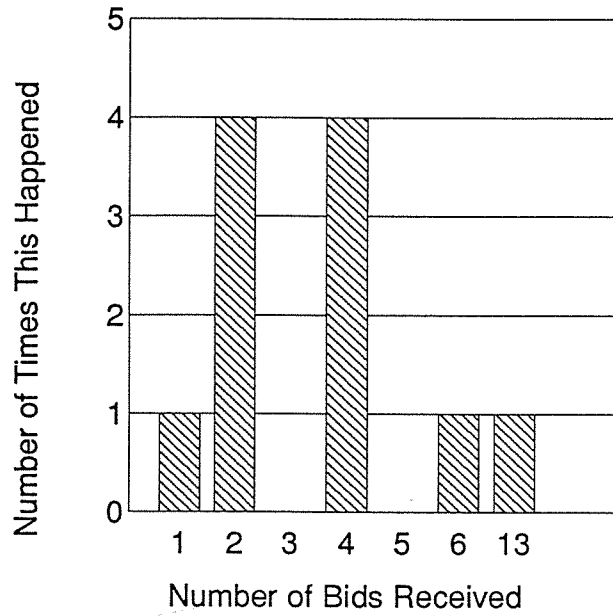


Figure A7.8 Wanganui Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, June 1991-April 1992.

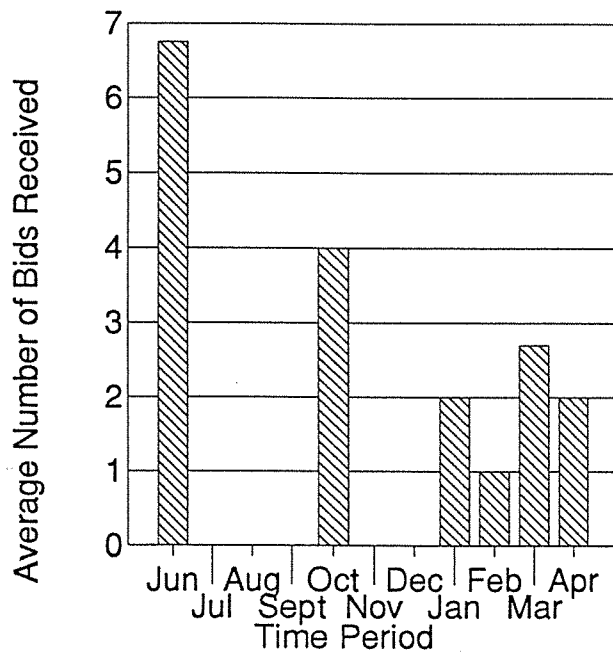


Figure A7.9 Wellington Region - Transit New Zealand

Number of times a number of bids were received for professional services.

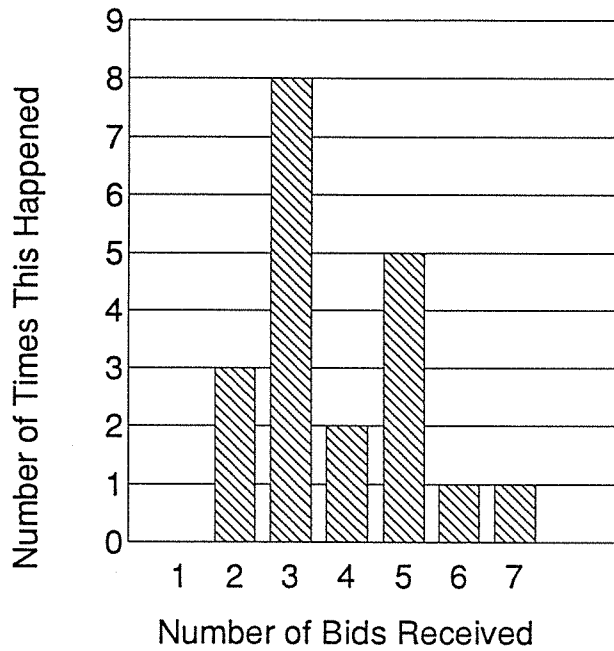


Figure A7.10 Wellington Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, Jun 1991-May 1992.

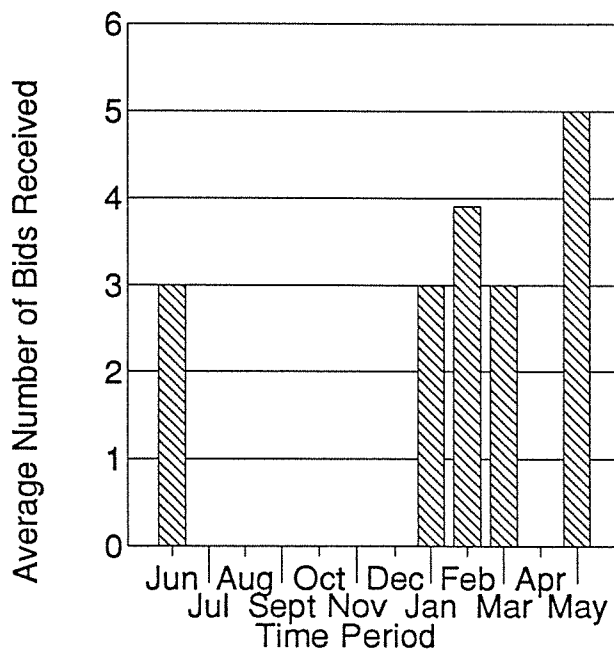


Figure A7.11 Christchurch Region - Transit New Zealand

Number of times a number of bids were received for professional services.

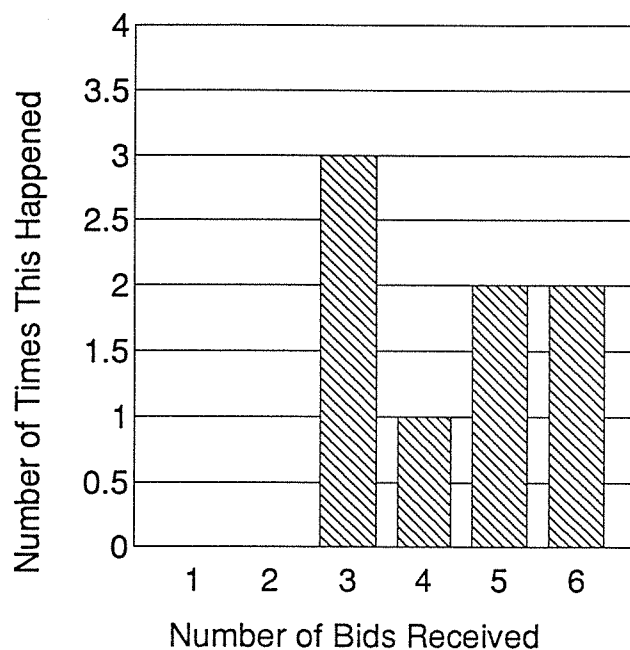


Figure A7.12 Christchurch Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, June 1991-April 1992.

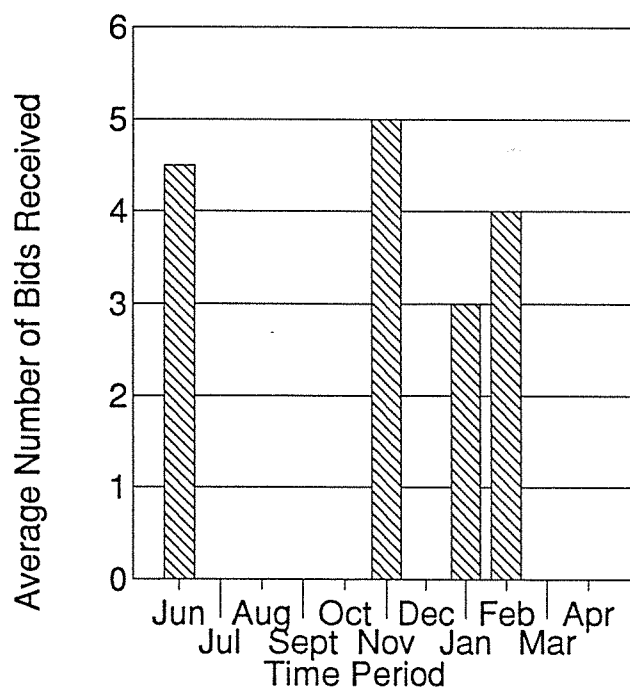


Figure A7.13 Dunedin Region - Transit New Zealand

Number of times a number of bids were received for professional services.

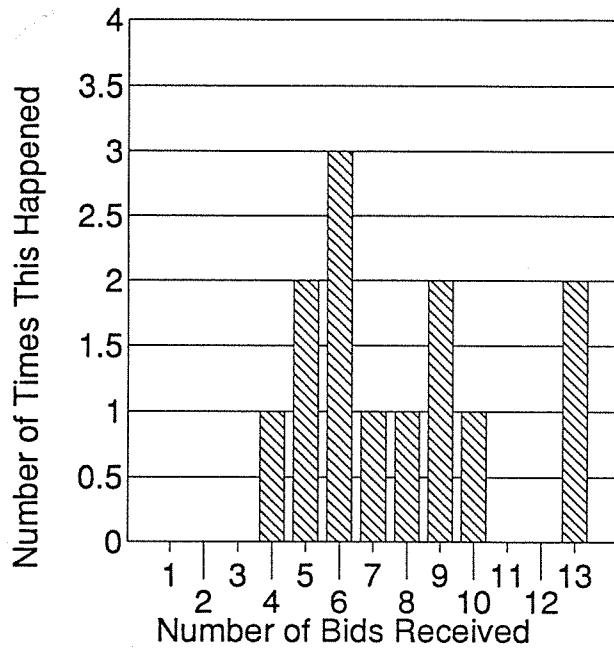


Figure A7.14 Dunedin Region - Transit New Zealand

Average number of bids received for professional services for each month over the study period, June 1991-April 1992.

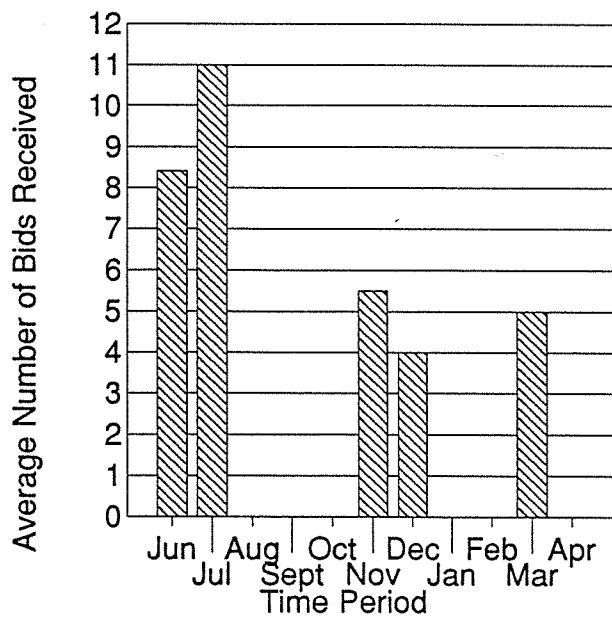
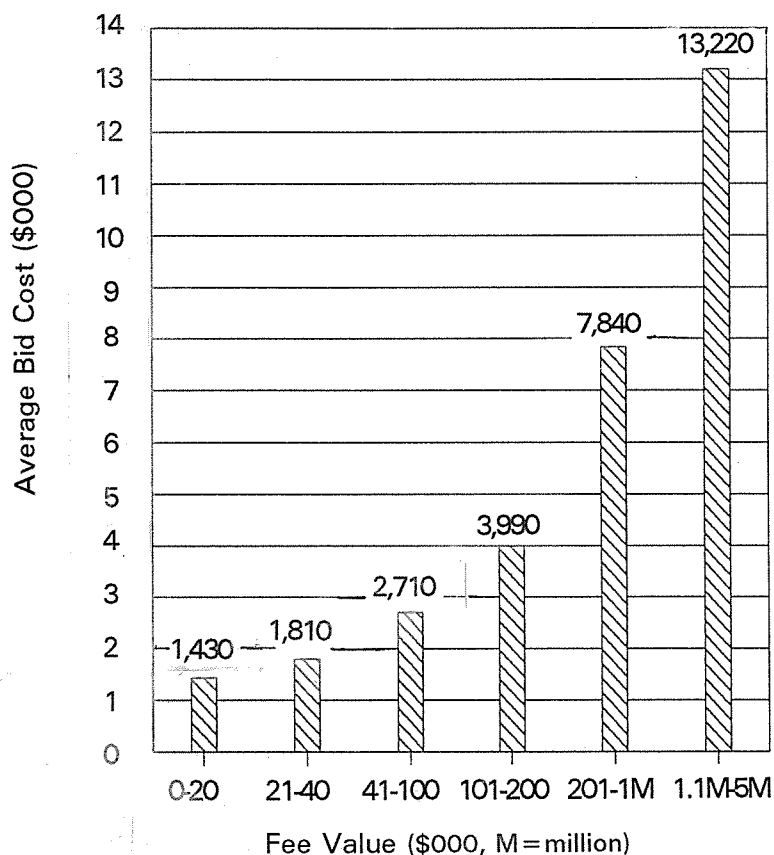


Figure 2.1 Average bidding costs compared with fee values of professional service contracts.

Graph drawn from information obtained from questionnaire responses from 42 consultants (see Appendix 1 for detailed analysis).



Even if these high percentage costs could be balanced against the lower percentage costs for the higher fee value contracts, in the most part they cannot be recovered and are therefore unacceptable.

If a target of holding the total tender administration and bid preparation costs to less than 15% of the fee value would be considered acceptable, then for lower fee value contracts, i.e. less than \$100,000, the procedures for the bid preparation by consultants would need to be simplified.

These costs however were those incurred during the first year that CPP was operating, when client systems and experience were still developing. Client performance and efficiency in administering the CPP process could be expected to improve as further experience is gained. Costs are therefore expected to decrease.

Figure 4.1 Average number of bids received nationwide by Transit New Zealand for professional services for each month over the study period, June 1991 - April 1992.

This graph and those in Appendix 7, Figures A7.1-A7.14, use data provided by Transit New Zealand, Head Office and its seven Regional Offices, for the period that records were available, June 1991 - April/May 1992. For this period 507 bids for professional services were received for 113 requests for tender. The overall average is 4.5 bids per request for tender.

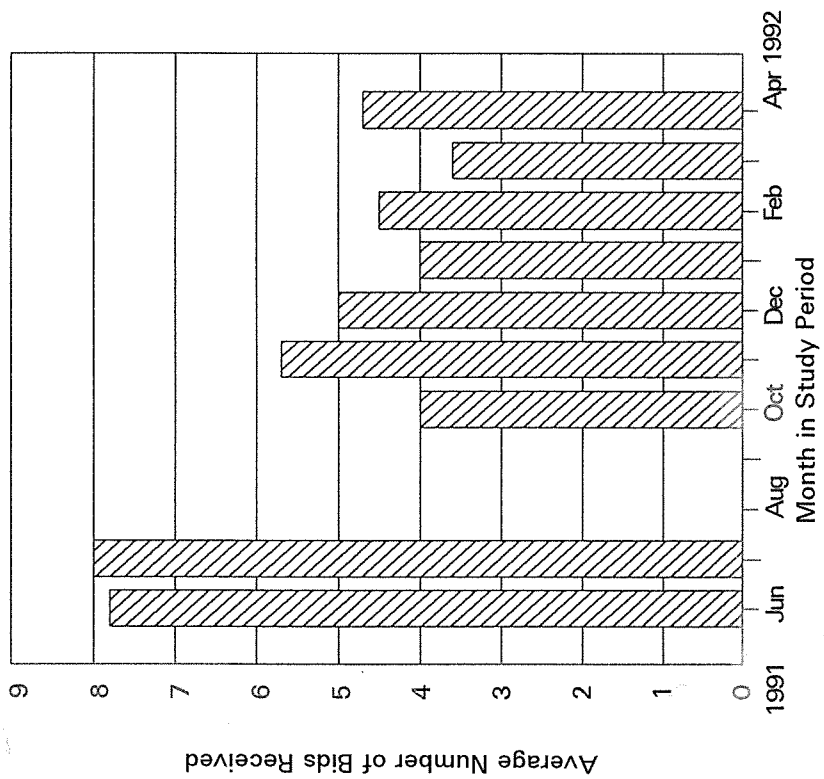


Figure 4.2 Numbers of times a number of bids were received by Local Authorities for professional services over the study period, June 1991 - May 1992.

The graph uses data provided from 9 Local Authorities actively using CPP. A total of 287 bids for professional services was received for 47 requests for tender. The overall average is 6 bids per request for tender.

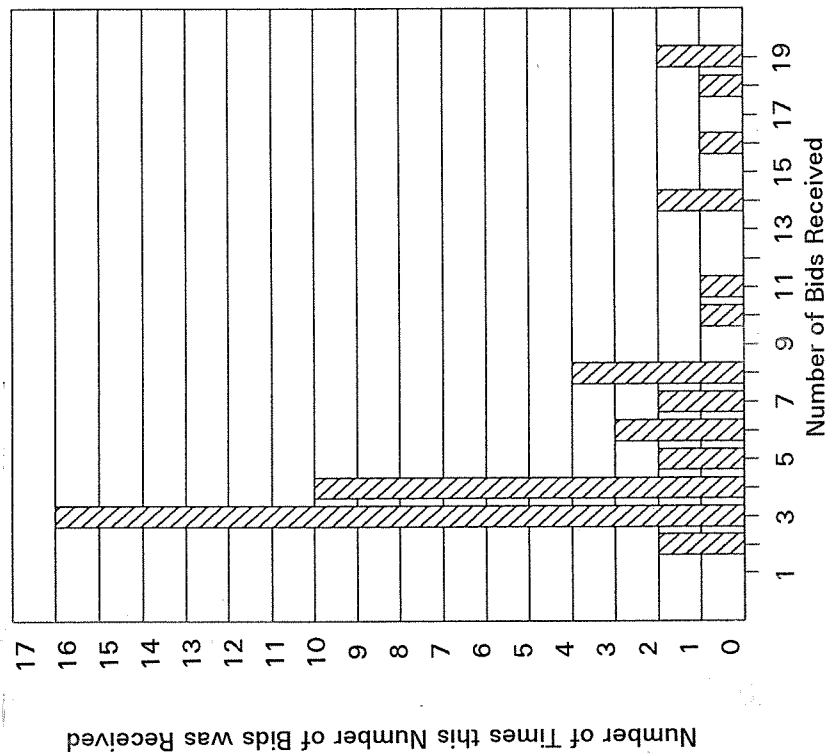
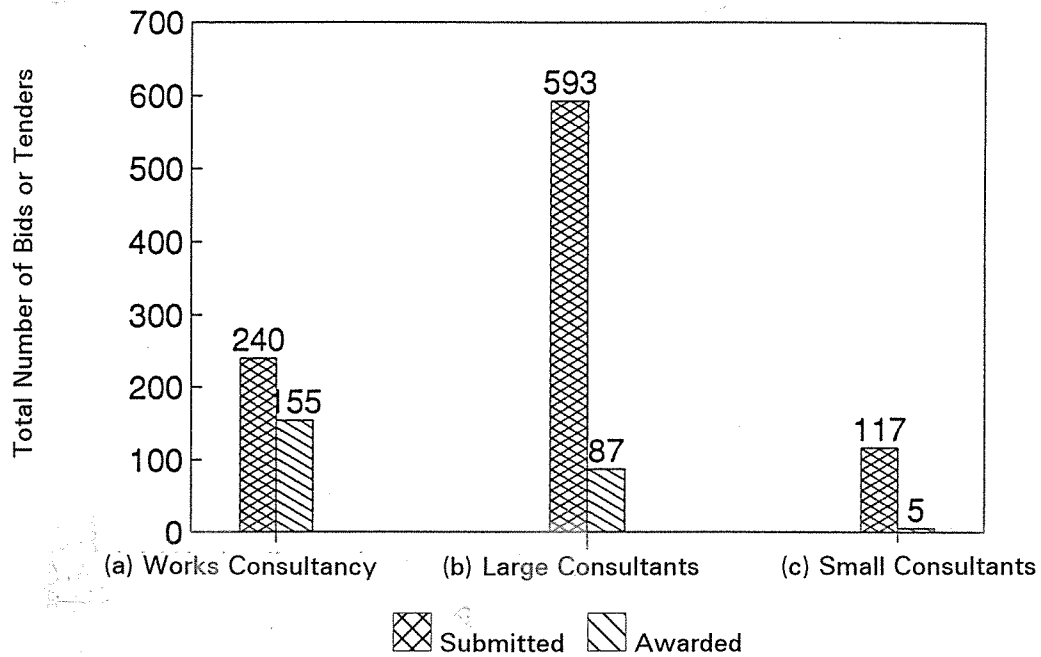


Figure 5.1 Number of bids for professional services contracts and tenders submitted from Works Consultancy Services Limited^(a), large consultants^(b), and small consultants^(c), for financial year June 1991 - May 1992.



(a) Works Consultancy Services - combined bidding at all fee levels during 1991-1992 for all Works Consultancy Services Limited offices.

(b) Large Consultants - consultants who bid for projects having fee values of more than \$100,000 or more during 1991-1992.

(c) Small Consultants - consultants who bid for projects having fee value of less than \$100,000 during 1991-1992.

$$\text{Success Rate 1991-1992 \%} = \frac{\text{Number of Tenders Awarded}}{\text{Number of Bids Submitted}}$$

Works Consultancy Service	Success rate = 65%
Large Consultants	Success rate = 15%
Small Consultants	Success rate = 4%

Based on information provided by consultants who responded to the questionnaire. The relative totals are not comparable as only the totals for Works Consultancy Services are complete.