University of Southern Queensland

Faculty of Engineering and Surveying

Dissertation Title

Relational Contracting – Investigation of Relational Contracting Behaviours Across Various Project Delivery Models

A dissertation submitted by

Mr Peter Frazer

In fulfilment of the requirements of

Course ENG4111 and ENG 4112 Research Project

Towards the degree of

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ABSTRACT

Introduction

This project is an analysis of the Australian construction industry focusing on project delivery methods. Survey data received from suitably experienced managers will be used to analyse Australian projects over the past five years for delivery method and associated procedures.

Background

The literature is littered with calls for change on the basis that the traditionally confrontational client/contractor relationship can jeopardise project & industry performance. Relational Contracting (RC) has developed in response to the adversarial nature of construction industries the world over. Alliancing, partnering, and early contractor involvement are examples of accepted delivery methods that implement different levels of RC principles.

A great deal has been written about the benefits of RC and also the variation in its application. RC theory is made up of a multitude of principles the more of which are implemented the more relational the model becomes. Eriksson & Westerberg (2010) go into a lot of detail proposing a framework based on seven principles. The framework identifies 7 stages of the procurement process and highlights the choice between competitive and relational behaviours at each. The choices made at each stage could result in a traditionally competitive or a fully relational model or anywhere in between. Table 1 below summarises the seven principles

Procurement Stage	Competitive Procedure	Relational Procedure
Design	Provided by supplier or client	Jointly specified with shared responsibilities
Tendering	Competitive tendering with multiple bids	Direct negotiation (one or limited bidders)
Bid evaluation	High weight on price	High weight on soft parameters
Subcontractor selection	By the contractor (or client)	Joint selection with shared responsibilities
Payment	Output based (fixed price)	Including incentives (shared result)
Collaborative tools	Low extent	High extent
Performance evaluation	By the client	By the supplier

Table 1: Procurement Stages 1

Objectives

- To generate data on construction projects completed within the last five years on the topic of delivery method and associated procedures;
- To quantify projects delivered under different procurement models;
- To analyse the procedures used on each project against the select set of criteria;
- To validate the criteria against the data received;
- To identify RC tools, techniques and behaviours that have been implemented on traditional projects.

Conclusions

Five of the seven criteria proposed in the framework are validated by the data received. Two of the seven are implemented within projects delivered under traditional models.

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CERTIFICATION

I certify that the ideas, designs and experimental work, results, analyses and conclusions set out in this dissertation are entirely my own effort, except where otherwise indicated and acknowledged.

I further certify that the work is original and has not been previously submitted for assessment in any other course or institution, except where specifically stated.

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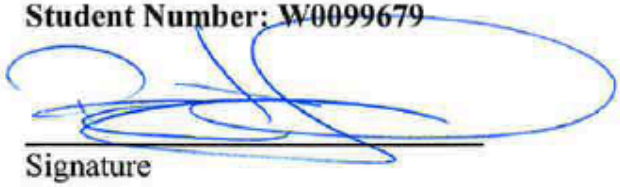

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Date

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Table of Contents

LIST OF FIGURES

ABBREVIATIONS

RC	Relational contracting
ECI	Early contractor involvement
RAMP	Risk adjusted maximum price
D&C	Design and construct
DTF	Department of Treasury and Finance
OP	Owner participant
NOP	Non-owner participant
CRPI	Cost reimbursable performance incentive
TOC	Target outturn cost
PPP	Public private partnership
BOT	Build-Operate-Transfer
BOOT	Build-Own-Operate-Transfer
CSF	Critical success factors
NEDO	National Economic Development Organisation

INTRODUCTION

1.1 Statement of Aims:

- To investigate a range of project types to identify behaviour found on relational contracting (RC) delivered projects that have been transferred to traditional models.
- To determine the prevalence of relational contracting delivery models in the Australian construction industry.
- To identify trends in delivery model preferences between client groups.

1.2 Objectives

The aim of this paper is to consider decisions commonly made during the construction process that are considered to lead to adversarial client/contractor relations, and identify alternative behaviours and techniques that have been implemented on Australian construction projects. The aim is to identify behaviours that would be considered 'relational contracting' in nature that can be implemented within traditional delivery models. This will allow improvements made under Alliancing and other RC models to be transferred into the traditional market place.

1.3 Research

A literature review will be conducted in the area of engineering project management to identify the delivery models commonly used in the Australian construction industry. Relational contracting literature will be reviewed to determine a set of criteria against which a project can be assessed. A survey of engineering managers will be undertaken to assess delivery models and behaviours implemented on recent projects against the selected RC criteria. The candidates will be suitably experienced in the Australian construction industry and projects will be targeted across a range of clients, contractors, locations and project types.

2 LITERATURE REVIEW

2.1 Review

2.1.1 Need for Change

The literature is littered with calls for change based on the inefficient and adversarial nature of construction industries the world over. As early as 1994 Latham (1994) reported on the UK construction industry as needing to change and made recommendations about the implementation of RC.

Studies refer to the industry as adversarial (Li, Cheng, Love, & Irani, 2001) and in a state of conflict (Chen & Chen, 2007), both of which jeopardise the success of construction projects (Chan, Chan, Fan, Lam, & Yeung, 2006). These characteristics have been attributed to the competitive, low-bid, fixed price procurement method that has traditionally been used to deliver infrastructure projects (Pesamaa, Eriksson, & Hair, 2009). The lowest bid criteria encourages contractors to take risks and lower their bid, relying on claims to recover costs, and the win-lose nature of contracts gives rise to opportunism(Rahman & Kumaraswamy, 2004) whereby one party acts in self interest at the expense of other participants or the project as a whole.

It is not the intention of this paper to rehash 15 years of work on the traditionally competitive delivery method, suffice it to say it has been attributed with loss of productivity (Ng, Rose, Mak, & Chen, 2002), disputes (Pesamaa, Eriksson, & Hair, 2009), exorbitant cost of arbitration and litigation (Yiu & Cheung, 2007), project delays, and cost overruns (Chan, Chan, & Ho, 2003). It is widely accepted that the industry needs alternative procurement practices and (Chan & Kumaraswamy, 2002)(Rahman & Kumaraswamy, 2004)(Chen & Chen, 2007) are a few of many who write on the topic.

2.1.2 Relational Contracting as an Alternative

There is extensive literature on the benefits of RC. In 2003 (Chan, Chan, & Ho, 2003) summarised the benefits of RC into 13 groups based on a literature review: reduced litigation, better cost control, better time control, better quality

product, efficient problem solving, closer relationship, enhanced communication, continuous improvement, potential for innovation, lower administrative costs, better safety performance, increased satisfaction, and improved culture. Wong et al (2008) generalise that RC based projects deliver improvements in quality, safety, uptake of new technology, and business development. Thompson & Sanders (1998) attribute quantum leaps in productivity and the potential to eliminate redundancy and reduce supervisory burdens. There is criticism that pro-RC papers tend to ignore genuine limitations and poor examples (Bresnen, 2007) but these criticisms do not attempt to challenge the potential upsides. Bresnen (2007), Hobbs & Andersen (2001) and Thompson & Sanders (1998) qualify that whilst there are definite advantages to be had from RC they are contingent on using the right application in the right instance and there is no "one-size-fits-all" solution.

2.1.3 What relational contracting models are there?

2.1.3.1 Early Contractor Involvement (ECI)

ECI is a relatively new (2004) concept that bears no resemblance to its UK namesake. There is no academic literature to be found on the model however it is used by both Queensland Main Roads (Swainston, 2006) and the South Australian Dept. Transport, Energy and Infrastructure (Edwards, 2008). The authorities that use ECI explain it as a two-phase concept in that stage 1, comprising project development and preliminary design (nominal 70%), is run as an alliance and stage 2 is let as a traditional design and construct. In the 'traditional' project delivery strategy, the constructor does not get the opportunity to participate and be involved in the design phase of a project (DeChiara & Zethin, 2002). It is implemented as a solution for projects too complicated for D&C but without the need for a complete alliance (Edwards, 2008).

The ECI model incorporates a number of RC principles. Clearly the contractor is engaged at the outset and therefore heavily involved in the design process. The selection process as described by Edwards (2008) is again a compromise. Tendering is open to all pre-qualified parties however the tender

requirements are neither expensive nor onerous. A desktop analysis will produce a shortlist of four bidders to advance to workshops, which will then be reduced to two final proponents. To this point the evaluation process has been all about soft parameters. The final two proponents are expected to submit a Risk Adjusted Maximum Price (RAMP), which is a non-binding estimate. The RAMP does not constitute a price submission but it is a price comparison and helps the client select the preferred proponent. According to Edwards (2008), ultimately the client and preferred proponent negotiate a fixed price and transition to a D&C.

2.1.3.2 Alliancing

Whilst not suitable for every project, it can be said that alliances are best applied when the scope of works is not well defined, the risks are not fully understood, and many unknowns remain (Ross, 1999).

What is Alliancing in the Building and Construction Industry? There are numerous definitions of project Alliancing. The Victorian Department of Treasury and Finance (DTF) (2010) characterises project alliancing as a method of procuring major capital assets, where the owner participant (OP) works collaboratively with non-owner participants (NOP) …" "… working as an integrated, collaborative team, they make unanimous, principle-based decisions on all key project issues".

What is it that makes an alliance? The elements that make up an alliance can generally be split in two categories, 'Hard' and 'Soft' (Yeung, Chan, & Chan, 2007). The 'hard' elements are defined by Yeung et al (2007) as contractual and directly related to legal positions. The 'Soft' elements are associated with relationships, people and processes.

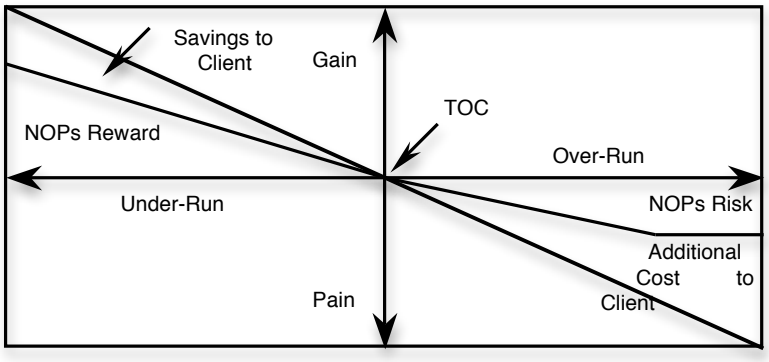
A formal contract and a real gain-pain-share commercial framework criteria form a part of the 'Hard' element of an alliance.

A formal contract involves a minimum of one Owner-Participant (OP) and one Non-Owner Participant (NOP). All parties are bound by a single legal agreement and are collectively referred to as Alliance Participants (Ross,

1999). All project commitments, rights, and delivery and performance obligations as defined in the agreement are collective and joint (Alchimie Pty Ltd and Phillips Fox Lawyers, 2003).

The commercial framework of an alliance is what really distinguishes it from alternative RC models. A fundamental principle of an alliance is that all participants share in the financial success or failure of the project. If one participant wins – all win, if one loses – all lose(Alchimie Pty Ltd and Phillips Fox Lawyers, 2003).

Table 1: Alliance - Commercial Framework (adapted from Ross,J. 1999)



The following criteria comprise the 'soft' elements (based on Yeung et al (2007) and Walton (2008):

- Trust is essential for an Alliance to be successful
- Commitment
- Common goals and objectives
- Win-Win Philosophy
- Equity
- Agreed conflict resolution methods
- Continuous improvement
- Cooperation and Communication
- Alliancing Workshop
- Early selection of contractor

The soft elements are consistent with general RC principles and don't necessarily define an alliance. The defining principle of an alliance is the pain-share-gain-share principle that is enshrined in the agreement.

2.1.3.3 Cost Reimbursable Performance Incentive (CRPI)

The Cost Reimbursable Performance Incentive (CRPI) delivery model is often referred to as 'Cost Plus' delivery mechanism (Ross, 1999). It is a very similar model to Alliancing, but less sophisticated and usually used on less complicated projects. Unlike an alliance, the CRPI participants are not all party to a single agreement and "…generally [CRPI are] conducted with separate owner and constructor project teams" (Ross, 1999, P.5). But like the Alliance, the team is developing and estimating a TOC during the Project Works Definition Phase.

With the typical CRPI commercial framework, the risk of loss for the contractor is practically removed(Berends, 2006). However, as the incentive component is measured against the agreed TOC; if budget overrun occurs, the contractor loses the incentive payment, but is not penalised with loss of direct costs or overheads. (Ross, 1999).

2.1.3.4 Public Private Partnership (PPP)

National PPP Guidelines (Commonwealth of Australia, 2008) state "The aim of PPP is to deliver improved services and better value for money primary through appropriate risk transfer, encouraging innovation, greater asset utilisation and an integrated whole-of-life management, underpinned by private financing" (P. 3). The objective of the PPP projects is to encourage private sector investment in social infrastructure where Value for Money can be demonstrated for the government (Edkins & Smyth, 2006) (Commonwealth of Australia, 2008) and (Tang, Shen, & Cheng, 2009).

PPPs are probably most sophisticated project delivery model, given the length of the contract periods including long-term obligations, sharing of risk and rewards between private and public sectors (Commonwealth of Australia, 2008). There are several ways to structure (PPP) and there are many forms of PPPs, but the two common structures are Build-Operate-Transfer (BOT)

and Build-Own-Operate-Transfer (BOOT)(Owles, 2008). The commercial framework principles are the same for any form of social infrastructure. In general, the investing party is reimbursed for (1) incurred design and construction costs including external party advisory cost, (2) operating and maintaining costs, (3) debt financing cost, and (4) overheads and profit (Commonwealth of Australia, 2008).

2.1.4 What Makes for Successful Relational Contracting?

Critical success factors (CSF) are an effort by researchers to distil what is known about RC into a framework that can be used for practical recommendations (Bresnen, 2007).

There is an extensive body of literature dedicated to CSF's within the context of relational contracting in the construction industry. There are a lot of similarities between studies and indeed the CSF's often appear similar to basic RC principles. Rahman et al (2007), Wong et al (2008) and Wong et al (2005), all conclude that trust between parties is ultimately the most significant factor in successful relational contracting. Pesamma et al (2009) find that partner selection based on task-related-attributes contributes to successful RC. Rahman &Kumaraswamy (2008) conclude that the five main factors facilitating RC are: integrated objectives and risk-reward plan, appropriate risk allocation/sharing, motivated client and encouraging supporting arrangements, trust and trust-based arrangements, and top management support. Chen & Chen (2007) find that collaborative team culture is most important followed by long-term quality focus, consistent objectives, and resource sharing. Chan et al (2006) find the top three critical success factors are mutual trust, early implementation of partnering and commitment to win-win attitude. Rahman &Kumaraswamy (2004) show that early involvement of contractors (an RC principle) facilitates both time and cost savings as a result of improved constructability.

Each of the studies cited based their results on a questionnaire survey of persons exposed to RC. The fact that there is such disparity between studies

support the notion that each project is different and any RC model needs to reflect that.

2.1.5 Comparing Procurement Methods

2.1.5.1 Selecting a Procurement Method

There is a well-established framework developed by The National Economic Development Organisation (NEDO, 1985) that aims to help clients select a procurement method. Nine criteria were identified that allow clients to prioritise particular aspects of their projects and thereby select the most appropriate method. The NEDO criteria are:

1. *Time.* Is early completion required?
2. *Certainty of time.* Is certainty of time important?
3. *Certainty of cost.* Is a firm price needed before any commitment to construction given?
4. *Price competition.* Is the selection of the construction team by price competition important?
5. *Flexibility.* Are variations necessary after work has begun on-site?
6. *Complexity.* Does the building need to be highly specialised, technologically advanced or highly serviced?
7. *Quality.* Is high quality of the product, in terms of material and workmanship and design concept important?
8. *Responsibility.* Is single point of responsibility the client's after the briefing stage or is direct responsibility to the client from the designers and cost consultants desired?
9. *Risk.* Is the transfer of the risk of cost and time slippage from the client important?

The NEDO framework is by no means the only example of selection criteria. Love et al (2008) provides a comparison of similar frameworks from Skitmore and Marsden (1998), Bennett and Grice (1990), Hampden-Turner (1990), and Love et al (1998). In addition the selection criteria used by The NSW Department of Public Works (2005) is compared to that of researchers Kumaraswamy and Dissanayaka (1998) and Luu et al (2003).

2.1.5.2 How Relational?

It is important to define what principles make a delivery method relational. Thompson & Sanders (1998) and Eriksson (2008) both write that RC is not a discrete application. There is a multitude of RC principles the more of which are implemented the more relational the model becomes. Eriksson & Westerberg (2010) propose a framework based on seven principles devised from an extensive literature review. The framework identifies 7 stages of the procurement process and highlights the choice between competitive and relational behaviours at each. The choices made at each stage could result in a traditionally competitive or a fully relational model or anywhere in between. Table 1 below summarises the seven principles

Table 2: Procurement procedures' relation to competition and relational contracting

Procurement Stage	Traditional	Intermediate	Relational
Design	Provided by supplier or client	Jointly provided with one party responsible	Jointly specified with shared responsibilities
Tendering	Competitive tendering with multiple bids	Select tendering (several bidders)	Direct negotiation (one bidder)
Bid evaluation	High weight on hard parameters (price, programme etc)	Equal weight on hard & soft	High weight on soft parameters (reputation, prior relationship)
Subcontractor selection	By the contractor (or client)	Joint selection with one party responsible	Joint selection with shared responsibilities
Payment	Output based (fixed price)	Fixed price & shared profits	Pain share / Gain share
Collaborative tools	Low extent	Medium extent	High extent
Performance evaluation	By the client	Jointly evaluated	By the supplier

Adapted from Eriksson & Westerberg, 2010

2.1.6 The Seven Stages

2.1.6.1 Design

This stage recognises that flaws exist within the traditional models whereby one party exclusively manages the design process. Client supplied designs have a tendency to result in constructability issues and contractor supplied designs risk inadequate client satisfaction through lack of input. A jointly managed design process is an indication of cooperation with increased

coordination between client/designers and contractors desirable(Eriksson & Westerberg, 2010). Responsibility for the design risk is used as the final measure of cooperation.

2.1.6.2 Tendering

The choice here is in the number of parties given the opportunity to tender. An open tender process that pits a large number of organisations against each other is traditionally considered good for the client as competition results in transparency and the lowest price. Whilst this method is often required by Government clients, private organisations often see value in a restricted bid list and even negotiations with a single bidder.

2.1.6.3 Bid Evaluation

This stage discusses the relevance of 'soft criteria' during bid evaluation rather than just the 'hard criteria' of price. Traditionally contracts have been awarded on price but as discussed earlier, this leads to risk taking on the part of the contractor and is widely considered to result in claims. Soft criteria that are relevant to bid evaluation are an existing relationship, collaborative ability, shared values, technical competence, reputation, and systems. The more alignment between client & contractor in these facets of the work the more cooperative the relationship is likely to be(Eriksson & Westerberg, 2010).

2.1.6.4 Subcontractor Selection

Subcontractor selection as a metric recognises the significance of the flow on effect of RC behaviours. The more involved the client is in the selection process the better the opportunity to integrate and foster project wide cooperation(Eriksson & Westerberg, 2010).

2.1.6.5 Payment

As discussed in the beginning, traditional hard dollar contracting can create a situation whereby one party's financial interests are best served by acting in such a way that is contrary to best for project outcomes. The idea of incentivising project payments encourages all parties to work together to share the rewards of improved project performance rather than engage in acts of self-interest at the expense of other participants or the project as a whole.

2.1.6.6 Collaborative Tools

A clear indicator of the cooperative intent of a project is in the level of tools provided to assist collaboration between the parties. There are many tried and tested examples in the literature with joint objectives, joint office building, team building activities, partnering facilitator, joint IT-tools, joint risk management, and a partnering arrangement being of particular interest (Eriksson & Westerberg, 2010).

2.1.6.7 Performance Evaluation

The proposal here is that process or output control by the client in the form of constant monitoring leads to distrust and conflict between the parties and opportunism on the part of the contractor. Process control by the contractor which involves responsibility for self-monitoring and certification requires a change of traditional processes but leads to improvements in cooperation and performance (Eriksson & Westerberg, 2010).

2.2 Consequences

2.2.1 The Role of the Client

It is important to acknowledge the role of the client in the selection of the procurement method. Eriksson et al (2010) provides a framework clearly describing the decisions that are made before a contractor is sought and the term of project impact those decisions have. Love et al (2008) have produced a literature review and a focus group study of senior Australian client group members that shows an overwhelming reluctance to move away from the traditional lump sum method. Pessama et al (2008) is more optimistic in describing a client group that acknowledges the benefits of improved cooperation and the consideration of various alternative procurement methods but concludes that there is a lack of understanding of how to implement these measures effectively.

2.2.2 Traditional Market

It was found during the literature review that relational contracting delivery models are best suited to large, complex and difficult projects. This leaves a

large section of the industry operating under traditional models despite any success the industry has with RC models. This research project may be used to highlight RC techniques that have previously been implemented within traditional models in the same marketplace.

2.2.3 Value of Research

The value then of this research is in acknowledging that projects will be delivered under traditional methods for a long time yet and that client groups need help in incorporating cooperation within the traditional context. In recognising that RC behaviours can be adopted incrementally this research will demonstrate the cooperative decisions & behaviours that have previously been implemented on traditional projects within Australia and could therefore be confidently adopted elsewhere.

3 METHODOLOGY

3.1 Data Collection

A common theme through the literature review was that the source data of the research papers was typically a survey questionnaire.

The survey that was used allowed analysis across a range of different characteristics that were identified during the literature review and the questions tailored to suit.

Alternative methods such as interview or database mining were considered but discounted as slow and unreliable respectively. A questionnaire could be easily and cheaply disseminated to a wider range of participants thereby maximising the pool of potential respondents.

3.2 Questionnaire

It was decided that each questionnaire would focus on a single project and not the respondent. This allowed the quantifying of characteristics from each project as opposed to the more subjective qualifying of the effectiveness of those characteristics according to the respondent. The questionnaire was developed in two parts:

- General demographics
- Project data

The demographic questions were important to evidence that data was received from suitably qualified respondents and from sufficiently varied projects. Questions on location, client type and value were included to allow for trend analysis if sufficient responses were received.

3.3 Respondents

Participants were targeted from the Australian construction industry only to provide more relevance to the results. Senior engineers currently in the industry were approached by phone to determine their interest in participating. A target of 30 projects was set and 18 participants were sent questionnaires. Of the 20 participants sent questionnaires, 15 responded and data on 29 projects was gathered.

3.4 Question Development

The project data questions were specific to the construction process and were used to assess the characteristics identified during the literature review. Multiple question formats were incorporated into the project information questionnaire.

Where possible questions were articulated to elicit a likert scale response. Where it was not possible to articulate as such, each question was coupled with a set of ordinal responses that could later be attributed with a value of 1-5. In the case of the collaborative tools question it was simply a case of yes or no for each case.

The questions were developed exclusively from the seven-stage framework proposed by Eriksson & Westerberg, 2010. A number of other frameworks were found such as NEDO (1985) however they were not relevant for project analysis as they were intended to assist with procurement method selection.

A draft questionnaire was analysed with the help of a future respondent to identify any ambiguities and suggest improvements. A number of responses were subsequently added to the bid evaluation and collaborative tools questions.

A blank questionnaire has been included in Appendix C to demonstrate the value attributed to each of the possible responses.

3.5 Data Analysis

Separate methods of analysis were required for the two groups of questions. The questions resulting in a likert scale are most easily analysed using mean and standard deviation calculations. This analysis is suitable for Stage 1,2,3,4,5 & 7. Analysis of Stage 6 requires a frequency comparison of each of the collaborative tools.

Frequency analysis was ultimately used on each of the data sets in order to quantify the examples of RC uptake by traditional projects.

4 HYPOTHESIS

4.1 Introduction

It is expected that data received from each of the relational models comprising ECI, alliance, CRPI, and PPP will reflect high levels of uptake of cooperative behaviours. The traditional construct only and D&C models however are expected to return competitive and adversarial data. These expectations are set out below in terms of expected mean values.

4.2 Expectations

4.2.1 Design Process

The data from relational projects are expected to show widespread use of joint design management $[4.0 \leq \mu \leq 5.0]$.

The data from traditional projects are expected to show widespread use of single party design management $[1.0 \leq \mu \leq 3.0]$.

4.2.2 Tendering

The data from relational projects are expected to show the preference for limited party bidding and examples of direct negotiation $[3.0 \leq \mu \leq 5.0]$.

The data from traditional projects are expected to show the use of competitive open or prequalified tenders $[1.0 \leq \mu \leq 2.0]$.

4.2.3 Bid Evaluation

The data from relational projects are expected to show a 'soft criteria' value $[4.0 \leq \mu \leq 5.0]$ that is higher than 'hard criteria'.

The data from traditional projects are expected to show a 'hard criteria' value $[4.0 \leq \mu \leq 5.0]$ that is greater than 'soft criteria'.

4.2.4 Subcontractor Selection

The data from relational projects are expected to show joint responsibility for subcontractor selection with some examples of downstream RC $[4.0 \leq \mu \leq 5.0]$.

The data from traditional projects are expected to show single party subcontractor selection responsibilities $[1.0 \leq \mu \leq 3.0]$.

4.2.5 Payment

The data from relational projects are expected to show the use of performance incentives or pain &/or gain share compensation $[4.0 \leq \mu \leq 5.0]$.

The data from traditional projects are expected to a lack of incentivised compensation $[1.0 \leq \mu \leq 3.0]$.

4.2.6 Collaborative Tools

The data from relational projects are expected to show the widespread implementation of collaborative tools to improve cooperation between the parties $[4.0 \leq \mu \leq 7.0]$.

The data from traditional projects are expected to show minimal uptake of collaborative tools $[0 \leq \mu \leq 2.0]$.

4.2.7 Performance Evaluation

The data from relational projects are expected to show a contractor evaluation value $[4.0 \leq \mu \leq 5.0]$ that is higher than that of client evaluation.

The data from traditional projects are expected to show a client evaluation value $[4.0 \leq \mu \leq 5.0]$ that is greater than that of contractor evaluation.

5 DATA ANALYSIS

5.1 Introduction

This research project aims to compare the methods and tools used under a range of project delivery models in the Australian construction industry with particular reference to Relational Contracting techniques. Analysis of the data will help determine which RC techniques have been implemented on projects delivered by a traditional model. A survey questionnaire was used to obtain the data and all data analysis was done using an SPSS Statistics Package.

Analysis was in the form of a comparison of mean or frequency depending on the format of the question and the subsequent responses. In the case of mean analyses, a value of 1 is the traditional extreme and 5 the relational extreme. The exception to this is the collaborative tools mean analysis in which 7 is the relational extreme to account for a larger number of optional responses in the questionnaire.

5.2 Overview of Respondents and Projects

It was the intention of the author to target suitably experienced respondents from the contracting side of the Australian construction industry from a wide range of projects. The following figures display the breakdown of responses in terms of delivery model, respondent experience, project value, and project location. The complete data is tabled in Appendix D.

5.2.1 Respondent Experience

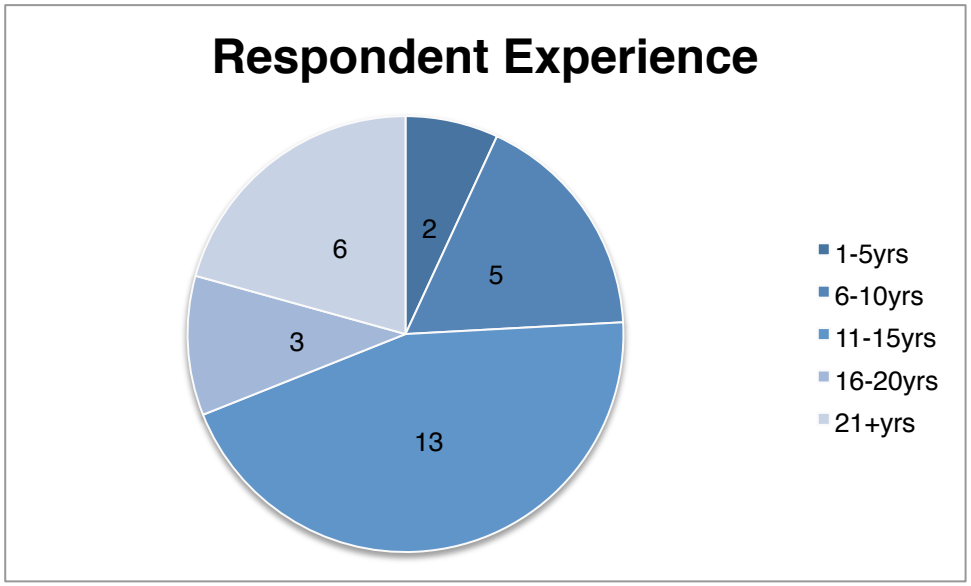


Figure 1: Responses by respondent experience

22 of 29 (75%) responses were received from a respondent with greater than 11 years experience. All respondents were with a contracting organisation.

5.2.2 Delivery Model

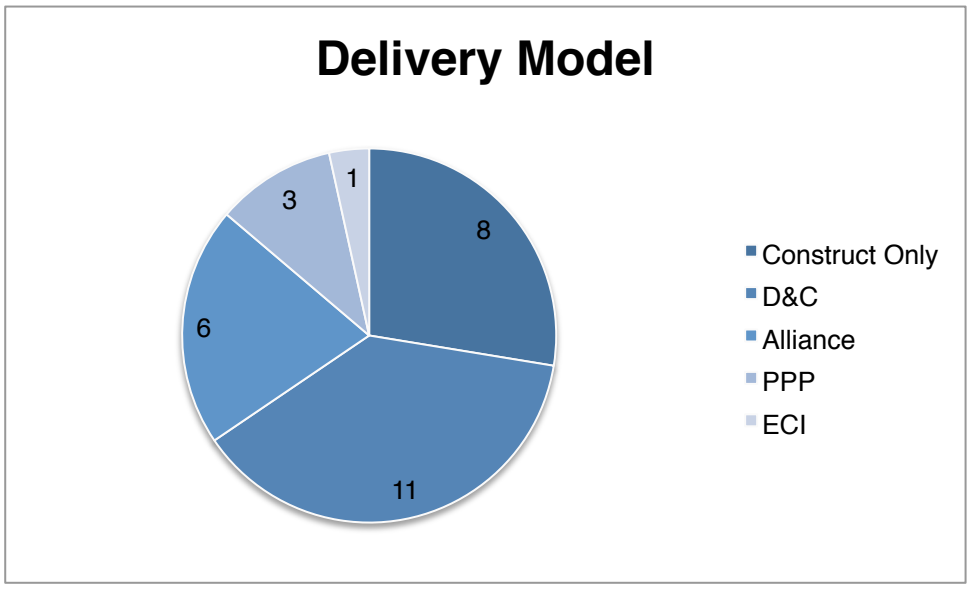


Figure 2: Responses by delivery model

Responses were received on five different types of delivery model.

5.2.3 Project Location

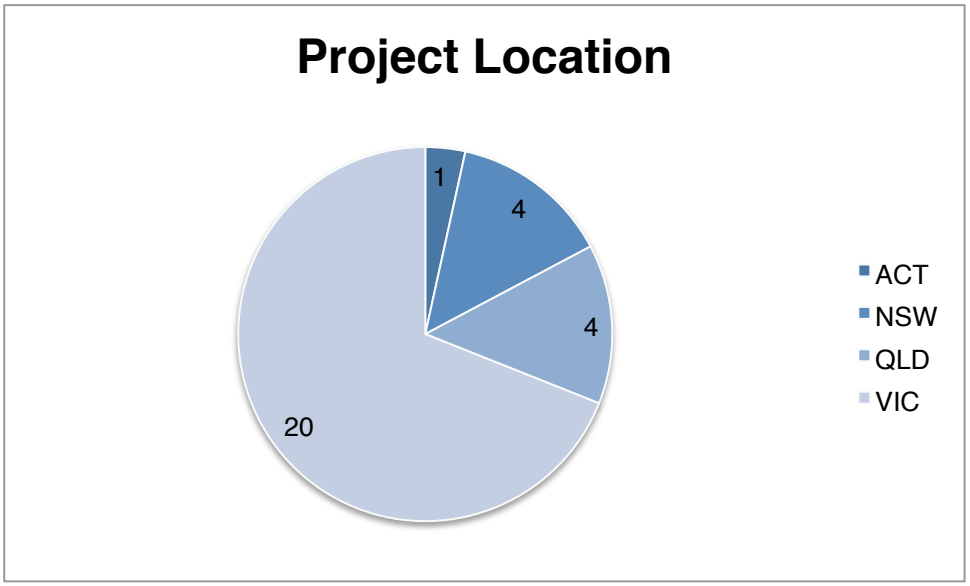


Figure 3: Responses by project location

The results are heavily biased towards Victoria as the author's place of work at the time of research. Results were received from alternative states however not in sufficient numbers to draw inter-state trends.

5.2.4 Project Value

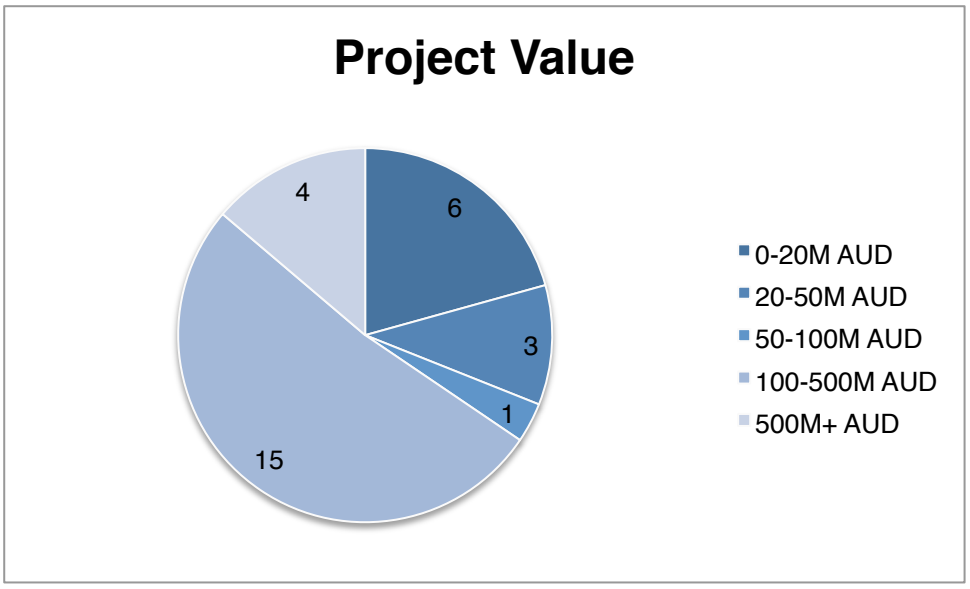


Figure 4: Responses by project value

It was important to represent a broad range of project values to counter any bias that may be found on very large or very small projects.

5.3 Analysis of Data

In order to compare traditional and relational data it is necessary to categorise and group the delivery models. D&C and construct only are categorised as traditional with alliance, PPP, and ECI categorised as relational. Means or frequencies will be compared for each of the questions and presented here for discussion.

5.3.1 Design Process

There is a distinct difference in the mean values of the traditional and relational data. The mean of the traditional data (1.74) is at the low end of the spectrum clearly indicating a preference for design management by one party. The value from the relational data is much higher (3.90) and in the range of joint design management.

Of significance is the variation within the relational category with the low mean values of the PPP (2.67) and ECI data (1.00) against the high mean value of the alliance data (5.00). Hence the only model to display truly relational design management is the alliance with all others relying on quite traditional methods.

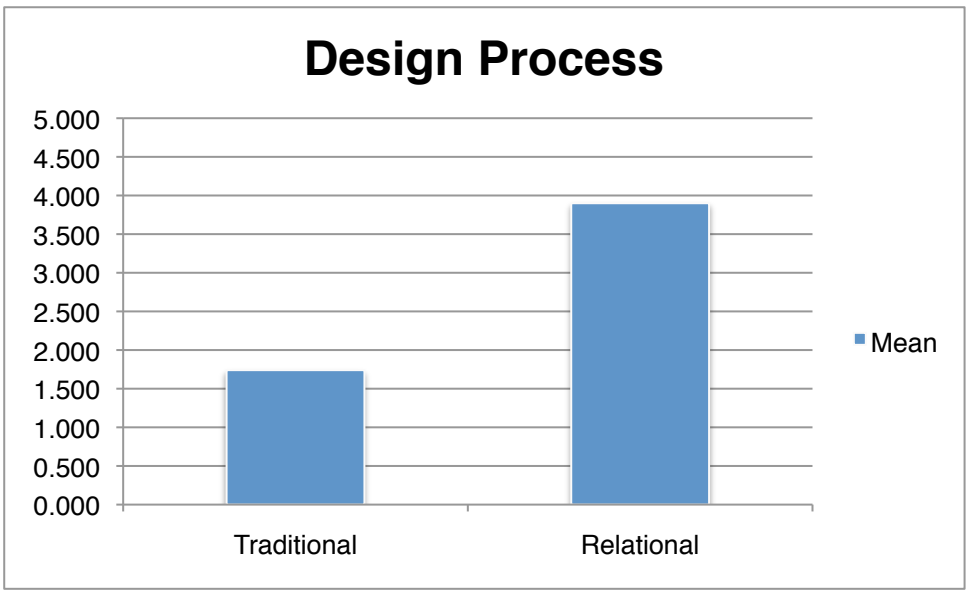


Figure 5: Mean value of design process by category

5.3.2 Tender Format

There is very little variation in mean values between all delivery models resulting in quite similar values for the traditional (2.47) and relational (2.40) categories. These values indicate a strong preference within both categories for the traditional method of using prequalified bidders, however the large standard deviation value for traditional (1.264) and relational (1.506) indicate some instances of direct negotiation.

Once again the alliance model displays the highest mean (2.67) however the value of PPP (2.00) and ECI (2.00) reduce the mean of the relational category to below that of the traditional.

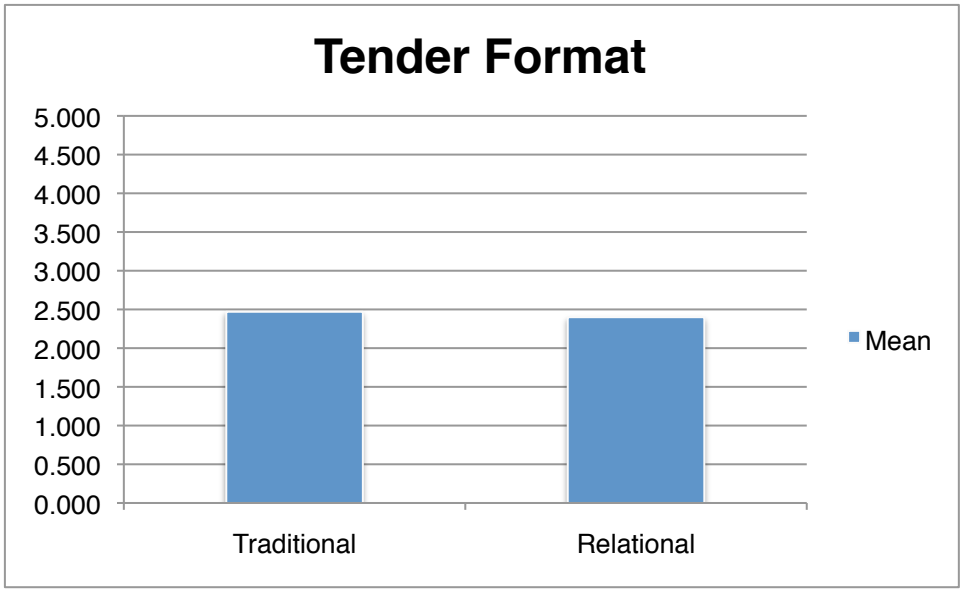


Figure 6: Mean value of tender format by category

5.3.3 Bid Evaluation

This question comprised of 10 separate criteria, each of which the respondent was asked to rate in relevance to the bid evaluation (1 being not considered, 5 being very important). These 10 criteria were then categorised as traditional 'hard criteria' or 'soft criteria' as discussed in the literature.

In the traditional category the mean of the hard criteria (4.08) is higher than that of the soft criteria (3.26) whereas for the relational category the hard criteria (3.45) is lower than that of the soft (3.93).

These mean values clearly support the literature demonstrating that traditional models prioritise price and programme during bid evaluation whereas relational models prioritise the soft criteria.

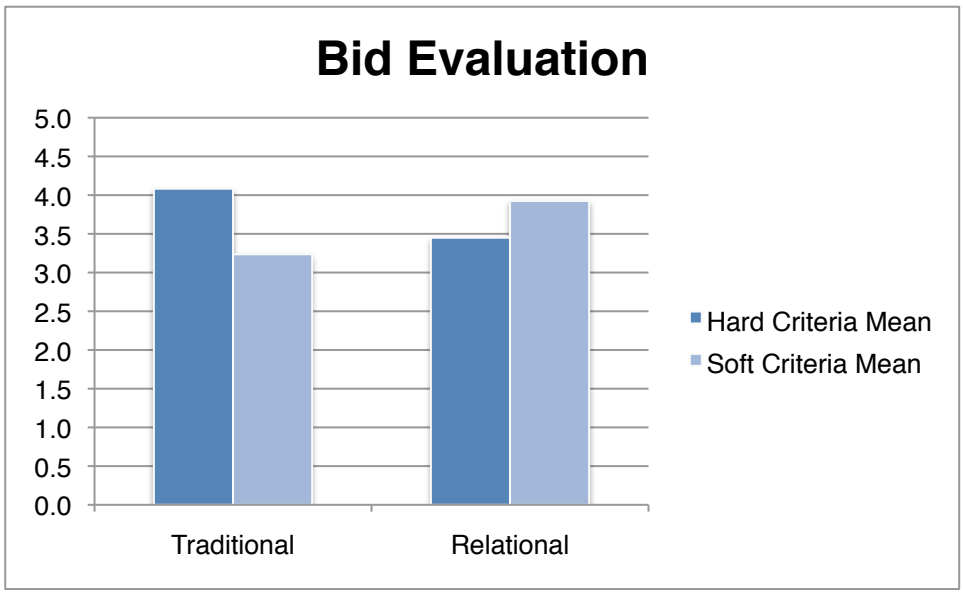


Figure 7: Mean value of bid evaluation by category

5.3.4 Subcontractor Selection

Subcontractor selection shows limited variation between the categories with traditional mean (2.32) only slightly lower than relational (2.80) and both indicate a preference for the traditional method of the contractor selecting.

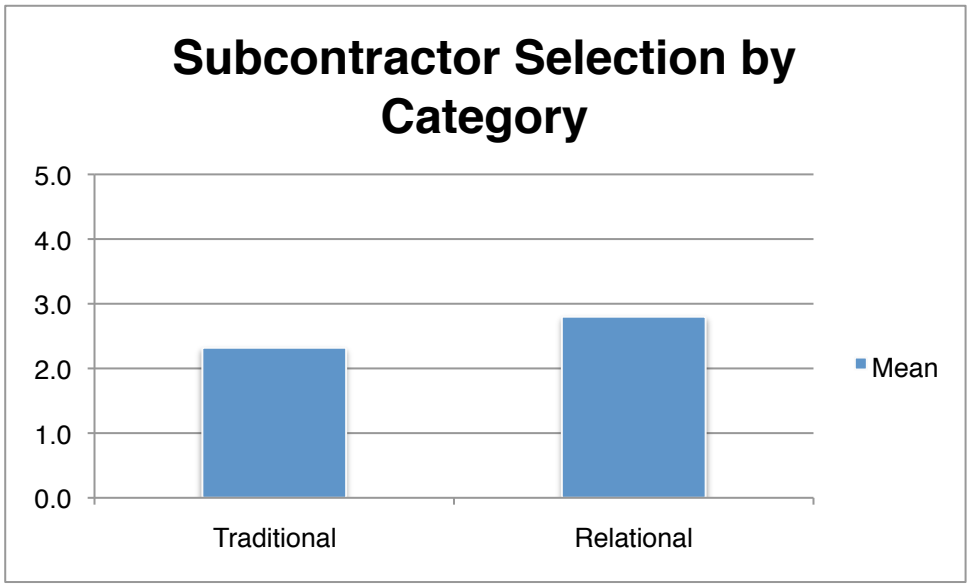


Figure 8: Mean value of subcontractor selection by category

The only relational behaviour was found on the alliance model with a mean value (3.33) heading towards joint responsibility and a standard deviation (1.506) indicating some instances of incentivised subcontractor arrangements.

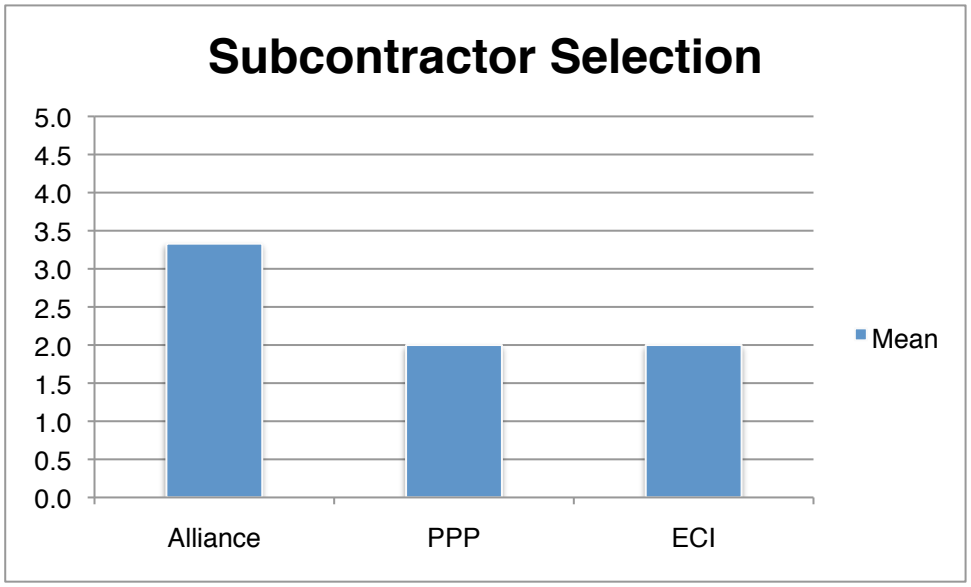


Figure 9: Mean value of subcontractor selection by model

5.3.5 Compensation

The mean value of the traditional category (1.47) is quite low displaying the traditional preference for fixed price or schedule of rates with little or no performance incentives. This is markedly different to the relational category with a mean value of (3.50).

The relational category needs explaining in greater detail, as it is comprised of two extremes. The alliance data reports a mean value (5.00) that is relational in the extreme and wholly represents incentive based payments. The relational mean is reduced by the PPP (1.00) and ECI (2.00), which are decidedly traditional values.

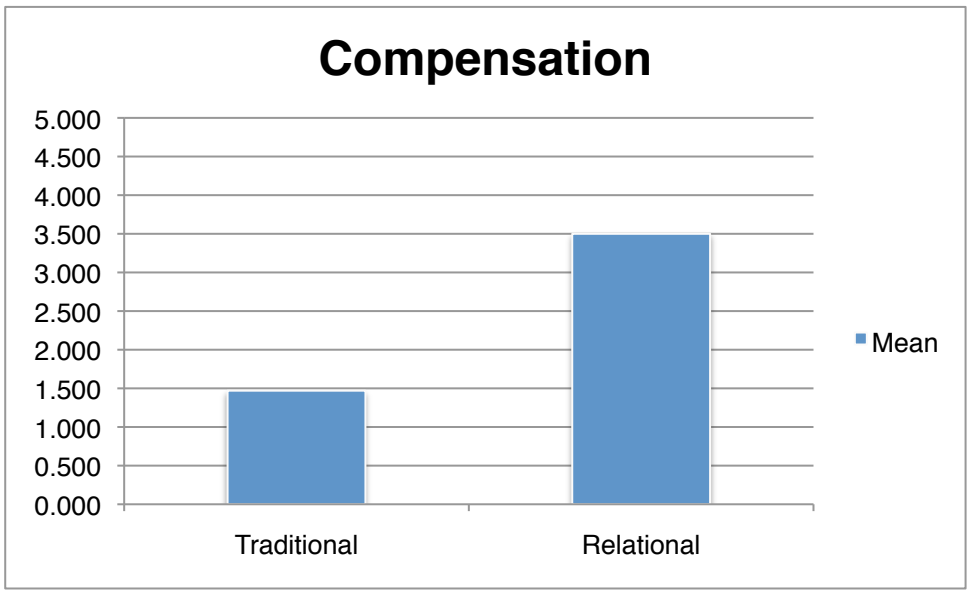


Figure 10: Mean value of compensation by category

5.3.6 Collaborative Tools

The collaborative tools data will be analysed using two methods. The data was sourced as yes/no for each of seven likely collaborative tools found on a project. Each project was attributed a number 1-7 corresponding with the number of tools implemented and a mean analysis was completed. Additionally a frequency analysis was completed for each of the seven tools allowing a thorough discussion of the data.

The mean value of the traditional category (1.05) is significantly lower than that of the relational (5.20). This demonstrates that traditional models incorporate few tools to foster cooperation on a project in stark contrast to the relational models that implement many.

The frequency analysis identifies the level of uptake of each tool for both categories. Of note is the fact that all tools are well represented within the relational category with three of the tools showing a frequency of 50%, two at 80% and two at 100%. This indicates that all seven of the tools can be considered 'business as usual' for relational models.

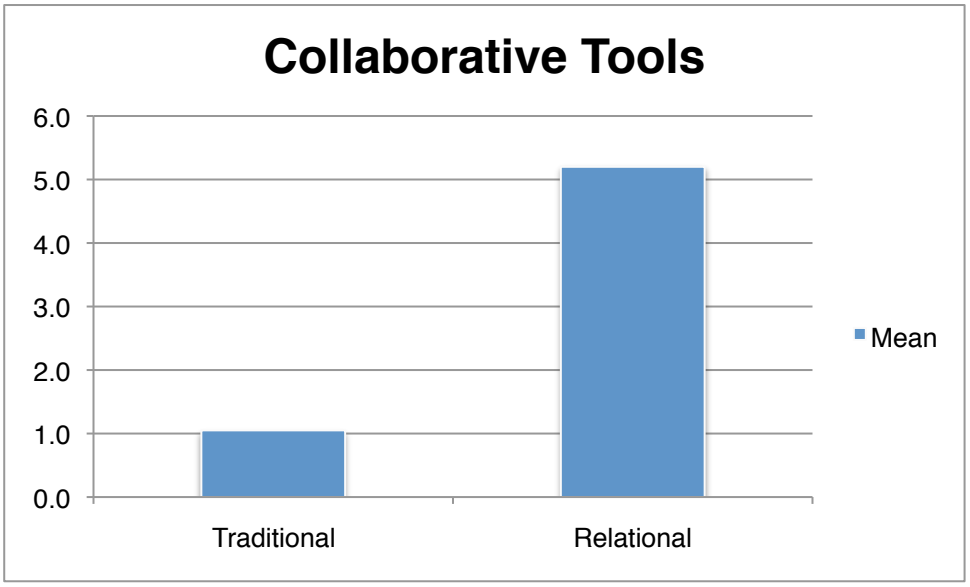


Figure 11: Mean value of collaborative tools by category

5.3.7 Performance Evaluation

Respondents were asked to rate the extent to which each party evaluated performance (1 being not at all, 5 being constantly). Client evaluation was asked in terms of process control and output control separately and the mean of these was used for each project. Contractor evaluation was asked in terms of process control only.

The mean values calculated from this data do not vary a lot between categories. There is less separation between the traditional means (3.55 for client and 4.53 for contractor) than there is for relational (3.35 for client and 4.80 for contractor).

This separation is demonstrated to the extreme by the alliance data returning substantially different mean values for client evaluation (2.75) and contractor evaluation (4.83).

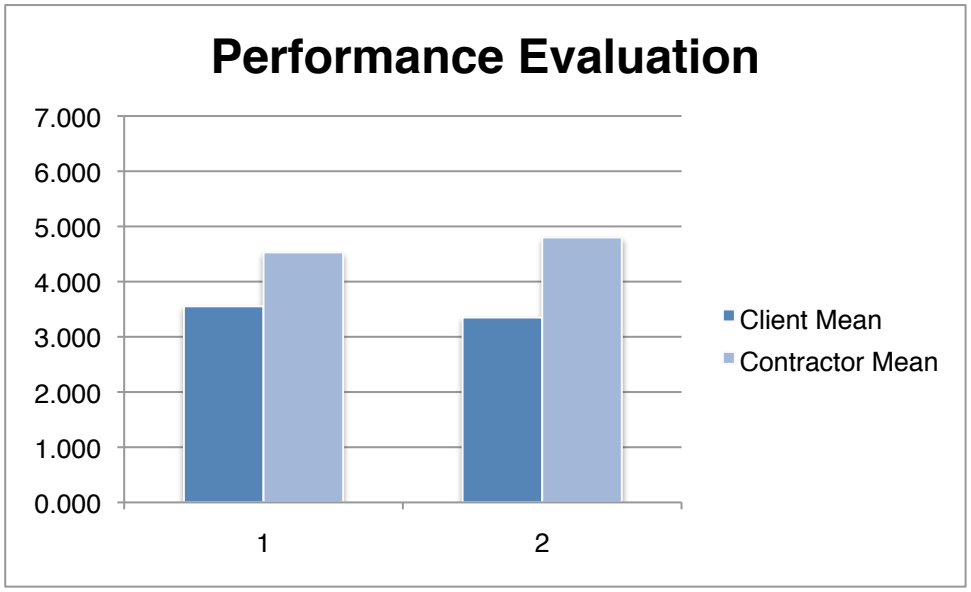


Figure 12: Mean value of performance evaluation by category

6 DISCUSSION OF RESULTS

6.1 Introduction

With the original aim in mind of identifying RC tools and techniques previously implemented under traditional delivery models it is necessary to further discuss the results.

In the first instance it is necessary to review the relational data against the expectations set out in the literature. This process will verify which of the relational criteria set out in the literature review is substantiated by the data and therefore credible for further comparison.

A frequency analysis will then be run on the traditional data to determine the level of uptake of relational tools and techniques on traditional models.

6.2 Individual Criteria

6.2.1 Design Process

The hypothesis is that relational models will incorporate joint design management as method of ensuring both client satisfaction in the scope and constructability in the design.

The mean value of the relational design process (3.90) indicates joint effort on the design with one party responsible for design risk. The responses received on the alliance model demonstrate the extreme of the relational models with a mean (5.0) representing joint design with both parties assuming all design risks. These values validate the hypothesis that relational models develop design cooperatively.

The mean of the traditional data (1.74) shows an overwhelming preference for single party design management on under traditional models. The frequency analysis of the traditional models shows three cases of contractor design with client input but no cases of joint design.

The difference in mean values (2.16) shows a clear division in techniques and the lack of joint design examples shows that as yet, there is no uptake of relational design management principles on within traditional frameworks.

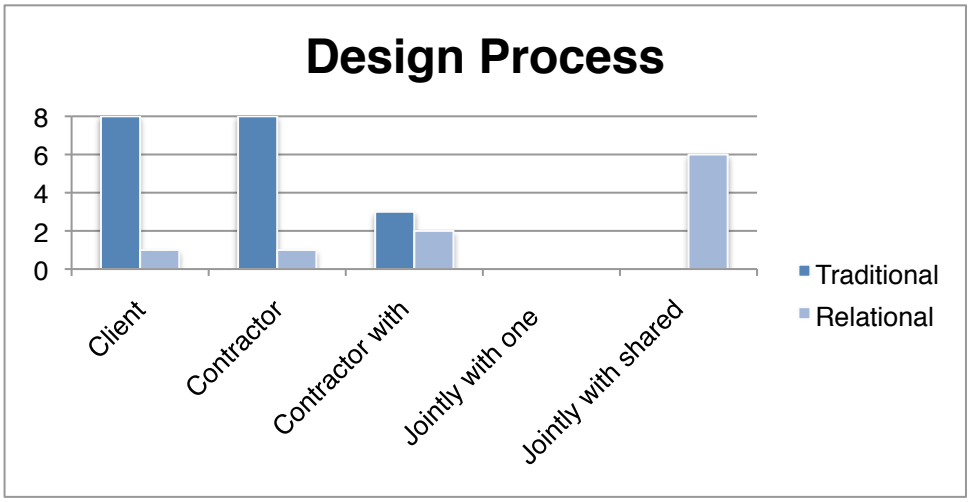


Figure 13: Frequency of design process responses by category

6.2.2 Tender Format

The hypothesis is that limiting tender invitations to direct negotiation with limited bidders encourages long-term relationships and goodwill and therefore results in cooperation. This would be reflected by a high relational mean value.

The relational mean (2.40) is within the traditional zone of responses. A score of 3.0 would represent the minimum response that restricts bidders to invitation only and goes someway to engendering the long-term relationships advocated in the literature. In this instance the results do not validate the hypothesis.

It should be noted that the traditional mean (2.47) is actually higher than the relational mean. This indicates a clear preference within all models for the traditional tender invitation format.

Also of note is the 3 responses received from traditional projects that used direct negotiation with a single bidder. This response was proposed as the most relational method in the literature.

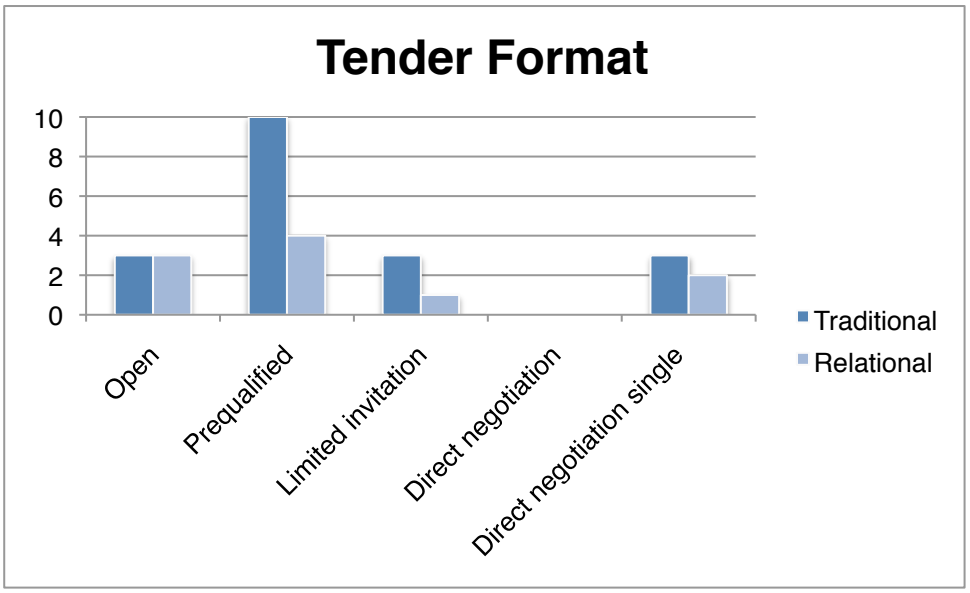


Figure 14: Frequency of tender format responses by category

6.2.3 Bid Evaluation

The hypothesis for this section is that the traditional models prioritise 'hard criteria' and traditional models 'soft criteria', both of which are validated.

What is not discussed is the closeness of the values albeit that they have reversed priorities. Whilst the traditional models clearly preference the hard criteria, the soft criteria value (3.26) is only slightly lower than that of the relational data (3.93). This shows that the traditional models are valuing the soft criteria; the major difference is in the consideration of hard criteria.

Looking at the individual criterion in more detail it can be seen that several were quite well represented in the traditional responses. Existing relationship, collaborative ability, technical competence, reputation, and systems all have multiple responses indicating maximum importance to the bid evaluation.

These responses clearly indicate a willingness to value 'soft criteria' when assessing under a traditional model.

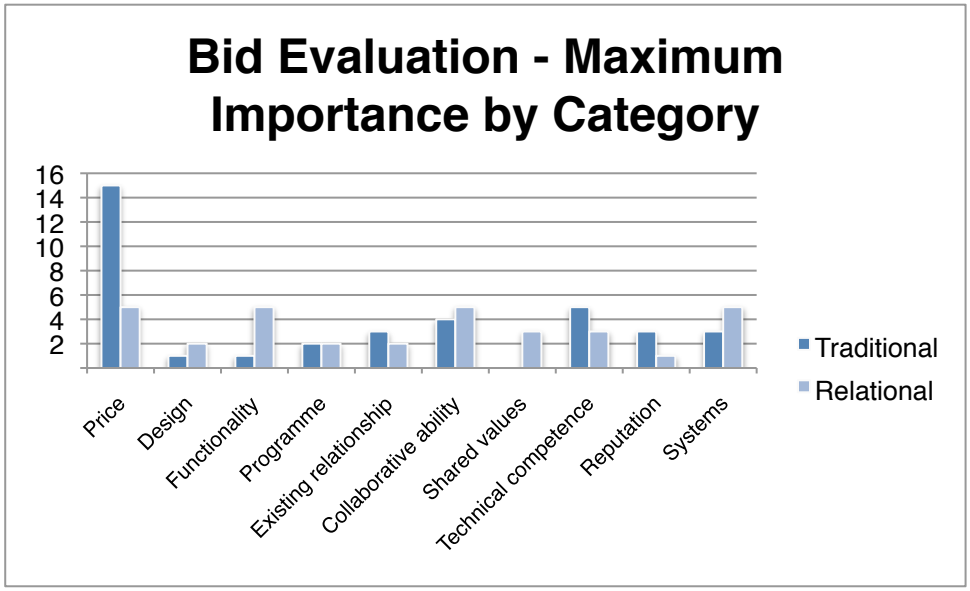


Figure 15: Frequency of maximum importance responses in bid evaluation by category

6.2.4 Subcontractor Selection

The hypothesis with respect to subcontractor selection is that the relational models will engage in joint selection and shared responsibility.

Clearly the mean value of the relational data (2.80) does not support this. The only relational result is in considering the alliance data in isolation and even this mean value (3.33) does not support joint responsibility.

A frequency analysis reveals that there are in fact only three examples of joint selection or incentivised subcontract agreements and all three are found on alliance models.

The relational data does not support the hypothesis and there are no isolated cases of uptake by traditional models.

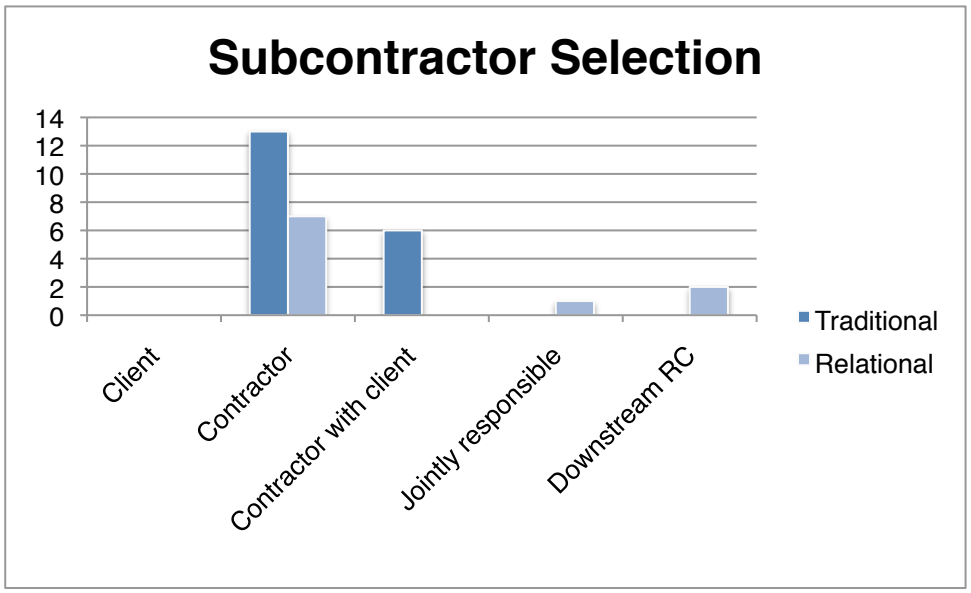


Figure 16: Frequency of subcontractor selection by category

6.2.5 Compensation

The hypothesis for this section is that the relational data will show a preference for incentivised compensation.

The relational mean value (3.50) does not quite substantiate this as shown in the results however there is further discussion. The alliance data reveals a mean value (5.0) that is as relational as the responses allow. These six responses are sufficient to validate the hypothesis.

The traditional mean value (1.47) shows a general reluctance to embrace incentivised compensation. Of significance is the fact that only one of the 19 traditional projects returned a relational response.

This shows that whilst the data validates the literature there is insignificant crossover to the traditional thinking.

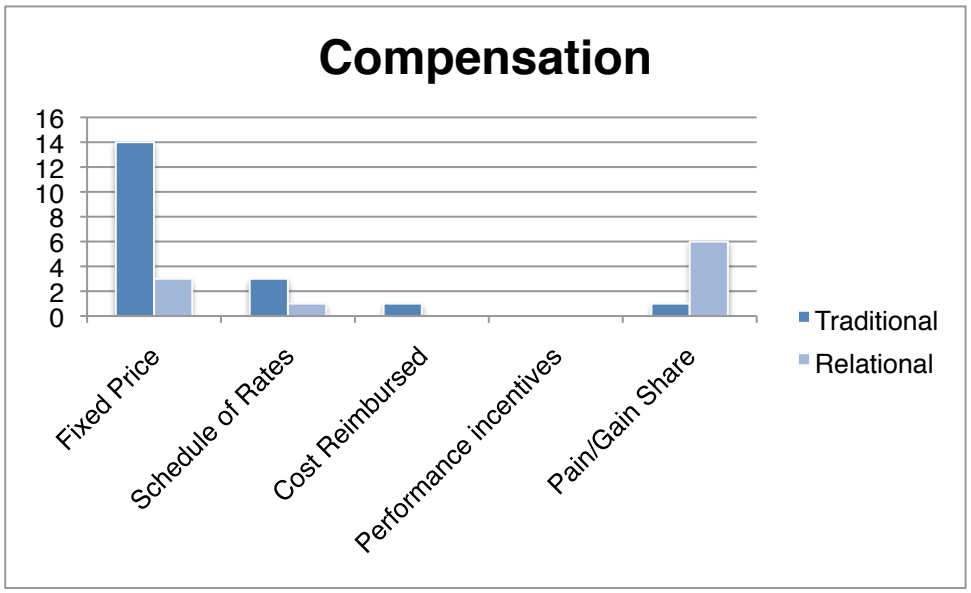


Figure 17: Frequency of compensation by category

6.2.6 Collaborative Tools

The hypothesis is that the relational models will by their very nature show a preference for incorporating collaborative tools. This was validated by the mean value of 5.20 from a possible 7.0 as previously discussed.

The traditional mean value (1.05) clearly demonstrates a lack of collaborative tools being implemented under these models. Notwithstanding the low mean value, the frequency analysis shows that each of the tools is implemented at least once. 26.5% of the projects engaged a team coach and 21.1% participated in team building workshops demonstrating that these tools are not extraordinary in the traditional environment.

Less common but still well represented are joint leadership team and shared office facilities at 15.8%. Whilst the remaining tools comprising joint risk management, dispute resolution and shared IT facilities only return 10% or less they do display a willingness to experiment with relational tools used elsewhere.

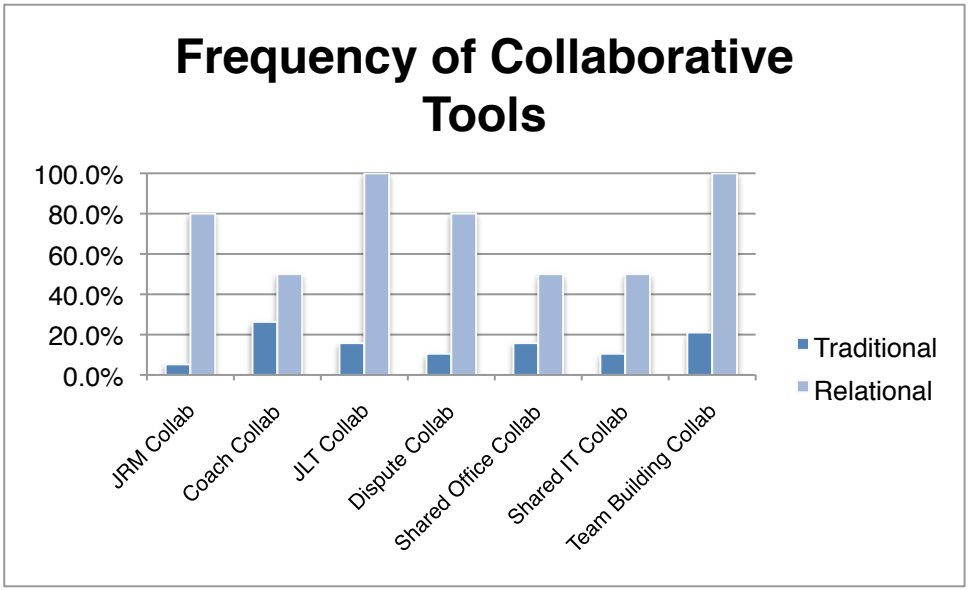


Figure 18: Frequency of collaborative tools by category

6.2.7 Performance Evaluation

The hypothesis is that relational models incorporate performance control by the contractor in order to reduce opportunistic behaviour and other causes of conflict. This would be supported by a high mean value for contractor evaluation and a low value for client evaluation. This is validated by the relational data with a contractor mean value of 4.80 versus a client mean value of 3.35.

The implied expectation is therefore for the traditional data to return a high client evaluation mean and lesser contractor evaluation. This didn't eventuate. The contractor evaluation mean (4.53) was higher than the client evaluation mean value (3.55) though they were separated by less than the relational means.

The larger separation between the relational mean values demonstrates the increased onus on the contractor under relational models for the quality of the works.

6.3 Limitations and Difficulties

The results show 10 out of 29 responses were relational. This 35% rate may indicate a general preference for traditional delivery models but there were insufficient total responses to draw a definite conclusion.

Likewise, 10 responses is too small a sample size for reliable relational data. For greater reliability a larger sample size of relational data should be targeted to balance the 19 traditional responses.

The nature of relational category is called into question by the disparity of the relational results. The alliance data (6 responses) regularly returned highly relational results however these values were often offset by the traditional results returned by the ECI (1) and PPP (2) responses. The results received from the ECI and PPP responses do not support the hypothesis that these models are relational in nature from the perspective of the contractor. Further

study could be conducted on this topic with a much larger sample size of each of these two models.

7 CONCLUSION

7.1 Introduction

The topic of relational contracting was researched in the interest of identifying RC principles that had been implemented on projects delivered by traditional models. The primary research was in the form of a literature review that returned a 7-stage framework for assessing recent projects.

A questionnaire was circulated to suitably experienced engineers in the Australian construction industry requesting responses to questions designed around the framework identified in the literature review.

29 responses were received which was encouraging however there were insufficient responses from relational projects to provide reliable results. Notwithstanding insufficient responses, these relational responses were assessed against the framework in order to validate or XY each stage of the framework.

Those stages that were validated by the data were then assessed against the traditional data. A frequency analysis was used to determine cases in which projects delivered under traditional models had implemented these RC tools or techniques.

7.2 Validation of Literature Review Framework

Of the seven criteria nominated by the literature review, five were validated by the data received from relational projects:

- *Design process.*
- *Bid evaluation.*
- *Compensation.*
- *Collaborative tools.*
- *Performance evaluation.*

7.3 Uptake by Relational Models

Frequency analysis of the corresponding traditional data sets reveals examples of uptake in *bid evaluation* and *collaborative tools*.

7.3.1 Bid Evaluation

'Soft criteria' were widely considered during the bid evaluation process on traditional models. Several of the assessment criteria were considered 'very important' in multiple cases. These were *existing relationships, collaborative ability, technical competence, reputation,* and *systems.*

7.3.2 Collaborative Tools

Whilst the traditional data set showed an overwhelming lack of c*ollaborative tools* there were examples of uptake. *Team coach* (26.5%) and *team building workshops* (21.1%) were well represented indicating acceptance within traditional models.

Less widespread but still encouraging by their presence are *joint leadership team, joint risk management, dispute resolution* and *shared office &/or IT facilities.*

7.4 Further Study

The study should be repeated with a larger relational sample size. Traditional models were well represented (19) and the results reliable.

The make up of the relational category should be considered in further detail with the ECI and PPP models studied to determine if they are truly relational.

This study only looked at what has been implemented and did not consider the effectiveness or outcome of its implementation. This is another clear area of research.

APPENDIX A – PROJECT SPECIFICATION

University of Southern Queensland

FACULTY OF ENGINEERING AND SURVEYING

ENG4111/4112 Research Project
PROJECT SPECIFICATION

FOR: Peter Robert FRAZER

TOPIC: RELATIONAL CONTRACTING - AN INVESTIGATION OF RELATIONAL CONTRACTING BEHAVIOURS ACROSS PROJECT DELIVERY MODELS

SUPERVISOR: David Thorpe

AIM: To identify relational contracting characteristics that have been implemented on projects delivered under a traditional model.

REVISION: B

PROGRAMME:

1. Research background information on relationship contracting and identify the RC models found in Australia.
2. Identify behaviours, techniques and characteristics that are considered part of relationship contracting.
3. Develop a questionnaire that will determine project delivery type and identify behaviours & characteristics that can be assessed against the criteria above.
4. Identify engineering managers that would have the requisite experience to complete the questionnaire.
5. Contact potential respondents and circulate questionnaires.
6. Evaluate the results to determine what, if any, RC characteristics have been found on traditionally delivered projects.
7. Submit an academic dissertation on the research.

As time permits:

8. Research alternative relationship based delivery methods.

AGREED: _____ (student) _____ (supervisor)

Date: / / 2010 Date: / / 2010

Examiner/Co-examiner: _____

APPENDIX B – QUESTIONNAIRE RESPONSES

PROJECT 1

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☑ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

Client

- ☐ Public Sector
- ☑ Private Sector

Project Value

- ☐ $ 462 M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☑ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:
The design on M2U, has been undertaken in accordance with an SWTC prescribed by RTA and Hills M2 (Transurban), the client, all the risk lies with LCPL.

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments: The M2 Upgrade Project was an unusual procurement process, which started out as a competitive Alliance, and was subsequently turned into Hard D&C, when the Financiers refused to cover an open Alliance arrangement.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Design	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Programme	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☑ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Shared values	☐ 1	☑ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Reputation	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments: Hills M2 are a very diffaent client to the RTA, their primary focus is shareholder value and reputation, they are not specifically worried about relationships. In contrast, RTA's primary focus, is long-term asset value, community satisfaction and enhanced relationships.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:
It's a hard dollar D+C, all the risk lies with the Main Contractor.

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
None of the above, Client and Contractor are in entirely separate camps, with no shared risk.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

Comments:
The client has engaged an Internal Varifier (IV), to oversee the contractors works, it is very much a "them and us" relationship.

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PROJECT 2

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [ ] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [x] Victoria
- [ ] Western Australia

Client

- [x] Public Sector
- [ ] Private Sector

Project Value

- [ ] $ 29 (actual project value appreciated if possible)
- [ ] 0 – 20M
- [x] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

Pete Frazer

III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments: HAS BEEN DONE POORLY.

Tendering

- [ ] The contract went to open tender
- [ ] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [x] The contract was awarded by direct negotiation with a single bidder

Comments: DUE TO TIMEFRAMES AND A PRE AGREED TOC IT WAS LET AS A SELF PERFORMING PACKAGE TO LCAC DUE TO A PRE EXISTING RELATIONSHIP WITH THE CLIENT.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☒ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Programme	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Shared values	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Reputation	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments: WHILST THIS WAS A NEGOCIATED CONTRACT WE DID SCORE WELL ON THE REQUIRED ASSESMENT CRITERIA.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments: THE CLIENT HAS THE RIGHT TO REJECT HOWEVER THEY HAVE BEEN HAPPY TO DATE.

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

Pete Frazer

Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☑ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☑ Shared client/contractor office
- ☑ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments: VERY SIMILAR TO DEER PARK.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments: ONLY WHEN THE CLIENTS SEES FIT DO THEY GET INVOLVED.

PROJECT 3

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [ ] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [x] Victoria
- [ ] Western Australia

Client

- [x] Public Sector
- [ ] Private Sector

Project Value

- [ ] $ 25m (actual project value appreciated if possible)
- [ ] 0 – 20M
- [ ] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments:
+ Small amount of ECI

Tendering

- [ ] The contract went to open tender
- [ ] The contract was open to prequalified parties
- [x] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments:
Shortlisted to 2 proponents

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Design	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5

Programme	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Collaborative ability	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Shared values	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Reputation	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☐ Fixed price
- ☐ Schedule of rates
- ☒ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
Nil. Construct only + % markup.
Client not interested in collaboration

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Comments:

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PROJECT 4

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☒ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☒ Victoria
- ☐ Western Australia

Client

- ☐ Public Sector
- ☒ Private Sector

Project Value

- ☐ $ 140m (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [x] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Designers initially engaged by client to bring design to 20%. then novated to contractor

Tendering

- [ ] The contract went to open tender
- [ ] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [x] The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Design	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Collaborative ability	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Shared values	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Reputation	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☒ Fixed price Have screwed down.
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
Nil - ~~the~~ hard money.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Comments:

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PROJECT 5

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☒ Design and Construct (D&C) + OWN & OPERATE.
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☒ Victoria
- ☐ Western Australia

Client

- ☒ Public Sector
- ☒ Private Sector

TJH contracted to Eastlink.
Eastlink contracted to state Govt.

Project Value

- ☐ $ 2.5 BILLION (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☒ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☐ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☒ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:
Shortlist to ~~two~~ two proponents.

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5	~~tot~~ tall price not build price.
Design	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5	
Functionality	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5	

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Programme	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Shared values	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Reputation	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☒ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
Nil : hard dollar with no interest in working collaboratively.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Comments:

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PROJECT 6

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☒ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☒ Victoria
- ☐ Western Australia

Client

- ☒ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 208M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☒ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☐ The contract went to open tender
- ☒ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Design	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Shared values	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments: Client took no interest in subcontractor selection process

Compensation

- ☒ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments: Hard dollar D&C

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☒ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☒ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5

general surveillance.

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments:

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PROJECT 7

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [ ] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [x] Victoria
- [ ] Western Australia

Client

- [x] Public Sector
- [ ] Private Sector

Project Value

- [ ] $ 85M (actual project value appreciated if possible)
- [ ] 0 – 20M
- [ ] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Contractor engaged @ 40% (allegedly) design stage.

Tendering

- [ ] The contract went to open tender
- [x] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments:
5 contractors shortlisted. Awarded based on team & capabilities. Post award a TOC was developed.

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Design – some design input	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Functionality	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Shared values	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☐ Fixed price
- ☐ Schedule of rates
- ☒ Cost reimbursed
- ☒ Performance incentives or bonuses
- ☒ Incentives based on pain &/or gain share

Comments: Direct costs reimbursed + gain/pain on TOC + KRA performance pool.

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- [x] Joint project delivery risk management
- [x] Team coach or facilitator
- [x] Leadership team comprising senior members of all participant organisations
- [x] Dispute resolution mechanism that allows the project to resolve its own disputes
- [ ] Shared client/contractor office
- [ ] Shared client/contractor IT platform?
- [x] Team building exercises and workshops used?

Comments:
Incentivised Constructonly delivered as an Alliance Framework.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments:

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PROJECT 8

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☒ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☒ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☒ Victoria
- ☐ Western Australia

Client

- ☒ Public Sector
- ☒ Private Sector

Project Value

- ☐ $ 270M _____ (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☒ The client & contractor jointly developed the design with both parties responsible for risk

Comments: Alliance involving the client, 2 design consultants and a JV of two contractors.

Tendering

- ☐ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☒ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments: 2 consortiums shortlisted from a field of 5.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Design	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5

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Programme	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Shared values	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☒ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:
Some key contractors were engaged under incentivised arrangements.

Compensation

- ☐ Fixed price
- ☐ Schedule of rates
- ☒ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☒ Incentives based on pain &/or gain share

Comments: Direct cost reimbursable with a pain/gainshare over the top.

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- [x] Joint project delivery risk management
- [x] Team coach or facilitator
- [x] Leadership team comprising senior members of all participant organisations
- [x] Dispute resolution mechanism that allows the project to resolve its own disputes
- [ ] Shared client/contractor office
- [ ] Shared client/contractor IT platform?
- [x] Team building exercises and workshops used?

Comments:
Client nonated office and IT platform.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments:

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PROJECT 9

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [x] Australian Capital Territory
- [ ] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [ ] Victoria
- [ ] Western Australia

Client

- [x] Public Sector
- [ ] Private Sector

Project Value

- [ ] $ 18 M (actual project value appreciated if possible)
- [ ] 0 – 20M
- [ ] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Developed by the Consultant (who was the Superintendent)

Tendering

- [x] The contract went to open tender
- [ ] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Design	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
There was very little collaborative effort on the part of the Client/Supv. Both stood away from the construction to push as much risk to the contractor as possible

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments:
Again, the Client only interested in the final outcome. everything inbetween was pushed on to the contractor

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PROJECT 10

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [ ] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [x] Victoria
- [ ] Western Australia

Client

- [ ] Public Sector
- [x] Private Sector

Project Value

- [ ] $ 14 M (actual project value appreciated if possible)
- [ ] 0 – 20M
- [ ] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments: Consultant developed the design - Client Had little of technical input.

Tendering

- [ ] The contract went to open tender
- [ ] The contract was open to prequalified parties
- [x] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments:
Tenders were then negotiated with preferred parties

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Design	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5

Programme	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Shared values	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Safety, quality & environmental systems	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5

Comments: Pre-existing relationship + price won the job.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments: entirely up to the contractor.

Compensation

- ☒ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments: Plus variations

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
Contractor left to perform works. Consultant managed the contract from Melbourne. Only saw Client half a dozen times over 18 mths

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments:
Quality control was left up to the Contractors internal systems

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PROJECT 11

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☒ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☒ Victoria
- ☐ Western Australia

Client

- ☒ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 60 M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☒ The contractor developed the design to client specifications
- ☒ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Clients concept design used in contractors design.
All designs to Clients specifications

Tendering

- ☒ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Design	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5

Programme	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Shared values	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Reputation	☐ 1	☒ 2	☐ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5

Comments:
Mainly price evaluated, However if tenders are close, other Criteria considered carefully

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☒ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☒ Team building exercises and workshops used?

Comments:
Client used team building exercises to improve communication between parties.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments:
QA was important to client / contractor.

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PROJECT 12

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C)
- ☐ Alliance
- ☑ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 6 6 T O M I L (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☑ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:
On this project the Contractor is responsible for the design and the Client reviews along with an 'Independant Reviewer' appointed by the Client.

Tendering

- ☑ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:
As such a large project only 4-5 consortiums capable of bidding - so any prequalification was arbitary.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Functionality	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

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Programme	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments:
Once again, due to scale of the project & bidders some of these criteria would be "given". I believe price, design proposal & capacity would have been very important.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractor with client's approval – only for subcontracts over $10 million.
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments: Fixed price PAF model.

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
None of the above currently being employed on this project.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5
CMA IR ✓

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5
CMA ✓

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5
CMA ✓

Comments:
Client has appointed Independent Reviewer to oversee the work and ensure compliance to specs. Client themselves appear unsure how involved they need to be in the construction work.

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PROJECT 13

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☒ Construct only
- ☐ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☒ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

Client

- ☐ Public Sector
- ☒ Private Sector

Project Value

- ☐ $ 387 M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☒ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments: The A number of construction contractors were engaged at 50% Design to ensure that the safety in Design process was completed to an adequate standard to ensure that risks included in the construction process were managed to an acceptable level.

Tendering

- ☐ The contract went to open tender
- ☒ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments: An expression of interest process was conducted initially which was done on an open basis. The A selection process identified three preferred suppliers which were then given the opportunity to competitively bid for the project.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price		☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Design	N/A	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	N/A	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Existing relationship	☒ 1	☐ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☒ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5
Reputation	☐ 1	☐ 2	☐ 3	☒ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☒ 5

Comments: BMA Has a very stringent evaluation process that includes the use of an analysis tool that weights each selection criteria.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☒ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☒ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☒ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☒ Shared client/contractor office
- ☒ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5

Comments: BMA has strong systems in place to ensure that project management is focussed on the resolution of issues that have been identified through project control processes.

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PROJECT 14

Which of the following describes the delivery method of the project in question (select more than one if appropriate):

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☐ Alliance
- ☑ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☑ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☑ The contractor developed the design to client specifications
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation
This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget, programme & contract.
How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Design	Scale		General ☑	Urban design ☑	
Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5 working with communities
Shared values	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

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Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☑ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Political

Comments: Gov commitment to deliver by Jan 2013

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis?

Comments:

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☑ Performance ~~incentives or bonuses~~ based QSP - lane availability
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☑ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☑ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments: Same as RWTH.

Performance evaluation

To what extent does the client monitor the contractor's performance during the construction process (1 = not at all and 5 = constantly)?

☐ 1 ☑ 2 LMA ☐ 3 ☐ 4 ☑ 5 IR.

To what extent does the contractor practice self-control of the works throughout the construction process?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the client inspect the finished product?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:

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PROJECT 15

Which of the following describes the delivery method of the project in question (select more than one if appropriate):

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☐ Alliance
- ☑ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M $200M (D+C)
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- 90% ☑ The contractor developed the design to client specifications
- 10% ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments: ITP workshop
Interactive Tender Process
- Guidance toward brief compliance.

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments: EOI
RFP
SNP – Pref. Bidder
ENP
– Fin. Close.

Bid evaluation
This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget, programme & contract.
How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

	Scale				
Design					IV
Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Functionality					IV
Active Management				IV	

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Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5 security
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Comments: Client DOJ - familiarity / trust.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis?

Comments:

Compensation

- ☑ Fixed price (D+C)
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance ~~incentives or bonuses~~ based OSP (consortium) quarterly service payment
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☑ Joint project delivery risk management
- ☑ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☑ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments: As per RWH.

Performance evaluation

To what extent does the client monitor the contractor's performance during the construction process (1 = not at all and 5 = constantly)?

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the contractor practice self-control of the works throughout the construction process?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the client inspect the finished product?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments: Security of existing prison is paramount.

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PROJECT 16

Which of the following describes the delivery method of the project in question (select more than one if appropriate):

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☐ Alliance
- ☑ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value (capital)

- ☐ $ (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

$250M D+C

$300M Total Funding

$200 - 240M O+M (25 years)

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- 90% ☑ The contractor developed the design to client specifications
- 10% ☑ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments: ✓EOI phase → short listed (usually 3) as consortium
✓RFP phase → preferred bidder (3↓2)
✓BAFO phase → preferred bidder 1
✓Financial close

SNP (Structure negotiation phase)
ENP (Exclusive NP).

Bid evaluation
This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget, programme & contract.
How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Equal ✓ ✓

	Scale				
Design					☑ 5
Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☑ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Operational Functionality					☑
Value for money					

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Technical competence	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5

Active Management ☑

Comments: Told we won because we demonstrated empathy for client + listened to them.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis?

Comments:

Compensation

- ☑ Fixed price (D+C)
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☑ Performance ~~incentives or bonuses~~ based / QSP (consortium). Perform to KPI's.
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools

(Please select from the following list each option that may be found on the project in question)

- [x] Joint project delivery risk management (User consultation)
- [ ] Team coach or facilitator
- [x] Leadership team comprising senior members of all participant organisations
- [x] Dispute resolution mechanism that allows the project to resolve its own disputes
- [ ] Shared client/contractor office
- [ ] Shared client/contractor IT platform? ~~Teambinder~~ Incite (web based collaboration tool)
- [x] Team building exercises and workshops used?

Comments: Meeting schedules/Protocols
Communication Protocols

Performance evaluation

To what extent does the client monitor the contractor's performance during the construction process (1 = not at all and 5 = constantly)?

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the contractor practice self-control of the works throughout the construction process?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the client inspect the finished product?

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

Comments:

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PROJECT 17

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 138M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☑ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Urban architect scope was defined. Structural design for these elements had to fulfil architects brief.

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:
VicRoads shortlist of Tier 1 contractors prequalified to bid contracts of large value. > $100m

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments:
Difficult to ascertain importance of these factors in clients' decision making process.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:
Variations were available for valid claims

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments:
Limited team building done on project, but good working relationship maintained on job b/w parties.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:

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PROJECT 18

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [x] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [x] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [ ] Victoria
- [ ] Western Australia

Client

- [x] Public Sector
- [ ] Private Sector

Project Value

- [ ] $ 30M (actual project value appreciated if possible)
- [ ] 0 – 20M
- [x] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments: Early Contractor Involvement. with Workshops assisted in Design Process

Tendering

- [ ] The contract went to open tender
- [x] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments: 3x Tenderers from an initial 5.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☐ Fixed price
- ☑ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments: Workshops were used to discuss important & critical processes. Management from Client & Clients Rep was excellent. This was due to experienced people in charge.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments: Client employed Consultants to manage project.

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PROJECT 19

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 107M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☑ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:
VicRoads shortlisted Tier 1 contractors prequalified to bid contracts of large value >$100m.

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

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Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments:
Difficult to ascertain importance of these factors in clients' decision making process

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:
Variations available for valid claims

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☑ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
Partnering workshops were held for the duration of the project to foster good working relationship. Facilitated by Client, but initiated upon agreement by Client + Contractor.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:
Onsite Surveillance Manager (Client) controlled output more than usual.

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PROJECT 20

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☑ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☐ Public Sector
- ☑ Private Sector

Project Value

- ☐ $ 110M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☑ The client & contractor jointly developed the design with both parties responsible for risk

Comments: THE ALLIANCE PARTNERS WERE TRANSURBAN (CLIENT) ABIGROUP (CONTRACTOR), AECOM (DESIGN CONSULTANT).

Tendering

- ☐ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☑ The contract was awarded by direct negotiation with a single bidder

Comments: TRANSURBAN AND AECOM HAVE AN ONGOING RELATIONSHIP AND TOGETHER DEVELOPED A FEASIBILITY STUDY. ABIGROUP WAS THEN INVITED TO PROVIDE CONSTRUCTION INPUT TO THE FEASIBILITY, WHICH THEN LEAD TO AN ALLIANCE BEING FORMED (A RECOMMENDATION OF THE FEASIBILITY STUDY) TO DELIVER THE PROJECT.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☑ 2	☐ 3	☐ 4	☐ 5
Functionality	☐ 1	☑ 2	☐ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☑ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments: TRANSURBAN ARE A ~~PRIVA~~ PUBLIC LISTED COMPANY. PRICE, PROGRAM AND REPUTATION IMPACT WERE OF THE UTMOST IMPORTANCE TO THEM. THE TECHNICAL ASPECTS WOULD BE DEVELOPED THROUGH THE ALLIANCE. AS A TOLL OPERATOR REPUTATION IS OF CRITICAL IMPORTANCE TO TRANSURBAN

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☑ The client & contractor were jointly responsible for selecting subcontractors
- ☑ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments: THE ALLIANCE SELECTED SUBCONTRACTORS (SHARED RISK). ON SEVERAL OCCASIONS SOME OF THE ALLIANCE PRINCIPALS WERE CARRIED THROUGH TO SUBCONTRACT ARRANGEMENTS.

Compensation

- ☐ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☑ Incentives based on pain &/or gain share

Comments: I CAN PROVIDE FURTHER DETAIL IF REQD.

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- [x] Joint project delivery risk management
- [x] Team coach or facilitator
- [x] Leadership team comprising senior members of all participant organisations
- [x] Dispute resolution mechanism that allows the project to resolve its own disputes
- [x] Shared client/contractor office
- [x] Shared client/contractor IT platform?
- [x] Team building exercises and workshops used?

Comments: ALL OF THE ABOVE WAS PRESENT IN THE SLM ALLIANCE.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☑ 1 ☐ 2 ☑ 3 ☐ 4 ☑ 5

PRACTICAL DAY TO DAY INVOLVEMENT.

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☑ 2 ☑ 3 ☐ 4 ☑ 5

CONTRACTUALLY THROUGH ALLIANCE MODEL.

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:
ALL RISKS AND OPPORTUNITIES ARE SHARED THROUGH THE ALLIANCE IN ACCORDANCE WITH AN AGREED FRAMEWORK.

ON A DAY TO DAY BASIS THE CONTRACTOR AND CONSULTANT MAKE UP THE MAJORITY OF THE TEAM. THE CLIENTS PRESENCE IS SMALL HOWEVER THE TEAM MAKEUP DOES NOT CHANGE THE COMPENSATION & RISK MODEL.

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PROJECT 21

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [x] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [ ] Victoria
- [ ] Western Australia

Client

- [x] Public Sector RTA (NSW)
- [ ] Private Sector

Project Value

- [ ] $ 9.0M. (actual project value appreciated if possible)
- [x] 0 – 20M
- [ ] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments: There NO were Workshops or Early Contractor Involvement.

Tendering

- [ ] The contract went to open tender
- [x] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments: All tenderers had to be prequalified.

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☑ 3	☑ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Comments: This was Macmahon Company's first Bridge Project in NSW. and it was important that Relationship, Quality & Safety were of a high standard.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments: The Client was informed of major subcontractors selected ie Precast for Super T's, Concrete Supplier, Piling Contractor.

Compensation

- ☑ Fixed price
- ☑ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments: This was a Lump Sum Price for Bridge and a Schedule of Rates for Earthworks

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments: Once a month Senior Members & PMs would meet and discuss progress and issues. Relationships were maintained to a healthy standard.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments: This project was in accordance with Roads & Traffic Authority NSW. QA. Specifications

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PROJECT 22

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☑ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☑ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

M7 Motorway was a 40km. Tollway constructed on a PPP model. Contractors. Abigroup Contractors and

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 1.4 Billion (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☑ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☑ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments: Design, Construct and Maintain for 40 years.

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

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Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Shared values	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Reputation	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:

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PROJECT 23

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C) WITH BRISCONNECTIONS
- ☐ Alliance
- ☑ Public Private Partnership (PPP) BETWEEN BRISCONNECTIONS AND CN1 (CLEM)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☑ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 280 Mins (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☑ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☑ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☑ The contract was awarded by direct negotiation with a single bidder

Comments:
ARU ROAD TO AIRPORT LINK PROJECT.

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Design	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Programme	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Comments:
NOT INVOLVED IN BID EVALUATION PROCESS.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
NONE OF THE ABOVE; IT'S A D&C CONTRACT.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☑ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

Comments:

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PROJECT 24

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☑ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 18·5M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☑ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☐ The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Typical VicRoads D+C process where contractor develops a detailed design based on the clients concept design

Tendering

- ☐ The contract went to open tender
- ☑ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:
VicRoads prequalification scheme → open to DC3 prequalified contractors

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5

Comments:
VicRoads typically award to lowest tender notwithstanding any other factors

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:
Contractually (AS4300 Model) UR were required to approve SIC's however in practice this was purely procedural.

Compensation

- ☑ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:
Lump Sum Contract

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☑ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
VicRoads project team facilated a workshop where partnering ~~pro~~ principals where brought forward → eg "no cold correspondence" etc

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

Comments: VicRoads surveillance manager was very collaborative but this tends to be the exception rather than the rule

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PROJECT 25

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- [x] Construct only
- [ ] Design and Construct (D&C)
- [ ] Alliance
- [ ] Public Private Partnership (PPP)
- [ ] Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- [ ] Joint Venture (JV)

Location of Project:

- [ ] Australian Capital Territory
- [ ] New South Wales
- [ ] Northern Territory
- [ ] Queensland
- [ ] South Australia
- [ ] Tasmania
- [x] Victoria (Mildura)
- [ ] Western Australia

Client

- [x] Public Sector
- [ ] Private Sector

Project Value

- [ ] $ 12M (actual project value appreciated if possible)
- [ ] 0 – 20M
- [ ] 20M – 50M
- [ ] 50M – 100M
- [ ] 100M – 500M
- [ ] 500M+

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III. Project Information

Design Process

- [x] The client &/or consultants developed the design
- [ ] The contractor developed the design to client specifications
- [ ] The contractor developed the design to client specifications with some client input.
- [ ] The client & contractor jointly developed the design with one party responsible for risk
- [ ] The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Client developed design as well as supplied all permanent materials (pipes)

Tendering

- [x] The contract went to open tender
- [ ] The contract was open to prequalified parties
- [ ] Tenders were invited from limited parties
- [ ] The contract was awarded by direct negotiation with several bidders
- [ ] The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Design	☑ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5

Comments:
was not fully immersed in bid process so could not make any valued comments

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

- ☐ Fixed price
- ☑ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☐ Incentives based on pain &/or gain share

Comments:
Lines were blurred as specification was not prescriptive with respect to measurement and payment items

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☐ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☐ Shared client/contractor office
- ☐ Shared client/contractor IT platform?
- ☐ Team building exercises and workshops used?

Comments:
No collaborative tools were used. Contract became quite adversarial.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

Comments: Principal had some solid perceptions about scope and delivery that were not necessarily reflected in the documents. Surveillance managers conduct at times was deceptive and misleading.

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PROJECT 26

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☑ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☑ $ 140 M (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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Programme	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Shared values	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5
Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Comments: As an Alliance quality, capability, experience and availability of the individuals proposed for the Project are a critical factor in bid evaluation. Also availability of resources to complete the project is important.

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☑ The client & contractor were jointly responsible for selecting subcontractors
- ☑ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments: As an Alliance effectively all appointments of consultants and contractors are done jointly. In reality the contractor has a better knowledge of the subcontract market and generally proposes the contractors.
Sub Alliances were adopted for critical activities where it was considered that pain/gain share incentives would achieve better outcomes.

Compensation

- ☐ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☑ Incentives based on pain &/or gain share

Comments: The commercial arrangements are based on pre agreed mark ups for overhead and profit. These mark ups are applied to the direct costs that are recorded and reported on an "open book" basis. In addition there are pain/gain share incentives as a result of the difference between Actual Outturn Cost (AOC) and the agreed Target Outturn Cost (TOC).

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- [x] Joint project delivery risk management
- [x] Team coach or facilitator
- [x] Leadership team comprising senior members of all participant organisations
- [x] Dispute resolution mechanism that allows the project to resolve its own disputes
- [x] Shared client/contractor office
- [x] Shared client/contractor IT platform?
- [x] Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☑ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments: As an Alliance these roles are carried out by the Alliance which incorporates both the Client & the Contractor.

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PROJECT 27

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☑ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☑ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☑ $ 260 M. (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☑ The client & contractor jointly developed the design with both parties responsible for risk

Comments:
Design developed within Alliance with client & stakeholder review process's.

Tendering

- ☑ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:
Normal Alliance process .. bid docs ... workshops ...

Bid evaluation
(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Design	☐ 1	☑ 2	☐ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5

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Programme	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Existing relationship	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Shared values	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5

Comments:

Subcontractor selection

- ☐ The client was responsible for selecting subcontractors
- ☑ The contractor was responsible for selecting subcontractors
- ☐ The contractor was responsible for selecting subcontractor with client's approval
- ☐ The client & contractor were jointly responsible for selecting subcontractors
- ☐ Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:
Packages tendered like a normal D&C project. Client informed of key packages and potential contractors discussed with client where an area of client knowledge or expertise. (eg plant specific equipment or technology).

Compensation

- ☐ Fixed price
- ☐ Schedule of rates
- ☐ Cost reimbursed
- ☐ Performance incentives or bonuses
- ☑ Incentives based on pain &/or gain share

Comments:
TOC established for each "Project" within the overall "program of works".

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Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☐ Joint project delivery risk management
- ☐ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☐ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☑ Shared client/contractor office
- ☑ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments:
Some client personell integrated into delivery team.

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☑ 4 ☐ 5

Comments:
Project generally within operational areas of clients facilities, hence client has constant presence.

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PROJECT 28

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☑ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☑ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 500 (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☑ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☑ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☐ The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Design	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- [x] Joint project delivery risk management
- [x] Team coach or facilitator
- [x] Leadership team comprising senior members of all participant organisations
- [x] Dispute resolution mechanism that allows the project to resolve its own disputes
- [x] Shared client/contractor office
- [x] Shared client/contractor IT platform?
- [x] Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:

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PROJECT 29

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☑ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☑ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

Client

- ☑ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ 140 (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☑ 100M – 500M
- ☐ 500M+

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III. Project Information

Design Process

- ☐ The client &/or consultants developed the design
- ☐ The contractor developed the design to client specifications
- ☐ The contractor developed the design to client specifications with some client input.
- ☐ The client & contractor jointly developed the design with one party responsible for risk
- ☑ The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

- ☐ The contract went to open tender
- ☐ The contract was open to prequalified parties
- ☐ Tenders were invited from limited parties
- ☐ The contract was awarded by direct negotiation with several bidders
- ☑ The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☑ 3	☐ 4	☐ 5
Design	☐ 1	☐ 2	☐ 3	☑ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☐ 4	☑ 5

Collaborative tools
(Please select from the following list each option that may be found on the project in question)

- ☑ Joint project delivery risk management
- ☑ Team coach or facilitator
- ☑ Leadership team comprising senior members of all participant organisations
- ☑ Dispute resolution mechanism that allows the project to resolve its own disputes
- ☑ Shared client/contractor office
- ☑ Shared client/contractor IT platform?
- ☑ Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☑ 5

Comments:

APPENDIX C – QUESTIONNAIRE ADAPTED TO DISPLAY VALUES

Research Questionnaire

This research topic falls under the very broad heading of Relational Contracting (RC). It aims to analyse the Australian Construction Industry with respect to project delivery methods and determine the market share of each. Secondary questions will then be asked to establish the level of relational behaviours implemented within each.

The questions will determine the responsibility split between client & contractor and will allow assessment against a predetermined set of RC criteria. The term contractor is used in place of supplier, constructor, consortium, joint venture, alliance or any other constructing entity.

In the interest of confidentiality this initial page containing respondent details will not be published. It will be used by the researcher only.

I. Respondent Details

Name & Position

_____

Years Experience

_____

Your Organisations Role on the Project

- ☐ Client
- ☐ Contractor
- ☐ Consultant
- ☐ Coach/Facilitator
- ☐ Other *(please specify if possible)*

_____

II. General Project Information

Name of the Project *(Please do not leave blank, if you wish to keep the project confidential please comment as such)*

Which of the following describes the delivery method of the project in question *(select more than one if appropriate)*:

- ☐ Construct only
- ☐ Design and Construct (D&C)
- ☐ Alliance
- ☐ Public Private Partnership (PPP)
- ☐ Early contractor involvement (ECI as used by Qld Main Roads & DTEI Sth Aust, not simply early design input)
- ☐ Joint Venture (JV)

Location of Project:

- ☐ Australian Capital Territory
- ☐ New South Wales
- ☐ Northern Territory
- ☐ Queensland
- ☐ South Australia
- ☐ Tasmania
- ☐ Victoria
- ☐ Western Australia

Client

- ☐ Public Sector
- ☐ Private Sector

Project Value

- ☐ $ _____ (actual project value appreciated if possible)
- ☐ 0 – 20M
- ☐ 20M – 50M
- ☐ 50M – 100M
- ☐ 100M – 500M
- ☐ 500M+

III. Project Information

Design Process

1 The client &/or consultants developed the design
2 The contractor developed the design to client specifications
3 The contractor developed the design to client specifications with some client input.
4 The client & contractor jointly developed the design with one party responsible for risk
5 The client & contractor jointly developed the design with both parties responsible for risk

Comments:

Tendering

1 The contract went to open tender
2 The contract was open to prequalified parties
3 Tenders were invited from limited parties
4 The contract was awarded by direct negotiation with several bidders
5 The contract was awarded by direct negotiation with a single bidder

Comments:

Bid evaluation

(This aims to determine the weighting given to 'soft criteria' such as reputation, past performance, relationship, attitude towards cooperation etc. compared to the traditional 'hard criteria' being budget & programme)

How important were the following criteria in the bid evaluation process? (1 = not considered and 5 = very important)

Price	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Design	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Functionality	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Programme	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Existing relationship	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Collaborative ability	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Shared values	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Technical competence	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Reputation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Safety, quality & environmental systems	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Comments:

Subcontractor selection

1 The client was responsible for selecting subcontractors
2 The contractor was responsible for selecting subcontractors
3 The contractor was responsible for selecting subcontractor with client's approval
4 The client & contractor were jointly responsible for selecting subcontractors
5 Subcontractors were engaged on an Alliance, Partnering or incentivised basis

Comments:

Compensation

1 Fixed price
2 Schedule of rates
3 Cost reimbursed
4 Performance incentives or bonuses
5 Incentives based on pain &/or gain share

Comments:

Collaborative tools
(Please select from the following list each option that may be found on the project in question)

1 Joint project delivery risk management
2 Team coach or facilitator
3 Leadership team comprising senior members of all participant organisations
4 Dispute resolution mechanism that allows the project to resolve its own disputes
5 Shared client/contractor office
6 Shared client/contractor IT platform?
7 Team building exercises and workshops used?

Comments:

Performance evaluation
(1 = not at all and 5 = constantly)

To what extent does the client engage in process control of the works?
(Monitoring the contractor's performance throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the client engage in output control of the works?
(Monitoring the end product/s)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

To what extent does the contractor engage in process control of the work?
(Contractor self-monitoring throughout the construction process)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Comments:

APPENDIX D – SPSS DATA OUTPUT

```
GET
  FILE='/Users/Pete/University/USQ/ENG4111:4112 Research Project/Dissertation/Survey Analysis 1.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
MEANS TABLES=DesignProcess TenderFormat PriceEval DesignEval FunctionalityEval ProgrammeEval ExistingRelationshipEval CollaborativeAbilityEval SharedValuesEval TechnicalCompetenceEval ReputationEval SystemsEval HardCriteria SoftCriteria
SubcontractorSelection Compensation JRMCollab CoachCollab JLTCollab DisputeCollab SharedOfficeCollab SharedITCollab TeamBuildingCollab CollaborativeCat ClientEval ContractorProcess BY ModelCat DeliveryModel
  /CELLS MEAN COUNT STDDEV.
```

Means

Notes

Output Created		26-Oct-2010 19:58:14
Comments		
Input	Data	/Users/Pete/University/USQ/ENG4111:4112 Research Project/Dissertation/Survey Analysis 1.sav
	Active Dataset	DataSet1
	Filter	<none>

	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	29
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.
Syntax		MEANS TABLES=DesignProcess TenderFormat PriceEval DesignEval FunctionalityEval ProgrammeEval ExistingRelationshipEval CollaborativeAbilityEval SharedValuesEval TechnicalCompetenceEval ReputationEval SystemsEval HardCriteria SoftCriteria SubcontractorSelection Compensation JRMCollab CoachCollab JLTCollab DisputeCollab SharedOfficeCollab SharedITCollab TeamBuildingCollab CollaborativeCat ClientEval ContractorProcess BY ModelCat DeliveryModel /CELLS MEAN COUNT STDDEV.
Resources	Processor Time	00:00:00.025
	Elapsed Time	00:00:00.000

[DataSet1] /Users/Pete/University/USQ/ENG4111:4112 Research Project/Dissertation/Survey Analysis 1.sav

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Design Process * Model Category	29	100.0%	0	.0%	29	100.0%
Tender Format * Model Category	29	100.0%	0	.0%	29	100.0%
Price Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Design Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Functionality Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Programme Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Existing Relationship Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Collaborative Ability Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Shared Values Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Technical Competence Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Reputation Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%

Systems Evaluation * Model Category	28	96.6%	1	3.4%	29	100.0%
Hard Criteria * Model Category	28	96.6%	1	3.4%	29	100.0%
Soft Criteria * Model Category	28	96.6%	1	3.4%	29	100.0%
Subcontractor Selection * Model Category	29	100.0%	0	.0%	29	100.0%
Compensation * Model Category	29	100.0%	0	.0%	29	100.0%
JRM Collab * Model Category	29	100.0%	0	.0%	29	100.0%
Coach Collab * Model Category	29	100.0%	0	.0%	29	100.0%
JLT Collab * Model Category	29	100.0%	0	.0%	29	100.0%
Dispute Collab * Model Category	29	100.0%	0	.0%	29	100.0%
Shared Office Collab * Model Category	29	100.0%	0	.0%	29	100.0%
Shared IT Collab * Model Category	29	100.0%	0	.0%	29	100.0%
Team Building Collab * Model Category	29	100.0%	0	.0%	29	100.0%
Collaborative Cat * Model Category	29	100.0%	0	.0%	29	100.0%
Client Evaluation * Model Category	29	100.0%	0	.0%	29	100.0%
Contractor Process * Model Category	29	100.0%	0	.0%	29	100.0%
Design Process * Delivery Model	29	100.0%	0	.0%	29	100.0%
Tender Format * Delivery Model	29	100.0%	0	.0%	29	100.0%

Price Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Design Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Functionality Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Programme Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Existing Relationship Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Collaborative Ability Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Shared Values Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Technical Competence Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Reputation Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Systems Evaluation * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Hard Criteria * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Soft Criteria * Delivery Model	28	96.6%	1	3.4%	29	100.0%
Subcontractor Selection * Delivery Model	29	100.0%	0	.0%	29	100.0%
Compensation * Delivery Model	29	100.0%	0	.0%	29	100.0%

JRM Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
Coach Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
JLT Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
Dispute Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
Shared Office Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
Shared IT Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
Team Building Collab * Delivery Model	29	100.0%	0	.0%	29	100.0%
Collaborative Cat * Delivery Model	29	100.0%	0	.0%	29	100.0%
Client Evaluation * Delivery Model	29	100.0%	0	.0%	29	100.0%
Contractor Process * Delivery Model	29	100.0%	0	.0%	29	100.0%

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Model Category

Model Category		Design Process	Tender Format	Price Evaluation	Design Evaluation	Functionality Evaluation
Traditional	Mean	1.74	2.47	4.67	2.83	2.94
	N	19	19	18	18	18

	Std. Deviation	.733	1.264	.840	1.425	1.349
Relational	Mean	3.90	2.40	4.00	3.40	3.60
	N	10	10	10	10	10
	Std. Deviation	1.524	1.506	1.054	1.350	1.713
Total	Mean	2.48	2.45	4.43	3.04	3.18
	N	29	29	28	28	28
	Std. Deviation	1.479	1.325	.959	1.401	1.492

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Model Category

Model Category		Programme Evaluation	Existing Relationship Evaluation	Collaborative Ability Evaluation	Shared Values Evaluation	Technical Competence Evaluation
Traditional	Mean	3.50	3.11	3.17	2.89	3.94
	N	18	18	18	18	18
	Std. Deviation	.924	1.367	1.200	.963	.802
Relational	Mean	2.90	3.60	4.50	3.80	4.20
	N	10	10	10	10	10
	Std. Deviation	1.524	1.075	.527	.919	.632
Total	Mean	3.29	3.29	3.64	3.21	4.04

	N	28	28	28	28	28
	Std. Deviation	1.182	1.272	1.193	1.031	.744

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Model Category

Model Category		Reputation Evaluation	Systems Evaluation	Hard Criteria	Soft Criteria	Subcontractor Selection
Traditional	Mean	3.50	3.50	4.0833	3.2361	2.32
	N	18	18	18	18	19
	Std. Deviation	.985	1.150	.52159	.69780	.478
Relational	Mean	4.00	4.30	3.4500	3.9250	2.80
	N	10	10	10	10	10
	Std. Deviation	.471	.823	.68516	.50069	1.317
Total	Mean	3.68	3.79	3.8571	3.4821	2.48
	N	28	28	28	28	29
	Std. Deviation	.863	1.101	.65060	.70932	.871

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Model Category

Model Category		Compensation	JRM Collab	Coach Collab	JLT Collab	Dispute Collab	Shared Office Collab
Traditional	Mean	1.47	.05	.26	.16	.11	.16
	N	19	19	19	19	19	19
	Std. Deviation	1.020	.229	.452	.375	.315	.375
Relational	Mean	3.50	.80	.50	1.00	.80	.50
	N	10	10	10	10	10	10
	Std. Deviation	1.958	.422	.527	.000	.422	.527
Total	Mean	2.17	.31	.34	.45	.34	.28
	N	29	29	29	29	29	29
	Std. Deviation	1.692	.471	.484	.506	.484	.455

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Model Category

Model Category		Shared IT Collab	Team Building Collab	Collaborative Cat	Client Evaluation	Contractor Process
Traditional	Mean	.11	.21	1.05	3.5526	4.53
	N	19	19	19	19	19
	Std. Deviation	.315	.419	1.471	.91127	.612
Relational	Mean	.50	1.00	5.20	3.3500	4.80
	N	10	10	10	10	10
	Std. Deviation	.527	.000	1.619	1.17969	.422
Total	Mean	.24	.48	2.48	3.4828	4.62
	N	29	29	29	29	29
	Std. Deviation	.435	.509	2.502	.99537	.561

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Delivery Model

Delivery Model		Design Process	Tender Format	Price Evaluation	Design Evaluation	Functionality Evaluation
Construct Only	Mean	1.00	2.38	4.38	1.63	1.88
	N	8	8	8	8	8

	Std. Deviation	.000	1.302	1.188	1.188	1.246
D&C	Mean	2.27	2.55	4.90	3.80	3.80
	N	11	11	10	10	10
	Std. Deviation	.467	1.293	.316	.632	.632
Alliance	Mean	5.00	2.67	3.33	3.33	4.00
	N	6	6	6	6	6
	Std. Deviation	.000	1.966	.816	1.033	1.265
PPP	Mean	2.67	2.00	5.00	4.33	3.67
	N	3	3	3	3	3
	Std. Deviation	.577	.000	.000	1.155	2.309
ECI	Mean	1.00	2.00	5.00	1.00	1.00
	N	1	1	1	1	1
	Std. Deviation	.	.	.	.	.
Total	Mean	2.48	2.45	4.43	3.04	3.18
	N	29	29	28	28	28
	Std. Deviation	1.479	1.325	.959	1.401	1.492

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Delivery Model

Delivery Model		Programme Evaluation	Existing Relationship Evaluation	Collaborative Ability Evaluation	Shared Values Evaluation	Technical Competence Evaluation
Construct Only	Mean	3.50	3.38	3.38	3.00	4.13
	N	8	8	8	8	8
	Std. Deviation	1.195	1.685	1.506	1.069	.835
D&C	Mean	3.50	2.90	3.00	2.80	3.80
	N	10	10	10	10	10
	Std. Deviation	.707	1.101	.943	.919	.789
Alliance	Mean	3.83	4.00	4.67	4.17	4.17
	N	6	6	6	6	6
	Std. Deviation	.983	1.095	.516	.983	.408
PPP	Mean	1.00	3.00	4.33	3.33	4.00
	N	3	3	3	3	3
	Std. Deviation	.000	1.000	.577	.577	1.000
ECI	Mean	3.00	3.00	4.00	3.00	5.00
	N	1	1	1	1	1

	Std. Deviation	.	.	.	.	.
Total	Mean	3.29	3.29	3.64	3.21	4.04
	N	28	28	28	28	28
	Std. Deviation	1.182	1.272	1.193	1.031	.744

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Delivery Model

Delivery Model		Reputation Evaluation	Systems Evaluation	Hard Criteria	Soft Criteria	Subcontractor Selection
Construct Only	Mean	3.62	3.50	3.9375	3.0625	2.38
	N	8	8	8	8	8
	Std. Deviation	.744	1.309	.72887	.74402	.518
D&C	Mean	3.40	3.50	4.2000	3.3750	2.27
	N	10	10	10	10	11
	Std. Deviation	1.174	1.080	.25820	.66406	.467
Alliance	Mean	4.17	4.33	3.5833	4.1042	3.33
	N	6	6	6	6	6
	Std. Deviation	.408	.816	.80104	.45701	1.506

PPP	Mean	3.67	4.00	3.0000	3.7917	2.00
	N	3	3	3	3	3
	Std. Deviation	.577	1.000	.00000	.50518	.000
ECI	Mean	4.00	5.00	4.0000	3.2500	2.00
	N	1	1	1	1	1
	Std. Deviation	.	.	.	.	.
Total	Mean	3.68	3.79	3.8571	3.4821	2.48
	N	28	28	28	28	29
	Std. Deviation	.863	1.101	.65060	.70932	.871

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Delivery Model

Delivery Model		Compensation	JRM Collab	Coach Collab	JLT Collab	Dispute Collab	Shared Office Collab
Construct Only	Mean	2.13	.13	.25	.25	.25	.25
	N	8	8	8	8	8	8
	Std. Deviation	1.356	.354	.463	.463	.463	.463
D&C	Mean	1.00	.00	.27	.09	.00	.09
	N	11	11	11	11	11	11

	Std. Deviation	.000	.000	.467	.302	.000	.302
Alliance	Mean	5.00	.83	.83	1.00	.83	.83
	N	6	6	6	6	6	6
	Std. Deviation	.000	.408	.408	.000	.408	.408
PPP	Mean	1.00	1.00	.00	1.00	1.00	.00
	N	3	3	3	3	3	3
	Std. Deviation	.000	.000	.000	.000	.000	.000
ECI	Mean	2.00	.00	.00	1.00	.00	.00
	N	1	1	1	1	1	1
	Std. Deviation	.	.	.	.	.	.
Total	Mean	2.17	.31	.34	.45	.34	.28
	N	29	29	29	29	29	29
	Std. Deviation	1.692	.471	.484	.506	.484	.455

Design Process Tender Format Price Evaluation Design Evaluation Functionality Evaluation Programme Evaluation Existing Relationship Evaluation Collaborative Ability Evaluation Shared Values Evaluation Technical Competence Evaluation Reputation Evaluation Systems Evaluation Hard Criteria Soft Criteria Subcontractor Selection Compensation JRM Collab Coach Collab JLT Collab Dispute Collab Shared Office Collab Shared IT Collab Team Building Collab Collaborative Cat Client Evaluation Contractor Process * Delivery Model

Delivery Model	Shared IT Collab	Team Building Collab	Collaborative Cat	Client Evaluation	Contractor Process

Construct Only	Mean	.25	.25	1.63	3.7500	4.63
	N	8	8	8	8	8
	Std. Deviation	.463	.463	2.066	.96362	.744
D&C	Mean	.00	.18	.64	3.4091	4.45
	N	11	11	11	11	11
	Std. Deviation	.000	.405	.674	.88933	.522
Alliance	Mean	.83	1.00	6.17	2.7500	4.83
	N	6	6	6	6	6
	Std. Deviation	.408	.000	1.329	1.08397	.408
PPP	Mean	.00	1.00	4.00	4.3333	4.67
	N	3	3	3	3	3
	Std. Deviation	.000	.000	.000	.76376	.577
ECI	Mean	.00	1.00	3.00	4.0000	5.00
	N	1	1	1	1	1
	Std. Deviation	.	.	.	.	.
Total	Mean	.24	.48	2.48	3.4828	4.62
	N	29	29	29	29	29
	Std. Deviation	.435	.509	2.502	.99537	.561

SORT CASES BY ModelCat.

SPLIT FILE LAYERED BY ModelCat.

FREQUENCIES VARIABLES=DesignProcess TenderFormat PriceEval DesignEval FunctionalityEval ProgrammeEval ExistingRelationshipEval CollaborativeAbilityEval SharedValuesEval TechnicalCompetenceEval ReputationEval SystemsEval HardCriteria SoftCriteria

SubcontractorSelection Compensation JRMCollab CoachCollab JLTCollab DisputeCollab SharedOfficeCollab SharedITCollab TeamBuildingCollab CollaborativeCat ClientEval ContractorProcess

/ORDER=ANALYSIS.

Frequencies

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.

	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=DesignProcess TenderFormat PriceEval DesignEval FunctionalityEval ProgrammeEval ExistingRelationshipEval CollaborativeAbilityEval SharedValuesEval TechnicalCompetenceEval ReputationEval SystemsEval HardCriteria SoftCriteria SubcontractorSelection Compensation JRMCollab CoachCollab JLTCollab DisputeCollab SharedOfficeCollab SharedITCollab TeamBuildingCollab CollaborativeCat ClientEval ContractorProcess /ORDER=ANALYSIS.
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[DataSet1] /Users/Pete/University/USQ/ENG4111:4112 Research Project/Dissertation/Survey Analysis 1.sav

Statistics

Model Category		Design Process	Tender Format	Price Evaluation	Design Evaluation	Functionality Evaluation
Traditional	N Valid	19	19	18	18	18
	Missing	0	0	1	1	1
Relational	N Valid	10	10	10	10	10

Statistics

Model Category		Design Process	Tender Format	Price Evaluation	Design Evaluation	Functionality Evaluation
Traditional	N Valid	19	19	18	18	18
	Missing	0	0	1	1	1
	Valid	10	10	10	10	10
	Missing	0	0	0	0	0

Statistics

Model Category		Programme Evaluation	Existing Relationship Evaluation	Collaborative Ability Evaluation	Shared Values Evaluation	Technical Competence Evaluation
Traditional	N Valid	18	18	18	18	18
	Missing	1	1	1	1	1
Relational	N Valid	10	10	10	10	10
	Missing	0	0	0	0	0

Statistics

Model Category		Reputation Evaluation	Systems Evaluation	Hard Criteria	Soft Criteria	Subcontractor Selection
Traditional	N Valid	18	18	18	18	19
	Missing	1	1	1	1	0
Relational	N Valid	10	10	10	10	10
	Missing	0	0	0	0	0

Statistics

Model Category		Compensation	JRM Collab	Coach Collab	JLT Collab	Dispute Collab	Shared Office Collab
Traditional	N Valid	19	19	19	19	19	19
	Missing	0	0	0	0	0	0
Relational	N Valid	10	10	10	10	10	10
	Missing	0	0	0	0	0	0

Statistics

Model Category		Shared IT Collab	Team Building Collab	Collaborative Cat	Client Evaluation	Contractor Process
Traditional	N Valid	19	19	19	19	19
	Missing	0	0	0	0	0
Relational	N Valid	10	10	10	10	10
	Missing	0	0	0	0	0

Frequency Table

Design Process

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	Client	8	42.1	42.1	42.1
		Contractor	8	42.1	42.1	84.2
		Contractor With Client Input	3	15.8	15.8	100.0
		Total	19	100.0	100.0	
Relational	Valid	Client	1	10.0	10.0	10.0
		Contractor	1	10.0	10.0	20.0
		Contractor With Client Input	2	20.0	20.0	40.0
		Joint With Shared Risk	6	60.0	60.0	100.0
		Total	10	100.0	100.0	

Tender Format

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	Open Tender	3	15.8	15.8	15.8
		Prequalified Parties	10	52.6	52.6	68.4
		Limited Invitation	3	15.8	15.8	84.2
		Direct Negotiation Single Bidder	3	15.8	15.8	100.0

		Total	19	100.0	100.0	
Relational	Valid	Open Tender	3	30.0	30.0	30.0
		Prequalified Parties	4	40.0	40.0	70.0
		Limited Invitation	1	10.0	10.0	80.0
		Direct Negotiation Single Bidder	2	20.0	20.0	100.0
		Total	10	100.0	100.0	

Price Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	2	1	5.3	5.6	5.6
		3	1	5.3	5.6	11.1
		4	1	5.3	5.6	16.7
		5	15	78.9	83.3	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	3	5	50.0	50.0	50.0
		5	5	50.0	50.0	100.0
		Total	10	100.0	100.0	

Design Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	6	31.6	33.3	33.3
		3	4	21.1	22.2	55.6
		4	7	36.8	38.9	94.4
		5	1	5.3	5.6	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	1	1	10.0	10.0	10.0
		2	2	20.0	20.0	30.0
		3	1	10.0	10.0	40.0
		4	4	40.0	40.0	80.0
		5	2	20.0	20.0	100.0
		Total	10	100.0	100.0	

Functionality Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	5	26.3	27.8	27.8
		3	5	26.3	27.8	55.6
		4	7	36.8	38.9	94.4
		5	1	5.3	5.6	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		

Relational	Valid	1	2	20.0	20.0	20.0
		2	1	10.0	10.0	30.0
		3	1	10.0	10.0	40.0
		4	1	10.0	10.0	50.0
		5	5	50.0	50.0	100.0
		Total	10	100.0	100.0	

Programme Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	1	5.3	5.6	5.6
		3	8	42.1	44.4	50.0
		4	7	36.8	38.9	88.9
		5	2	10.5	11.1	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	1	3	30.0	30.0	30.0
		3	4	40.0	40.0	70.0
		4	1	10.0	10.0	80.0
		5	2	20.0	20.0	100.0
		Total	10	100.0	100.0	

Existing Relationship Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	3	15.8	16.7	16.7
		2	3	15.8	16.7	33.3
		3	4	21.1	22.2	55.6
		4	5	26.3	27.8	83.3
		5	3	15.8	16.7	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	2	2	20.0	20.0	20.0
		3	2	20.0	20.0	40.0
		4	4	40.0	40.0	80.0
		5	2	20.0	20.0	100.0
		Total	10	100.0	100.0	

Collaborative Ability Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	1	5.3	5.6	5.6
		2	4	21.1	22.2	27.8
		3	8	42.1	44.4	72.2
		4	1	5.3	5.6	77.8
		5	4	21.1	22.2	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		

	Total		19	100.0		
Relational	Valid	4	5	50.0	50.0	50.0
		5	5	50.0	50.0	100.0
		Total	10	100.0	100.0	

Shared Values Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	1	5.3	5.6	5.6
		2	6	31.6	33.3	38.9
		3	5	26.3	27.8	66.7
		4	6	31.6	33.3	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	3	5	50.0	50.0	50.0
		4	2	20.0	20.0	70.0
		5	3	30.0	30.0	100.0
		Total	10	100.0	100.0	

Technical Competence Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	3	6	31.6	33.3	33.3
		4	7	36.8	38.9	72.2

		5	5	26.3	27.8	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	3	1	10.0	10.0	10.0
		4	6	60.0	60.0	70.0
		5	3	30.0	30.0	100.0
		Total	10	100.0	100.0	

Reputation Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	2	3	15.8	16.7	16.7
		3	6	31.6	33.3	50.0
		4	6	31.6	33.3	83.3
		5	3	15.8	16.7	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	3	1	10.0	10.0	10.0
		4	8	80.0	80.0	90.0
		5	1	10.0	10.0	100.0
		Total	10	100.0	100.0	

Systems Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1	2	10.5	11.1	11.1
		3	6	31.6	33.3	44.4
		4	7	36.8	38.9	83.3
		5	3	15.8	16.7	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	3	2	20.0	20.0	20.0
		4	3	30.0	30.0	50.0
		5	5	50.0	50.0	100.0
		Total	10	100.0	100.0	

Hard Criteria

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	3.00	2	10.5	11.1	11.1
		3.50	1	5.3	5.6	16.7
		4.00	8	42.1	44.4	61.1
		4.50	6	31.6	33.3	94.4
		5.00	1	5.3	5.6	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		

Relational	Valid	3.00	6	60.0	60.0	60.0
		3.50	1	10.0	10.0	70.0
		4.00	2	20.0	20.0	90.0
		5.00	1	10.0	10.0	100.0
		Total	10	100.0	100.0	

Soft Criteria

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	1.88	1	5.3	5.6	5.6
		2.50	1	5.3	5.6	11.1
		2.75	3	15.8	16.7	27.8
		2.88	4	21.1	22.2	50.0
		3.00	2	10.5	11.1	61.1
		3.75	1	5.3	5.6	66.7
		3.88	2	10.5	11.1	77.8
		4.00	1	5.3	5.6	83.3
		4.13	2	10.5	11.1	94.4
		4.38	1	5.3	5.6	100.0
		Total	18	94.7	100.0	
	Missing	System	1	5.3		
	Total		19	100.0		
Relational	Valid	3.25	1	10.0	10.0	10.0
		3.50	3	30.0	30.0	40.0
		3.63	1	10.0	10.0	50.0
		4.13	1	10.0	10.0	60.0

		4.25	1	10.0	10.0	70.0
		4.38	1	10.0	10.0	80.0
		4.50	1	10.0	10.0	90.0
		4.63	1	10.0	10.0	100.0
		Total	10	100.0	100.0	

Subcontractor Selection

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	Contractor	13	68.4	68.4	68.4
		Contractor With Client Approval	6	31.6	31.6	100.0
		Total	19	100.0	100.0	
Relational	Valid	Contractor	7	70.0	70.0	70.0
		Client & Contractor	1	10.0	10.0	80.0
		Incentivised subcontractors	2	20.0	20.0	100.0
		Total	10	100.0	100.0	

Compensation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	Fixed Price	14	73.7	73.7	73.7
		Schedule of Rates	3	15.8	15.8	89.5
		Cost Reimbursed	1	5.3	5.3	94.7

		Pain/Gain Share	1	5.3	5.3	100.0
		Total	19	100.0	100.0	
Relational	Valid	Fixed Price	3	30.0	30.0	30.0
		Schedule of Rates	1	10.0	10.0	40.0
		Pain/Gain Share	6	60.0	60.0	100.0
		Total	10	100.0	100.0	

JRM Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	18	94.7	94.7	94.7
		Yes	1	5.3	5.3	100.0
		Total	19	100.0	100.0	
Relational	Valid	No	2	20.0	20.0	20.0
		Yes	8	80.0	80.0	100.0
		Total	10	100.0	100.0	

Coach Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	14	73.7	73.7	73.7
		Yes	5	26.3	26.3	100.0
		Total	19	100.0	100.0	
Relational	Valid	No	5	50.0	50.0	50.0

	Yes	5	50.0	50.0	100.0
	Total	10	100.0	100.0	

JLT Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	16	84.2	84.2	84.2
		Yes	3	15.8	15.8	100.0
		Total	19	100.0	100.0	
Relational	Valid	Yes	10	100.0	100.0	100.0

Dispute Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	17	89.5	89.5	89.5
		Yes	2	10.5	10.5	100.0
		Total	19	100.0	100.0	
Relational	Valid	No	2	20.0	20.0	20.0
		Yes	8	80.0	80.0	100.0
		Total	10	100.0	100.0	

Shared Office Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	16	84.2	84.2	84.2

		Yes	3	15.8	15.8	100.0
		Total	19	100.0	100.0	
Relational	Valid	No	5	50.0	50.0	50.0
		Yes	5	50.0	50.0	100.0
		Total	10	100.0	100.0	

Shared IT Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	17	89.5	89.5	89.5
		Yes	2	10.5	10.5	100.0
		Total	19	100.0	100.0	
Relational	Valid	No	5	50.0	50.0	50.0
		Yes	5	50.0	50.0	100.0
		Total	10	100.0	100.0	

Team Building Collab

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	No	15	78.9	78.9	78.9
		Yes	4	21.1	21.1	100.0
		Total	19	100.0	100.0	
Relational	Valid	Yes	10	100.0	100.0	100.0

Collaborative Cat

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	0	9	47.4	47.4	47.4
		1	6	31.6	31.6	78.9
		2	1	5.3	5.3	84.2
		3	1	5.3	5.3	89.5
		4	1	5.3	5.3	94.7
		5	1	5.3	5.3	100.0
		Total	19	100.0	100.0	
Relational	Valid	3	1	10.0	10.0	10.0
		4	4	40.0	40.0	50.0
		5	1	10.0	10.0	60.0
		7	4	40.0	40.0	100.0
		Total	10	100.0	100.0	

Client Evaluation

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	2.50	6	31.6	31.6	31.6
		3.00	2	10.5	10.5	42.1
		3.50	2	10.5	10.5	52.6
		4.00	4	21.1	21.1	73.7
		4.50	3	15.8	15.8	89.5
		5.00	2	10.5	10.5	100.0
		Total	19	100.0	100.0	
Relational	Valid	1.50	1	10.0	10.0	10.0
		2.00	2	20.0	20.0	30.0

	3.00	1	10.0	10.0	40.0
	3.50	1	10.0	10.0	50.0
	4.00	3	30.0	30.0	80.0
	4.50	1	10.0	10.0	90.0
	5.00	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

Contractor Process

Model Category			Frequency	Percent	Valid Percent	Cumulative Percent
Traditional	Valid	3	1	5.3	5.3	5.3
		4	7	36.8	36.8	42.1
		5	11	57.9	57.9	100.0
		Total	19	100.0	100.0	
Relational	Valid	4	2	20.0	20.0	20.0
		5	8	80.0	80.0	100.0
		Total	10	100.0	100.0	

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