

PUBLISHED VERSION

James Davidson, Paul Memmott, Carroll Go-Sam and Elizabeth Grant
Remote Indigenous housing procurement: a comparative study
AHURI Final Report, 2011; (167): pp. i-xiii, 1-143

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Received: Friday 28 June 2013 1:29pm

<http://hdl.handle.net/2440/67217>



Final Report

Remote Indigenous housing procurement: a comparative study

authored by

James Davidson, Paul Memmott, Carroll Go-Sam and Elizabeth Grant

for the

Australian Housing and Urban Research Institute

Queensland Research Centre

April 2011

AHURI Final Report No. 167

ISSN: 1834-7223

ISBN: 978-1-921610-70-7



Authors	Davidson, James Memmott, Paul Go-Sam, Carroll Grant, Elizabeth	University of Queensland University of Queensland University of Queensland University of Adelaide
Title	Remote Indigenous housing procurement: a comparative study	
ISBN	978-1-921610-70-7	
Format	PDF	
Key Words	Remote, Indigenous, housing, procurement, comparative, study	
Editor	Jim Davison	AHURI National Office
Publisher	Australian Housing and Urban Research Institute Melbourne, Australia	
Series	AHURI Final Report; no. 167	
ISSN	1834-7223	
Preferred Citation	Davidson, J. et al. (2011) <i>Remote Indigenous housing procurement: a comparative study</i> , AHURI Final Report No.167. Melbourne: Australian Housing and Urban Research Institute.	

ACKNOWLEDGEMENTS

This material was produced with funding from the Australian Government and the Australian states and territory governments. AHURI Limited gratefully acknowledges the financial and other support it has received from these governments, without which this work would not have been possible.

AHURI comprises a network of universities clustered into Research Centres across Australia. Research Centre contributions, both financial and in-kind, have made the completion of this report possible.

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ACRONYMS

A.A.	Alex Ackfun (Former General Manager of ATSIH, Qld)
Ab'l	Aboriginal
ABS	Australian Bureau of Statistics
AERC	Aboriginal Environments Research Centre
A.G.	Australian Government
AHURI	Australian Housing and Urban Research Institute
AIA	Australian Institute of Architects (formerly RAlA)
AIMSC	Australian Indigenous Minority Supply Council
AIHW	Australian Institute of Health and Welfare
ALT	Alliance Leadership Team
AP	Anangu Pitjantjatjara
APY	Anangu Pitjantjatjara Yankunytjatjara (SA)
ASGC	Australian Standard Geographical Classification
ATSIC	Former Aboriginal and Torres Strait Islander Commission
ATSIH	Former Aboriginal and Torres Strait Islander Housing (Qld)
ATSIPD	Former Department of Aboriginal and Torres Strait Islander Policy and Development (Qld)
B.A.	Bob Allen (Former ATSIH, Qld)
BCACS	Bynoe Community Advancement Cooperative Society (Qld)
B.D.	Former Q Build foreman
BIHA	Bathurst Island Housing Association (SIHIP Project)
BHM	Bynoe Housing Manager
CACS	Community Advancement Cooperative Society Ltd (Bynoe)
CAT	Centre for Appropriate Technology
Cat. No.	Catalogue Number
CBD	Central Business District
CDEP	Community Development Employment Projects
C.E.	Community Engagement (SIHIP Project)
CECs	Community Education Centres, NT
CEO	Chief Executive Officer
CHIP	Former Community Housing and Infrastructure Program
COAG	Council of Australian Governments
C.R.	Clayton Reeves, DFCSA
CRC	Community Relations Coordinator (SIHIP Project)
CRG	Community Reference Group

C'th	Commonwealth
D&C	Design and Construct
DBIA	Design-Build Institute of America
DC	Design Coordinator (SIHIP Project)
DCM	Design, Construct and Maintain
DD&C	Design Development and Construct
DEETA	Former Department of Education, Employment, Training and Arts, Qld
DEEWR	Former Department of Education, Employment and Workplace Relations (C'th)
DETE-OEY	Former Department of Education, Training and Employment—Office of Employment and Youth (SA)
DEWR	Department of Education, Employment and Workplace Relations (SA)
DEWRSB	Former Department of Employment Workplace Relations and Small Business (SA)
DFC	Department for Families and Communities, SA
DFYCC	Former Department of Families, Youth, Communities, Care, Qld
DH	Former Department of Housing (Qld)
DHC	Former Department of Housing and Construction
DHLGRS	Department of Housing, Local Government and Regional Services (NT)
DOGIT	Deed of Grant in Trust
DMR	Department of Main Roads, Qld
DN&C	Design, Novate and Construct
DNRM	Former Department of Natural Resources and Minerals
DPI	Department of Primary Industries
DPW	Department of Public Works, Qld
DPWH	Former Department of Public Works and Housing, Qld
DTMR	Department of Transport, Main Roads, Qld
E&T	Employment and Training
ECI	Early Contractor Involvement (SIHIP Project)
E.F.	No. 1 Alliance Partner, Manager (SIHIP Project)
EHP	Environmental Health Project
EOI	Expression of Interest
E.T.C.	Education and Training Coordinator (SIHIP Project)
EWD	Employment Workforce Development (SIHIP Project)
FaCS	Former Department of Families and Community Services (C'th)

FACSlA	Former Department of Families, Community Services and Indigenous Affairs (C'th)
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs (C'th)
f.c.	fibrous cement (wall and ceiling sheeting)
FHBH	Fixing Housing for Better Health
F.J.	Member of Parliament—Northern Territory Government
F.P.	Fred Pascoe (BCAC, Qld)
FSC	Federal Safety Commissioner
GCC	GIEBIE Civil and Construction
GCS	Guaranteed Construction Sum
GEBIE	Groote Eylandt and Bickerton Island Enterprises
G.L.	No. 2 Alliance, Community Engagement and Employment Work Place Development Manager (SIHIP Project)
GMP	Guaranteed Maximum Price
G.P.	Gayle Plunkett, Project Manager, John C.R. Evans Architects
GST	Goods and Services Tax
HICH	Housing Improvement and Child Health
HMAC	Housing Ministers Advisory Committee
HRG	Housing Reference Group (NT Housing)
HSA	Housing South Australia
ICH	Indigenous Community Housing
IBA	Indigenous Business Australia (C'th)
ICC	Island Coordinating Council (Qld)
ICHO	Indigenous Community Housing Organisation
ICO	Indigenous Community Organisation
ICHP	Indigenous Community Housing Program
I.D.	Ian Doust, Project Manager, C&B Group Pty Ltd
IGC	Indigenous Geographic Classification
IHANT	Indigenous Housing Authority of the Northern Territory (NT)
INA	Information not available
IPT	Integrated Project Team (SIHIP Project)
JET	Jobs, Education and Training
J.T.	John Thomas, KBPL
J.V.	joint venture
KACCI	Koonibba Aboriginal Community Council Incorporated (SA)
KBA	Koonibba Building Association (SA)

KBAC	Koonibba Building Aboriginal Corporation (SA)
KBPL	Koonibba Building Pty Ltd (SA)
KEAC	Koonibba Enterprises Aboriginal Corporation (SA)
K.H.	SIHIP Values and Metrics Manager (SIHIP Project)
KPI	Key Performance Indicator
KRA	Key Result Area
L.B.	Laurie Bowater, Bynoe Coop Building Contractor for NAHS Normanton Housing
L.C.	Land Council
LIPPs	Local Industry Participation Plans (SIHIP Project)
L.R.	No. 2 Alliance Partner, Senior Engineer (SIHIP Project)
L.T.	Les Tenni, Building Contractor for NAHS Normanton Housing
M.B.	Melda Boundy, Manager Program Development ATSIH
MC	Managing Contractor
MIGATE	Mt Isa Group Apprenticeship, Training and Employment
MOU	Memorandum of Understanding
NA	not available
NAHA	National Affordable Housing Agreement
NAHS	National Aboriginal Health Strategy
NAHS EHP	National Aboriginal Health Strategy Environmental Health Project
NBC	Northern Building Consultants
nd	not dated
NGO	non-government organisation
NIHG	National Indigenous Housing Guide
np	not-paginated
NPA	Northern Peninsula Area
N.P.A.	National Partnership Agreement
NRF	National Reporting Framework
NTG	Northern Territory Government
P	Contract Package, e.g. 'P10' (SIHIP Project)
PAMT	Project Alliance Management Team (SIHIP Project)
p.c.	personal communication
PC	Practical Completion
PD	Project Director (SIHIP Project)
PDR	Package Development Report (SIHIP Project)
P.F.	Peter Frazer (TIRP, Qld)

P.K.	No. 2 Alliance Partner, Manager (SIHIP Project)
PM	Project Manager
P.M.	Paul Memmott
POE	Post-Occupancy Evaluation
P.P.	Paul Pholeros, Architect, Healthhabitat, Sydney and Independent Design Auditor for SIHIP
PPP	Public Private Partnerships
PROEs	Permanent Resident Outside Employees
PRB	Package Return Brief (SIHIP Project)
P.S.	Each of three senior Public Servants representing Territory Housing in Alliance contract administration (SIHIP)
PSP	Package Scoping Proposal
PVC	Poly vinyl chloride
QBSA	Queensland Building Services Authority
QS	Quantity Surveyor
RAIA	Royal Australian Institute of Architects (later changed AIA)
R&M	Repairs and Maintenance
R.N.	No. 1 Alliance, Senior Architect (SIHIP Project)
R.P.	Rhonda Phillips, Former Manager Program Development ATSIH
R.T.	Rod Tiffen, DFCSA
RTI	Right To Information
SAAHA	South Australian Aboriginal Housing Authority (no longer operating)
SAHT	South Australia Housing Trust
SALT	Strategic Alliance Leadership Team (SIHIP Project)
SCRGSP	Steering Committee for the Review of Government Services Provision
SIHP	Strategic Intervention Housing Program [later changed to SIHIP]
SIHIP	Strategic Indigenous Housing and Infrastructure Program [formerly SIHP]
SL	Sustainable Livelihood
SME	small to medium enterprise (SIHIP Project)
SOMIH	State-Owned and Managed Indigenous Housing
T&A	Tenni and Arbouin
TAFE	Technical and Further Education
T&E	Training and Employment
T.H.	Territory Housing (Northern Territory Government)

TI	Thursday Island
TIRP	Thursday Island Redevelopment Project (Qld)
TRAWQ	Tamoi, Rose Hill, Applin, Waiben and Quarantine suburban areas of Thursday Island
T.S.	Torres Strait
TSC	Torres Shire Council (Qld)
T.S.I.	Torres Strait Islander
TSRA	Torres Strait Regional Authority (Qld)
TWT	Tjutjunaku Worka Tjuta (Ceduna CDEP, SA)
UPK	Uwankara Palyanyku Kanyintjaku (SA)
VFM	Value for Money (SIHIP Project)
WCBT	West Coast Building Training Initiative (SA)

EXECUTIVE SUMMARY

History shows Aboriginal housing to be a politically contested realm as two quite different peoples attempt to negotiate different social, economic and cultural values in constructing a shared future Australian built environment. Housing procurement, defined herein as ‘the act or process of bringing into being a building that was not there before and embraces all the activities that might be necessary to that objective’, has at times been sporadically linked to other forms of government service delivery outcomes and objectives in remote Aboriginal communities such as construction, maintenance, training, employment, education, governance, management, health, and sustainability. Yet still further program values have emerged in recent years that can best be described as ‘symbolic capitals’ inclusive of leadership, mutual respect, positive cultural identity and other life-skills outcomes.

Secondary outcomes of the housing process are what we loosely term the ‘socio-economic capitals’ of housing procurement: outcomes that are in addition to the physical asset of the house. Specifically, this study explores the relationships between remote Indigenous housing procurement and the broader socio-economic capitals of Indigenous communities. It contributes to an understanding of the potential longer-term economic, social, health and cultural outcomes of current and future housing policies and housing delivery programs.

Remote Indigenous housing procurement practice occurs in a complex context of political, market, and industry dynamics. Achieving high-level outcomes beyond the physical units of houses is fraught with difficulty in these contexts. Despite this, there are some procurement success stories and, with this in mind, this project aims to assess what has been achieved during the last decade in the procurement of Aboriginal housing, as grounded in actual practice. The delivery of Aboriginal housing, if done well, would not only diminish livelihood vulnerabilities, but would also strengthen self-governance and generate services responsive to community demand. The significance of a better understanding of housing procurement systems within the context of remote Indigenous communities has potential benefit for all peoples engaged in the built environment sector.

Partly due to the paucity of research in this field, the current research project is a valuable addition to the body of knowledge regarding housing procurement processes in remote Aboriginal communities in Australia. It has the potential to create greater awareness of good practice administrative processes leading to more positive outcomes of culturally responsive housing by using the social and economic capitals that Aboriginal people can bring to procurement. If there has been one clear outcome from this research project, it is that the procurement process is arguably just as important as the final housing product itself. Focus needs to be placed on a meaningful process and the product that eventuates must conform to statutory and regulatory standards. Procurement driven by *the scenario of maximum numbers of houses on the ground as fast as possible* ignores the potential to value add multiple Aboriginal social and economic capitals.

Understanding procurement in remote Indigenous settings

In attempting to understand the relationship between housing procurement and Aboriginal capital networks in remote communities, the research report begins by presenting the common procurement strategies and associated contractual methodologies used in the Australian construction industry. Most forms of building procurement rely on legally binding contracts that establish the scope of works and specify the outcomes to be achieved during the contracted works. Currently, in the

Australian construction industry, there are nine formal contractual methods used in the provision of mainstream construction projects. These are:

1. Documented Design (Traditional 'Lump Sum'), also known as 'Construct Only'
2. Design Development and Construct (DD&C)
3. Design, Novate and Construct (DN&C)
4. Design and Construct (D&C)
5. Design, Construct and Maintain (DCM)
6. Guaranteed Maximum Price (GMP)
7. Managing Contractor
8. Alliance (Co-operative) Contracting
9. Public Private Partnerships (PPP)
10. Owner-Builder.

A review of the last 10 years of housing procurement projects in remote Aboriginal communities shows the prevalence up to 2005¹ of small-scaled housing projects partly administered by individual Indigenous Community Housing Organisations (ICHOs) and funded entirely by state and federal government departments through programs such as Community Housing and Infrastructure Program (CHIP) and the National Aboriginal Health Strategy (NAHS) (e.g. see Vanstone 2004). Pertaining to selected case studies in this report, currently in the states of Queensland, South Australia and the Northern Territory, there are a number of government programs that deliver Indigenous-specific forms of housing, through different statutory and organisational structures, such as State-Owned and Managed Indigenous Housing (SOMIH) authorities, Indigenous local governments, Indigenous Community Housing Organisations (ICHO) and Indigenous Community Organisations (ICO) (AIHW 2009b, p.1, p.11).

All are funded in one form or another through various Commonwealth or state programs, either under the National Partnership Agreement (NPA) on Remote Indigenous Housing, the National Affordable Housing Agreement (NAHA). SOMIH are dwellings owned and managed by the particular state or territory housing authorities funded through National Partnership Agreements on housing affordability, homelessness and social housing.² Under the NPA some Indigenous community housing organisations (ICHOs) and ICOs may or may not act as agents for state or territory housing bodies and may participate in one or a range of procurement activities such as new builds, repairs and maintenance and major refurbishments.³ In reviewing the literature on contractual methodologies in Aboriginal housing delivery, it was difficult to find in-depth accounts of the actual procurement strategies. Therefore, the fieldwork phase of this project conducted a detailed investigation of the actual parameters and formal agreements evident in the case studies above in order to independently evaluate the effectiveness and outcomes of those programs.

1 When ATSIC was disbanded by the Howard Government, announced on April 2004 with the proposal for Regional Councils to be closed by May 2005. (Source: <http://www.aph.gov.au/library/pubs/cib/2004-05/05cib04.htm#abolition>. Accessed: 27 October 2010)

2 Web: <http://www.fahcsia.gov.au/sa/housing/progserv/affordability/affordablehousing/Pages/default.aspx> (Accessed 02 November 2010)

3 Web: http://www.fahcsia.gov.au/sa/housing/progserv/affordability/affordablehousing/Pages/NPA_SocialHousing.aspx (Accessed 02 November 2010)

The case studies

In order to examine in more depth a range of the types of social and economic capital benefits outlined above, the researchers, with input from their AHURI User Group, selected four best-practice case studies. The final selection of four primary case studies was based on a range of criteria, including the existence of project documents, gaining project document access permission, capacity of original participants to facilitate such access, community access permissions, and the cost of community visitation, as well as the actual suitability of the case study for procurement analysis. In responding to the program objectives, those case studies selected for analysis were:

- The Thursday Island Redevelopment Project, ATSI Housing, Qld.
- National Aboriginal Health Strategy-funded ICHO Project: Bynoe CACS Ltd, Normanton, Qld.
- South Australia Housing-funded project at Koonibba, SA.
- The Strategic Indigenous Housing and Infrastructure Program (SIHIP), NT.

The Thursday Island Redevelopment Project (TIRP) was chosen due to its complex social and cultural agenda and is one of the largest and most successful housing and infrastructure delivery programs ever undertaken in a remote Indigenous community in Queensland. The SIHIP project was selected due to its scale and complexity in being Australia's largest ever delivery program for remote Indigenous housing and infrastructure. Both the Housing South Australia, Koonibba and NAHS Normanton housing projects were chosen as an important contrast to the scale of the TIRP and SIHIP projects. The authors felt that a contrast of scales and complexities would provide ample areas for comparative discussion relevant to future procurement strategies in both large and small procurement projects.

The spectrum of case study scales elicited varied analysis of social capitals. The two smaller-scale case studies, Koonibba and Normanton, provided opportunity to scrutinise social and economic capital outputs in greater detail, generating findings that can inform procurement programs across all scales. In contrast the two large-scale case studies, TIRP and SIHIP, offered greater social capital outputs due in part to higher economic capital investment and larger program size. Hence, on the basis of these four case studies, increases in program funding produced definitive increases in social capital outcomes across different program packages or stages.

Findings on 'capitals' in Indigenous housing procurement

The findings on the various types of capitals explored in the case studies are analysed in Chapter 6 of this report.

First, *social capitals* in remote Indigenous contexts are described as networks that are all-important in everyday life and often outstrip economic capitals. The study found that, in terms of procurement and its relationship to social capitals, the better a given community's social capitals are understood and respected, the better any potential housing procurement system will be. Manifestation of social capitals across the case studies varied, partly dependant on the extent of purposeful intention to engage with such. It can also be expected that different communities will exhibit potentially varying extents of social capitals dependent on a multitude of given circumstances including, but not limited to, extent of remoteness, local levels of leadership, social organisation, skill capability, adherence to local custom and cultural traditions among others.

Literature analysis shows that in the mainstream market context, social capital has the potential to develop into leveraged economic action. By contrast, Indigenous social

capital investment appears to yield only limited economic gain and does not usually manifest as capitalistic economic development largely due to the nature of the unique political economy of discrete remote Indigenous settlements. The driving force of remote Indigenous social capital generates the culturally destined 'economically rational strategy' of 'pooling limited cash' that both sustains and perpetuates high Indigenous mobility; thus customary social capital outstrips physical capital and other livelihood options.

Turning to the generation of *economic capitals*, the SIHIP alliance procurement method was able to provide sufficient contractual size and flexibility to explore the potential for the enhancement of local small-to-medium sized enterprises that were 'incubated' through the management structure of the alliance members to benefit from the economic scale of the available budgets for the duration of the program. Emerging examples largely centred on a range of pre-existing Aboriginal enterprises with notably a capacity and specialisation in different economic activities related to the construction industry.

With respect to *cultural and ethical capitals* in remote Indigenous communities, the analysis concluded that design professionals cannot successfully design housing and plan settlements for Aboriginal people unless there is an understanding of their everyday social behaviors and climatic/geographic context. The customary use of domiciliary space supports distinct types of household groups and sub-groups, typical diurnal/nocturnal behaviour patterns suited to different seasonal periods as well as characteristic socio-spatial structures. Culturally distinct behaviour includes set forms of approach and departure, external orientation and sensory communication between domiciles, different concepts of privacy and crowding, sleeping behaviour, and sleeping group composition, cooking and use of fire, and storage of possessions and resources.

Cultural appropriateness in house design relates to how well the finished product functions to support occupants' beliefs, values and their associated domiciliary behaviours and household structures. The contractual system itself is important in this respect, however, it appears that projects with short timeframes and grand expectations in achieving large numbers of houses will automatically severely limit or even preclude time-intensive or householder responsive consultation due to the focus on standardising house design and the dominance of speedy economies of scale. Consequently, it appears that large-scale flexible contractual processes such as managing contractor or alliancing, would lend themselves to this methodology, whereas small-scale traditional lump sum contracts would lend themselves to intense pre-design consultation and individualisation in house design, which appears to produce better results in relation to cultural appropriateness in house design.

In terms of *governance* as a form of capital and its relationship to procurement processes, improved housing procurement in remote Aboriginal communities will not produce quality governance structures within communities; however, improved self-governance systems within remote communities will result in greater information dissemination and accountability, and thus better housing procurement. It is therefore difficult to choose any one particular contractual strategy over another in relation to strengthening and working with governance as a social capital. In saying this, after reviewing the governance literature and case study analyses, the authors believe that an improvement in self-governance mechanisms, whereby Indigenous people administer infrastructure and housing programs themselves will result in the positive development of Aboriginal housing procurement throughout Australia. While this seems an obvious statement, history has shown this pursuit to be a difficult achievement.

Turning to the *capitals of employment, training and education*, the economic context of remote settlements bears greatly upon the sustainability of such livelihood factors. Economic opportunities are usually stifled due to geographic location, small populations and high circular mobility. In many instances the largest capital investment by governments in remote communities is settlement housing and infrastructure projects per se, yet variable project delivery often leads to varied opportunities for employment and training. The Normanton and Koonibba case studies showed that when Indigenous labour was involved in housing procurement there was a mismatch of time-pressured delivery, which limited a given community's capacity to participate. Subsequently, the dominance of time-pressured delivery frameworks has reduced the capacity to develop human capitals which in turn has impacted on the management of housing procurement, resulting in a preference for limited unskilled Aboriginal labour involvement.

In terms of incorporating local labour and implementing training programs within the range of different procurement strategies, the case studies illustrate that the issue becomes one of risk mitigation for both the proprietor and building contractor. The risk relates to timeframe and budget overruns given the workplace reality of a more transient, possibly truant, and low-skilled semi-literate labour force in many remote communities. Of the contractual procurement options discussed previously, both the traditional contracting approaches would see the contractor taking on the risks associated with labour force truancy whereas more flexible forms of contracting such as alliancing or partnering would see all parties sharing those risks. Furthermore, case study analyses illustrate that the majority of best practice outcomes generated through procurement were the result of excellent internal government coordination at the local, state and Australian government level, illustrating a positive connection between Top-Down (strategic) meeting Bottom-Up (grass-roots) processes.

Unfortunately the case studies appear to have yielded the least data on *health capitals* compared to the other capitals under consideration. Nevertheless, in looking at the relationships between housing procurement processes and reducing livelihood vulnerabilities, two main health strategies that were found to be possible in procurement were reducing crowding and improving health hardware performance. To improve environmental health and reduce crowding in remote Aboriginal housing requires both technical and social design considerations.

Challenges to building 'capitals' in housing procurement

One of the major findings of this study has been that numerous best practice housing procurement examples exist in the Australian Indigenous housing context. Given this situation, the authors are led to question the reasons underlying the continual generation of variable, and often poor, housing results. The answer appears to relate to a number of fundamental challenges that need to be improved in order for best practice housing procurement to become a widespread achievement in Indigenous housing delivery. Consequently, the main obstacles or project disruptions identified during the case study analyses are as follows, being discussed in greater detail in the report:

- The challenges of achieving employment and training capitals within the procurement parameters of government funding cycles and remote settings.
- The problems of strategically addressing multiple program objectives with conflicting timelines.
- Managing risks that impact on project planning and execution, both 'up' risk (elections, politicians, senior public servants, media) and 'down' risk (community and cultural factors, remote undocumented building sites and climate).

→ Maintaining continuity of Indigenous employment both during and after the procurement process.

These problems present difficult challenges for governments, builders and communities who wish to collaboratively enhance socio-economic capitals in the housing procurement process. The case studies contain various attempts, some successful, in strategically addressing the contractual challenges of working in remote environments with the numerous recurring unforeseen human and natural environmental problems of remote Indigenous community contexts that typically occur.

A model for housing procurement in remote Indigenous communities

Mainstream housing procurement contracts and methods that are driven by the economic imperatives of minimising financial risk and maximising financial gains, all with expected delivery in set timeframes, do not readily lend themselves to integration with the largely unskilled, highly mobile labour markets of remote Indigenous settlements. The case study evidence suggests that a somewhat different procurement system needs to be implemented, one that borrows from local Aboriginal social capitals, and that is fostered at communal or regional levels. Consequently, particular aspects of Aboriginal social, cultural and economic capitals seem to have been in conflict, mismatched or not recognisable under the rigid parameters of conventional mainstream housing procurement delivery. If Indigenous people are to derive improved livelihood outcomes from housing and infrastructure programs, there needs to be recognition at both state and federal government levels that rushed program agendas often strip long-term benefits, and may contribute to the burden of livelihood vulnerabilities due to increased house maintenance costs and reduced social benefits.

Thus, this report contains an argument that an intercultural and hybridised approach to sustainability is needed, based on the procurement realities faced by remote settlements; and that this is possible through an engagement with multiple Aboriginal 'capitals' consisting of social, cultural, health, employment, training and governance capitals within a sustainability livelihoods approach. Consequently, the case study analyses investigate the relationship between Indigenous social and economic capitals and procurement systems in an attempt to draw conclusions as to which direction procurement scenarios should head in the future in order to benefit all stakeholders more equitably in a given project.

The conclusion of the report addresses what a best-practice procurement model might look like and how appropriate construction systems can be developed in remote settings given a high likelihood of interrupted employment and circular mobility behaviour where Aboriginal social priorities often outweigh economic priorities, with individuals choosing family obligations and responsibilities over their own personal material desires. This situation affects procurement strategies given that housing procurement takes on a typically linear program until practical completion.

The case studies show that incorporating the entire repertoire of the social and economic capitals into a specific procurement agenda may not necessarily occur in all circumstances. In a particular project case, the specific human and environmental context of a community would also assist in pinpointing which procurement system, and thus, contractual strategy to employ in order to gain as much advantage for a project from the existing Indigenous capitals present in that community. For example, there may be a general shortage of skilled labour in a community, which might lead procurement designers down a mainstream, traditional lump sum path that relied on an external contractor; whereas, in those communities that have numbers of skilled

and semi-skilled labour, a mentoring methodology may suit, whereby a community organisation enters into a partnership-form of contract with a mainstream builder to carry out work in order to lever up to undertake subsequent construction projects on their own. Moreover, flexible contractual arrangements can cater for changing circumstances as programs evolve and local enterprise corporations gain confidence and capacity to take on more challenging contractual roles.

The contractual methodology is a tool in the procurement process that can be effectively used to gain social and economic capital incorporation into contemporary housing provision, but if applied non-strategically, may have inadvertent negative impacts on such local capitals. Procurement is only a small part in the larger picture of quality of life in remote Indigenous communities, however, it does offer an opportunity to improve human livelihoods if designed and administered correctly. The case studies have shown that when the designers of a specific procurement system engage in a meaningful way with Indigenous people in working towards a shared understanding through participation (and not just consultation for its own sake), the outcome is likely to be better than not having done so. Another area of importance is the relationship between quality social capital outcomes and community engagement time. Projects need adequate time for pre-planning in order to not only establish how to approach a particular problem, but also how to design a constructive exit strategy for when a specific project comes to an end, so that gained capitals are not then lost. Additionally, there needs to be a concerted effort to evaluate and measure project outcomes.

Lessons learned from the case study analyses illustrate that the contractual frameworks chosen for a particular project did indeed have a consequential relationship in the incorporation and enhancement of Indigenous social and economic capitals in housing provision. It is therefore possible to create more innovative, cost-effective housing delivery methods in remote communities. However, the analyses illustrate that rather than attempting to design a one-size-fits-all contractual process for the remote Indigenous housing sector, it appears preferable to start with a strategic flexible delivery framework to support social and economic capital objectives—an approach that tends towards a ‘horses-for-courses’ ideology rather than a blanket approach tending toward a single definitive answer. Drawing from the findings of the four case studies, an integrated procurement strategy would be comprised of as many as possible of the following elements:

1. Be adaptable to both large-scale and small-scale project contexts.
2. Be able to incorporate a joint venture or partnership structure into its contractual framework whereby an Indigenous community, organisation or enterprise could align contractually with a mainstream building contractor and/or government.
3. Have the ability to be flexible to allow for major shifts as the program progresses.
4. Directly encourage and foster collective teamwork and administration mentoring in order to build capacity within the Indigenous participants in the system so as to achieve open building licences for future work.
5. Offer incentives for mainstream building contractors to participate through risk mitigation.
6. Offer incentives to proprietors in having an open-book scenario to all project costs.
7. Adopt culturally appropriate design standards (as opposed to mainstream social housing ‘minimum design standards/guidelines’) with the SIHIP Design Guidelines being the best practice benchmark at the time of writing (Wigley 2008).

8. Be responsive to shifts in timeframes in the delivery system, so as to facilitate flexibility in response to remote community politics and social and climatic contexts.
9. Give time for appropriate community-based consultation during both the design and delivery processes.
10. Incorporate meaningful training and employment outcomes in the local communities where the program is based in an attempt to create as much economic stimulus through labour programs as possible.
11. Have a longevity of at least five years so as to result in meaningful training outcomes whereby local labourers have an opportunity to carry their training through to full certification.
12. Have a long-term exit strategy that not only incorporates training outcomes, but establishes a tenancy and asset management program, in addition to a repairs and maintenance program within given communities.
13. Be immune to government political cycles.
14. Adhere to healthy-living environmental and house design practices.
15. Achieve cultural capitals through town planning and house design and community consultation through Housing Reference Groups (HRGs).
16. Achieve balance between open-ended scoping and a prescribed approach to formatting project briefs.
17. Be open to innovation and change as the program proceeds.
18. Encourage the integration and cooperation of government departments in the contractual framework.

The list above is not intended to be an exhaustive representation of what makes a good procurement system; but does represent the key elements drawn from the case study findings, for a good-practice procurement framework for future government and non-government housing projects in remote Indigenous communities. In gaining relevance in remote Indigenous communities, the procurement system will be confronted with many challenges, most notably in relation to governance structures and frameworks at both a local and government level.

While functional for one-off projects, it was found that the conventional lump sum contract gave less opportunity in regard to incorporating many of the social capitals discussed. This is in contrast to the 'strategically administered lump sum' as exemplified in TIRP, as well as other procurement methods such as 'alliancing'. Furthermore, large-scale contract packages offered greater flexibility and capacity to incorporate holistic planning and design that encompassed everything from settlement infrastructure on the one hand to targeted socio-economic capitals on the other.

From the case study analyses it can be seen that the 'strategically administered lump sum', 'alliancing', and 'relationship MC' methods of procurement all have the potential to deliver many of the outcomes listed in the above table. The design of a procurement system that maximises the above outcomes of the strategic framework can be termed an 'integrated project delivery framework'. Such a framework maximises opportunities for the incorporation of the broad range of capitals described above into housing delivery systems and procurement.

End point

Partly due to the paucity of research in this field, the current research project is an invaluable addition to the body of knowledge regarding housing procurement

processes in remote Aboriginal communities in Australia. It has the potential to create greater awareness of good practice administrative processes leading to more positive outcomes of culturally responsive housing by using the social and economic capitals that Aboriginal people can bring to procurement. In order to appropriately procure Aboriginal housing in remote communities in Australia, an envelope of 'ethical fairness' needs to cover all participants in the process; be they building contractors, Aboriginal occupants, government officials or others in procuring quality housing outcomes that attest to a shared future built environment that will last the test of time and that are representative and responsive to cultural settings with different social and economic values.

This research project has shown that, irrespective of the differences in program scale, contract type, funding, duration and outcomes, significant challenges inevitably arose for each of the case study projects in generating socio-economic capitals. Varied infrastructure and resource constraints contributed to an expansion and/or contraction of capacity relative to the scale of hybrid economies operable for the duration of the program. However, a clear finding is that procurement limitations are not simply due to constrained resources and remoteness, but to the inherent complexities of organisational practice within governments, communities and industry. A key finding is that a significant shift in organisational culture can facilitate system improvement through redesign in order to improve service delivery outcomes and meet the challenges and complexities of program execution achieving 'capital' outcomes under unforeseen remote conditions that delivery teams cannot fully control.

1 INTRODUCTION

Recent history shows Aboriginal housing to be a politically contested realm as two quite different peoples attempt to negotiate different social, economic and cultural values in constructing a shared future Australian built environment. Historically, housing procurement in remote Aboriginal communities has at times been sporadically linked to other forms of government service delivery outcomes and objectives such as construction, maintenance, training, employment, education, governance, management, health, sustainability; yet still further program values have emerged in recent years that can best be described as 'symbolic capitals' inclusive of leadership, mutual respect, positive cultural identity and other life skills and quality outcomes.

These secondary outcomes of the housing process are what we loosely term the 'capitals' of housing: outcomes that are in addition to the physical asset of the house. The idea of a research study on the relation between the procurement methods and the social, human and economic capitals in Indigenous housing seems even more compelling given the shifts in Indigenous policy in the Australian Government during the early 2000s.

If one is to track through Indigenous policies from the early 1970s (starting in the Whitlam era), one finds the persistent inclusion of a range of capitals in housing delivery, initially generated from the policies of self-determination and self-management (the Fraser era). The late 1970s and 1980s saw a flourishing of self-help construction, Aboriginal pre-fabricated house manufacturing companies, concrete block-making, house maintenance teams, landscaping enterprises, housing management committees and cooperatives, and even the employment of architects within Aboriginal-controlled agencies (Memmott 1988). By the 1990s government policies across many jurisdictions subscribed to levels of Indigenous decision-making and governance which became formalised within the many Indigenous Community Housing Organisations (ICHOs), the Regional Councils of the Aboriginal and Torres Strait Islander Commission (ATSIC) and the various state housing units with state bodies, such as the Aboriginal and Torres Strait Islander Housing (ATSIH Qld), the Indigenous Housing Authority of the Northern Territory (IHANT) and the South Australian Aboriginal Housing Authority (SAAHA). All of these structures were dismantled or disempowered in the first decade of the new millennia (early 2000s), due to internal reviews garnering a swing back towards mainstreaming.

However, policies tend to move cyclically through time like a pendulum, and at the time of writing there was renewed interest in the potential capitals of Indigenous housing and an opportunity to re-examine how they might be achieved within a renewed call for the economic sustainability of communities and for 'Closing the Gap' in Aboriginal life expectancy, health, education and poverty under the Australian Government's Indigenous targeted National Partnerships Agreements with the various states and territories.

Given that the construction of houses is delivered using the practical and legal mechanism of a building contract into which design documentation and specifications are incorporated, it is surprising that no study to date has directly addressed the relation between what we term the 'procurement method', and the social, human and economic outcomes of the supply of housing, or the 'social, human and economic capitals'. As will be discussed in this research report, the significance of a better understanding of housing procurement systems in remote Indigenous communities has potential benefit to all peoples in the Australian built environment sector. Aboriginal housing procurement, if done well, would not only provide a contribution

towards the reduction of livelihood vulnerabilities, but would create a powerful voice for strengthening self-governance and achieving services responsive to demand.

1.1 The study and its aims

This project explores the relationships between Indigenous housing procurement and the broader social and economic objectives or 'capitals' of Indigenous communities. It contributes to an understanding of the longer-term economic, social, environmental, health and cultural outcomes of past, current and future housing policies and housing delivery programs. The types of desirable outcomes from housing projects and their relative weightings vary across jurisdictions and between communities, but the following criteria for such outcomes are frequently encountered in the policy and program literature:

- Involving Indigenous decision-making through consultation.
- Achieving competitive housing delivery costs and economies of scale.
- Sustaining local Indigenous building and maintenance teams in employment and training.
- Ensuring that design complies with environmental health criteria.
- Establishing a portfolio of high standard designs (cost effective, culturally and environmentally sustainable, disabled/elderly access).
- Ensuring that routine maintenance is consistent with local community capacity.
- Matching building contract sizes and performance goals with the regional capacities of private sector building contractors.
- Affordability with regard to energy usage and maintenance costs.
- Tenant satisfaction with the housing product and procurement process.

While a number of theoretical frameworks have been devised to classify and describe this range of benefits based on individual project reports, ideological arguments and limited case study material, there are no published comparative analyses of case studies on what we refer to as the 'socio-economic capitals' of housing procurement. Housing procurement practice occurs in a complex context of political, market and industry dynamics. Achieving high-level outcomes beyond the units of houses is fraught with difficulty in remote Indigenous housing. For example, contractual requirements on building contractors to use local Aboriginal labour or purchase Aboriginal Council-supplied materials can introduce hidden risks, which in turn inflate tender prices in a market-driven economy. Despite this, there are some procurement success stories, and with this in mind, this project aims to assess what has been achieved during the last decade in the procurement of Aboriginal housing, as grounded in actual practice. These aims also partly address the AHURI Indigenous Research Agenda 2009 on sustainability relating to the financial implications of different procurement systems in meeting asset management practices and housing outcomes for Indigenous people in remote areas (AHURI 2008, p.21).

Let us briefly overview the contents of this research report. The remainder of this chapter deals with methodological issues, first by describing the 'Research background' and how the study builds on earlier AHURI reports, which leads into the formulation of the set of research questions underpinning this research. The chapter continues with a detailed discussion of the contractual methodologies encountered in current building procurement systems before presenting an overview of the capitals of Indigenous housing, dealing separately with social and economic, cultural and ethical, health, employment and training, and lastly governance. The chapter concludes by

presenting the case study selection process and the methodology implemented in carrying out the research task.

Chapter 2 presents a case study analysis of the medium-scale Thursday Island Redevelopment project undertaken by the Queensland Department of Housing between 1996 and 2000; Chapter 3 focuses on a small-scale Australian Government funded housing project carried out under the auspices of the National Aboriginal Health Strategy in Normanton, Northwest Queensland; Chapter 4 presents another small-scale case study in the community of Koonibba in western South Australia on housing procured by Housing South Australia; and Chapter 5 analyses research undertaken into the large-scale Strategic Indigenous Housing and Infrastructure Program currently underway in the Northern Territory. Finally, Chapter 6 comparatively analyses the research findings in setting out how each of Indigenous capitals might be more logically or appropriately gained or enhanced through a particular type of procurement process, and concludes by recommending what factors need to be considered in designing an appropriate housing procurement model for remote Indigenous environments.

1.2 Research background

Drawing on a body of previous and current housing research, and using the AHURI report by Long et al. (2007), *An Audit and Review of Australian Indigenous Housing Research* as a starting point, the current authors have conducted a more in-depth literature review to assist in defining the social and economic capital frameworks of current Indigenous housing procurement in Australia. This is set out in depth in our Positioning Paper (Davidson et al. 2010), but in particular, reference is made to recent AHURI reports by Fien et al. (2007, 2008) who in turn drew upon previous AHURI work by Long et al. (2007), Memmott et al. (2006), Memmott (2004), Memmott and Chambers (2003), Moran (2004, 1999), Memmott and Moran (2001). Fien et al. (2008, pp.85–103), through an integrated process of intense literature analysis grounded in three remote field studies (Mimili, Palm Island, Maningrida), compiled a Design Framework for Indigenous Housing that consists of six principles of sustainability, being:

1. cultural appropriateness
2. environmentally sustainable
3. healthy living practices
4. employment opportunities and economic development
5. life-cycle costing
6. innovation in procurement, ownership and construction systems.

These principles are combined with the specification of key decision-making points for their application through consultation in the housing system at settlement planning, housing design, construction and post-occupancy management phases.

Fien et al. (2008) derive an extensive list of best practice principles, many of which have also been similarly devised elsewhere by Memmott (1989a, 1991). But it must be noted that the full list of the design framework is so demanding and so far reaching it is doubtful whether most or even a modest number are likely to be incorporated under conventional procurement methodologies. For a senior public servant in a government department or a professional consultant (project manager) to successfully implement all these program principles would not only require a very high level of professional expertise, but also a shared willingness and capacity to engage in them by the many other players in the housing process; what Ackfun (2008, p.75) has

referred to as the collective ‘mindset of attitudes and values’ of all the participants in the housing procurement process (policy-makers, managers, contractors, stakeholders, clients, employers). Thus, it is the idiosyncratic application by these players who are called upon to execute bureaucratic programs that can vary the scales of success or failure of any carefully devised policy or program (Moran 2006a, pp.152–159). Unfortunately, in Australian Indigenous housing, very seldom is such an ideal realised due to the aforementioned complex reality of political, market, and industry-driven dynamics.

Dr Bruce Walker, Director of the Centre for Appropriate Technology (CAT) in Alice Springs has called for an even further expanded agenda in housing procurement beyond cultural factors, health objectives, appropriate technology and cost optimisation, to encompass investment in the economic development of the livelihood options, social capitals and social assets of Indigenous communities as part of a total regional reform and development system (Walker 2008, p.38). Under this wider umbrella would fit such exemplar initiatives as the recently formed Inaugural Australian Indigenous Minority Supply Council (AIMSC) which aims to assist Indigenous business entrepreneurs (including those in the housing industry sector) to gain access to the procurement processes of Australia’s top corporate companies; and Myuma Pty Ltd under the auspices of the Dugalunji Aboriginal Corporation (Camooweal) in establishing its own pre-vocational courses in training Aboriginal people for the mining/construction industry and positioning them with jobs (Memmott 2007, 2010). In an attempt to move towards such a broad housing outcome and framework, the current research seeks to ground an understanding of housing procurement in actual practice and within a longitudinal perspective that covers the post-occupancy period so that housing outcomes can be adequately assessed—an area of housing research fraught with empirical challenges.

It could be asked why this is necessary or significant if the design framework for good housing procurement is already developed within the literature? The problem is the current lack of well-documented evaluations of Aboriginal housing procurement in a total sense. There are a few early comprehensive case studies such as Heppell and Wigley 1981 (Mt Nancy in Alice Springs) and Memmott 1991 (Wilcannia), but they are somewhat outdated with respect to contemporary professional practice standards and contractual methodologies, although some key principles are worth re-visiting. An extensive literature review has shown that there are comparatively few recent documented examples, and those that are available are often embedded in unpublished documents such as professional reports or theses e.g. Howorth 2003 (Central Australia—Apatula ATSIC Region, NT), Fantin 2003 (North East Arnhem Land, NT), Grant 1999 (Oak Valley, SA), Go-Sam 1997 (Mutitjulu, NT); or are only confined to one outcome or one subset of outcomes of the procurement process. An exemplar category of the latter type comprises post-occupancy housing evaluations that confine themselves to houses as functional products rather than the procurement and decision-making process, for example, Memmott (1989a, b) on the Tangentyere Council housing design assessment, Architects Studio et al. (2000) on the NT IHANT housing POE; the recently published fieldwork findings in Fien et al. (2008) of case studies at Maningrida (NT), Palm Island (Qld) and Mimili (AP Lands), all fall mainly within this latter category.

In February 2009, the Council of Australian Governments (COAG), including those most relevant to the case studies in this report (the Commonwealth Government and the state governments of Queensland, South Australia and the Northern Territory) became mutually bound in Indigenous housing provision to remote communities through the ‘National Partnership Agreement on Remote Indigenous Housing’. A number of the proposed outcomes and outputs of this ten-year strategy as set out in

this Agreement coincided with the type of socio-economic capitals being examined in the current research study, viz:

- Reduced overcrowding, particularly in remote and discrete communities.
- Robust and standardised tenancy management.
- Increased employment for local residents.
- Resolution of land tenure to secure economic development opportunities and home-ownership possibilities in economically sustainable communities. (COAG 2009, p.5.)

However, a retrospective review of Indigenous housing policies throughout the latter half of the 20th century and the early 21st century would reveal that they all incorporated various combinations and permutations of the socio-economic and cultural capitals that are the subject of this study. For example, in the 1990s the National Aboriginal Health Strategy (NAHS) directed policy towards Aboriginal and Torres Strait Islander health outcomes through housing (Jones 2000, pp.229–230) and ATSIC's Community Development Planning program embraced social and community development combined with settlement infrastructure upgrading (Jones 2000, pp.294–298). And, in 2003, the 'Building a Better Future: Indigenous Housing to 2010' policy of the Housing Ministers Advisory Committee (HMAC) aimed to improve the capacity of Indigenous community housing organisations and to achieve safe, healthy and sustainable housing (Thompson 2004, p.85, p.86). Further examples could be cited from earlier periods despite the vastly different political contexts of the time; for example, even in the 1960s there was widespread experimentation with Aboriginal construction teams and homemaker programs (Thompson 2004, Chapter 4). There is no reason to assume that the achievement of such broader social and economic capitals will not continue to play a role in current Indigenous housing procurement policies of Australian and state governments. A retrospective approach to seeking good practice case studies from past policy eras is thus still potentially useful to inform future practice in Indigenous housing.

1.3 Research questions

In order to examine in more depth a range of the types of social and economic capital benefits outlined above, the researchers, with input from their AHURI User Group, have selected a number of best practice case studies. The project generates and discusses strategies, guidelines, principles and measures for good Aboriginal housing procurement practices in remote Australia.

In order to successfully undertake the research program, the authors formulated a list of working research questions with which to guide investigations. A number of these research questions set the research agenda for the earlier Positioning Paper (Davidson et al. 2010); with the remaining establishing the research framework for case study analyses undertaken in Stage 2 of this investigation, and presented herewith.

The relevant questions for case study analysis in the Final Report were refined from the Positioning Paper, and are as follows:

1. Which social and economic capitals are demonstrable from the case studies, and to what extent might they encompass construction, maintenance, training, employment, education, leadership, governance, service delivery, management, health, sustainability, mutual respect, positive cultural identity and other life skills outcomes?
2. What examples of good practice housing procurement in building socio-economic capital in communities, can be identified through the case study analyses?

3. What obstacles or project disruptions can be identified in specific case study analyses that prevented such socio-economic capitals being realised in communities?
4. In successful case studies, how enduring have these social and economic capitals been?

1.4 Understanding contractual systems in procurement

In attempting to understand the relationship between housing procurement and Aboriginal capital networks in remote communities, the common procurement strategies and associated contractual methodologies used in the Australian construction industry are presented below. Most forms of building procurement rely on legally binding contracts that establish the scope of works and set out the terms of reference to be undertaken during the contracted works. Currently in the Australian construction industry, there are nine formal contractual methods used in the provision of mainstream projects and one informal method identified at the end of the list, these being:

- Documented Design (Traditional 'Lump Sum'), also known as 'Construct Only'.
- Design Development and Construct (DD&C).
- Design, Novate and Construct (DN&C).
- Design and Construct (D&C).
- Design, Construct and Maintain (DCM).
- Guaranteed Maximum Price (GMP).
- Managing Contractor.
- Alliance (Cooperative) Contracting.
- Public Private Partnerships (PPP).
- Owner-Builder (informal).

1.4.1 Documented Design contracts

In general, the Documented Design or 'traditional lump sum' contract is an agreement between two parties, commonly referred to as the proprietor (client/owner) and head contractor (builder), for works to be completed for a fixed monetary amount. This 'construct only' process typically involves the proprietor engaging an independent design consultant (such as an architect) who is responsible for the overall design intent and scope of work. This design work forms the basis for a tendering process whereby a number of contractors are invited (either through public or private notification) to compete for construction services. The perceived advantage to this form of contract is its provision for greater control by the proprietor over design quality prior to, and during, construction. The perceived disadvantage of this system is the resultant risk borne by the proprietor in relation to time and cost overruns that have the potential to lead to an adversarial contractual environment (Connell Wagner 2007, p.2). Consequently, this form of contractual mechanism is appropriate for projects where (a) design quality is critical; (b) the proprietor is skilled enough to manage the design process; (c) flexibility is needed during the construction process to account for design parameter changes; (d) there is confidence in the design consultant to understand all brief requirements; and (e) there is enough time available for detailed design and documentation to occur (NSW Government 2008, p.4).

1.4.2 Design Development and Construct (DD&C) contracts

According to the Design-Build Institute of America (DBIA), forms of Design and Construct (D&C) procurement (which includes DD&C, DN&C and DCM) harks back to pre-modern forms of contract whereby a master builder or architect maintained absolute control over all aspects of project design and delivery (DBIA 2009). Under a typical D&C process, the head contracting entity enters into an agreement with the proprietor whereby they assume all project risks in further developing the proprietor's already established conceptual design and project brief. Once the D&C contract is in place, the contractor oversees the preparation of detailed design and construction documentation and then manages construction in order for the project to achieve practical completion. Under this form of procurement process, the contractor tenders a lump sum price and assumes all responsibility for errors and omissions in their design documentation, which is ultimately beneficial to the project proprietor. Commonly, D&C contracts are used when there are significant financial risks associated with time delays and potential project scope changes and the proprietor does not have the skill to manage the design, documentation and consultant coordination process themselves.

1.4.3 Other contractual forms

A review of Australian procurement history shows a number of other variations to the common D&C contractual system, including: Design, Novate and Construct (DN&C) which is used when a single designer is required for the entirety of the project and involves 'novating' the design team from the employ of the proprietor to the contractor who then assumes 'full and unambiguous responsibility for the whole of the design as well as the construction' (NSW Government 2008, p.5); and Design Construct and Maintain (DCM) which has an additional post-construction maintenance period included in the original contract. According to the *Procurement Practice Guide* (NSW Government 2008, p.8), for proprietors, maintenance stipulations work better in D&C procurement than traditional lump sum scenarios as the contractor retains full legal responsibility over the entire process from design through construction to post-construction maintenance. In this model, the benefit to the proprietor is the contractor's liability period which is typically six years and three months post-construction and which can be extended through maintenance clauses in the contract (NSW Government 2008, p.9).

Also included within the D&C procurement framework is the Guaranteed Maximum Price (GMP) contract whereby a head contractor guarantees the project proprietor a 'maximum' price for the construction works (NSW Government 2008, p.10). The contractor assumes all responsibility for cost over-runs and timeframe extensions; while the proprietor may provide further incentive with early completion bonuses. The major benefit to the proprietor in using GMP contracts is the mitigation of financial risk by having a contracted maximum price while the greatest threat is the reduction in project scope and quality to meet contracted cost and time objectives (Connell Wagner 2007, p.4). The authors have yet to find evidence of D&C forms of procurement being used in remote Aboriginal communities over the last ten years. The risk profile of the D&C process may account for this lack of use as building contractors choose to shy away from perceived unforeseen risks associated with building in remote communities.

The Managing Contractor (MC) process combines elements of both 'traditional' and D&C procurement systems whereby the contractor takes on the role of a traditional project manager to deliver the contracted works to an agreed Target Construction Sum and Target Date for completion (NSW Government 2008, p.11). The MC contract is awarded on the basis of negotiating a number of non-price criteria and

management fees that cover the contractor's costs in consultant coordination, authorities' approvals processes and liaison with user and client groups. Once the project scope and deliverables are established, the contractor then tenders a Guaranteed Construction Sum (GCS) and Date for Practical Completion (PC), after which they are then liable for any cost overruns as well as typically being entitled to a 50 per cent share with the proprietor in any cost savings upon completion. Due to the extra time and resources spread across the design and build process, administration costs may be more for an MC when compared to a traditional construct only Lump Sum process (Connell Wagner 2007, p.5). Typically, the major benefit of MC procurement is better communication between proprietor, contractor and key stakeholders during the design and construction process which has the added advantage of minimising time delays resulting in better cost controls than most other forms of construction procurement.

A summary of commonly used contractual types categorising procurement circumstances in which they may be applied has been developed by the authors and included in Table 1 below.

Table 1: Commonly used contract types—potentials and risks

	<i>Traditional lump sum</i>	<i>Design & Construct</i>	<i>Guaranteed Maximum Price</i>	<i>Managing Contractor</i>	<i>Alliance Contracting</i>	<i>Public Private Partnerships</i>
Administration						
Project scale	Suits small & large projects	Suits large projects	Suits small & large projects	Suits large projects	Suits large projects	Suits large projects
Community consultation	Conducted pre-contract by proprietor's consultants	Conducted during design period by contractor/consultants	Conducted pre-contract by proprietor's consultants			
House design types	Suit individualised	Suit standardised	Suit standardised	Suit standardised	Suit standardised	Both
Potentials						
New build construction	Yes	Yes	Yes	Yes	Yes	Yes
House renovation	Yes	Yes	Yes	Yes	Yes	Yes
Repairs and maintenance	Yes	Yes	Yes	Yes	Yes	Yes
Quality design	High with better pre-construction consultation	Low due to timeframe limitations	Low due to timeframe limitations	High with better pre-construction consultation	Variable due to timeframe limitations	High with better pre-construction consultation
Quality documentation	High, depending on design timeframe	Low	Low	High, depending on design timeframe	Variable due to timeframe limitations	High, depending on design timeframe

Quality construction	High with good construction documentation	Low due to high risk of design changes during construction period	Low due to high risk of design changes during construction period	High with good construction documentation	Variable due to high risk of design changes during construction period	High with good construction documentation
Innovation in construction	Possible, better with more preparation	Desirable	Desirable	Possible, better with more preparation	Desirable	Possible, better with more preparation
Risks						
Construction costs	Borne by proprietor	Borne by contractor	Borne by contractor	Borne by proprietor	Shared	Borne by contractor
Construction cost efficiencies	Possible, better with more preparation	Good, depending on contract conditions	Yes	Yes	Good, depending on contract conditions	Good, depending on contract conditions
Timeframe	Shared	Borne by contractor	Borne by contractor	Borne by contractor	Shared	Borne by contractor
Design changes	Time & cost borne by proprietor	Time & cost borne by contractor	Time & cost borne by contractor	Time & cost borne by contractor	Shared by proprietor & contractor	Time & cost borne by contractor

Two additional procurement systems are Public Private Partnerships (PPP), which involve private sector companies financing the design, construction, operation and maintenance of public assets for a given period of time (Connell Wagner 2007, p.8) and the Owner/Designer/Builder (ODB) facilitation process whereby a project manager (possibly an architect or engineer) assists a given community or household in constructing required infrastructure and housing. Again, due to a lack of documentary evidence in the literature, the authors are yet to ascertain whether PPP processes have been used in housing procurement in remote Aboriginal communities. However, one of the best-known examples of an ODB system is the work of architect Paul Haar at Mount Catt Arnhem Land and St Paul's Village on Moa Island in the Torres Strait. In describing his design facilitation methodology, Haar states that '[o]ne cannot underestimate the value of allowing remote communities to appropriate their own dwelling experience, to design, construct and take pride in their own homes, and to again embrace housing "as a symbol of the self"' (Haar 2003, p.96). Other community development organisations such as Emergency Architects Australia⁴ are known to use this method of ODB facilitation in their housing aid projects in Asia and the Pacific. Due to its grass-roots approach, the ODB process appears unsuitable for large-scale housing projects controlled by a central administration such as government.

1.4.4 Alliance contracting

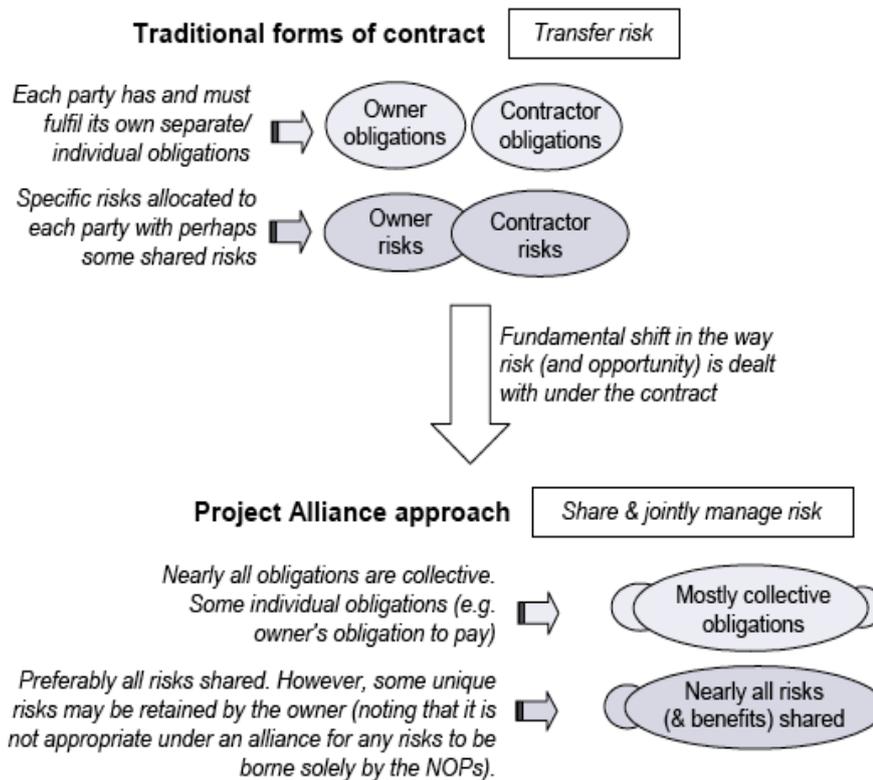
Alliance contracting or Project Partnering is a relatively new form of procurement in the Australian construction industry and involves two or more entities entering into an agreement to 'work cooperatively, reaching decisions jointly by consensus and using intensive relationship facilitation' (NSW Government 2008, p.13). In managing relationships, alliance contracting calls for a commitment from all parties to common objectives, cooperative action and collective decision-making in sharing information and knowledge in a non-adversarial social environment (Connell Wagner 2007, p.7).

⁴ See Emergency Architects Australia (2010).

Yeung et al. (2007, p.219) define the alliancing model as having its origins from the German philosopher Wittgenstein's idea of family-resemblance, where a complicated concept can be understood as a network of overlapping similarities. The model is broadly subdivided into contractual and relationship-based components, nominating the former as hard and the latter as soft. Alliancing is seen as a model to flexibly structure and define vague elements within the contractual arrangement. Although the definition of the model has had little industry consensus, it is conceptualised as having necessary elements of formal contracts comprising real gain-share/pain-share elements and so called vague relationship-based elements identified as trust, long-term commitment, cooperation and communication.

Alliance contracting is useful for long-term projects with complex social and technical parameters where the project scope is uncertain or unknown at the outset with all stakeholders sharing the risk collectively. Furthermore, alliancing is used to combine 'a relationship management system and a delivery system' where 'partnering [is] underpinned with economic rationalism' and 'agreed profit and loss outcomes are contractually binding on all parties' (Yeung et al. 2007, p.223). The 'Alliance' contract model has been earmarked as a potential opportunity to introduce innovative constructions systems in order to garner regional models of housing procurement and achieve cost efficiencies (Fien et al. 2007, pp.34–35). Currently, the Northern Territory Government is administering an alliance/partnering system for the large-scale procurement of housing in remote Aboriginal communities in the Northern Territory, which involves a joint management structure with the Australian Government. Interestingly, the Australian Institute of Architects (AIA) neither endorses nor rejects this contractual methodology, but does maintain its endorsement of lump sum contracts as the 'best way to deliver 'one-off' construction projects and cautions architects to consider carefully before entering into alliancing contracts' (AIA 2009b). As a point of comparison, the figure below models the risk transfer associated with traditional forms of contract and project partnering (alliancing).

Figure 1: Comparison between traditional and alliance forms of contract



Source: Extracted from the Department of Treasury and Finance 2006, p.10.

A review of the last 10 years of housing procurement projects in remote Aboriginal communities shows the prevalence up to 2005⁵ of small-scaled housing projects partly administered by individual Indigenous Community Housing Organisations (ICHOs). They were funded entirely by state and federal government departments through programs such as Community Housing and Infrastructure Program (CHIP). CHIP was complemented by the NAHS program which was of a larger-scale and embraced infrastructure (power, water, air strips, roads, sewerage) as well as housing. However, it should be noted that in comparison to the current SIHIP program (see later in this report) NAHS was also towards the smaller end of the scale (e.g. see Vanstone 2004). Pertaining to selected case studies in this report, currently, in the states of Queensland, South Australia and the Northern Territory, there are a number of government programs that deliver Indigenous-specific forms of housing, through different statutory and organisational structures such as, State Owned and Managed Indigenous Housing (SOMIH) authorities, Indigenous local governments, Indigenous Community Housing Organisations (ICHO) and Indigenous Community Organisations (ICO) (AIHW 2009b, p.1, p.11). All are funded in one form or another through various Commonwealth or state programs under the National Affordable Housing Agreement (NAHA). SOMIH are dwellings owned and managed by the particular state or territory housing authorities funded through National Partnership Agreements on housing affordability, homelessness and social housing.⁶ Under the Northern Peninsula Area

⁵ When ATSIC was disbanded by the Howard Government, initially announced on April 2004 with the proposal for Regional Councils to be closed by May 2005. Source: <http://www.aph.gov.au/library/pubs/cib/2004-05/05cib04.htm#abolition> (Accessed: 27/10/10)

⁶ Web: <http://www.fahcsia.gov.au/sa/housing/progserv/affordability/affordablehousing/Pages/default.aspx> (Accessed 02/11/10)

(NPA), some Indigenous community housing organisations (ICHOs) and ICOs may or may not act as agents for state or territory housing bodies and may participate in one or a range of procurement activities such as new builds, repairs and maintenance and major refurbishments.⁷

1.5 Understanding the social and economic capitals of Indigenous housing procurement

Let us consider the various types of capitals elicited in our earlier Positioning Paper (also see for a full discussion on the literature underpinning these concepts).

1.5.1 Social capitals

Social capital consists of networks of social relationships formed for mutual benefit and based on norms of trust, reciprocity and unity. Although Indigenous social capital investment appears to yield only limited economic gain and does not usually manifest as capitalistic economic development largely, there is a possibility of exploring whether informal Aboriginal groups such as socio-spatial kin-based residential groupings, customary gendered activity groups, hunting or craft manufacturing groups, and ceremonial or ritual groups, can play roles in the housing economy or in housing management. Such social capital would need to be localised and contextualised due to the distinct economic and social circumstances in remote settlements. For purposes of identification and evaluation, it is possible to measure social capital strength, although it is necessary to combine a quantitative scaling approach with a qualitative assessment to capture the distinctive cross-cultural mix of values and networks in Aboriginal communities. (Davidson et al. 2010, Section 3.2)

1.5.2 Cultural and ethical capitals in procurement

A related dimension to social capital is cultural capital which can play a significant role in housing design. The 'cultural design paradigm' involves the use of models of culturally distinct behavior to inform definitions of Aboriginal housing needs (Memmott & Go-Sam 2003, p.13). These need to be generated from effective consultation with end users, requiring specialist expertise in cross-cultural skills. This approach provides opportunity in housing procurement for the reinforcing of cultural identity, thereby strengthening social and cultural capital. Ethical capital is further generated from a consistent application of primary ethical principles of mutual respect, mutual rights and mutual responsibilities in meeting the reasonable culturally specific needs of householders.

1.5.3 Health capitals and procurement

A form of human capital that can be generated from housing procurement is *health capital*. Houses and associated environments can contribute positively to sustaining Aboriginal health and reducing livelihood vulnerabilities. Surveys are available to assess the quality of the health hardware, i.e. 'the physical equipment necessary for healthy, hygienic living', which provides a measure of health capital in Indigenous housing (Davidson et al. 2010, Section 3.4). Another form of health capital is arguably generated by supporting the social and psychological functions of housing. A significant way to do this is to reduce crowding. However, due to the complexity of cross-cultural measurement models, 'crowding' is also a specialist area of research and design practice; and needs to encompass the complex Aboriginal inter-relationships of kinship, household density, behavioural norms and values, and the functional state of house infrastructure as well as the hygienic condition of houses and

⁷ Web: <http://www.fahcsia.gov.au/sa/housing/progserv/affordability/affordablehousing/Pages/NPASocialHousing.aspx> (Accessed 02/11/10)

psychological well-being. Crowding is defined in terms of stress arising from the unwanted presence of others as opposed to density per se, and this problem can manifest in diverse ways within different cultures. The problem of quantifying and measuring crowding reduction in Indigenous housing in order to reduce psychological stress and infectious disease transmission is similarly difficult, and although coarse measurements are regularly made using conventional occupancy standards, they are not necessarily an accurate guide as indicated by some of the culturally distinctive examples given.

1.5.4 Employment and training capitals in procurement

Housing and infrastructure procurement, as one of the largest capital investments by governments in remote communities, has a clear potential to generate *employment and training capitals* and thereby provide improved wealth creation and economic sustainability for Aboriginal people. Achieving economic outcomes to improve livelihoods in remote regions of Australia, where there are considerable economic vulnerabilities of labour and skills shortages, which simultaneously exist alongside high unemployment in Aboriginal settlements, has proved elusive. Upward pressures from macro-economic forces cause tight labour markets that have threatened social housing programs with fixed budgets as they increasingly compete with industries that are equipped with greater purchasing power (Szava et al. 2007); while declining housing affordability in remote settlements has dual regional social impact at the policy level on efficiency and equity (Haslam McKenzie et al. 2008, pp.10–16). The economic context in remote settlements bears greatly upon other sustainability livelihood factors, such as cultural and human capitals of employment, training and education, albeit in a context where limited economic opportunities are stifled due to geographic location, small populations and recurring circular mobility (Moran 2009, np).

The capacity for Indigenous groups to form entrepreneurial business to participate in the government-sponsored building activity in their own communities is equally limited, as such groups typically lack a range of necessary capitals (financial, human, technological) as well as relevant management skills, business acumen and market accessibility (Foley 2008; Furneaux & Brown 2008; Pearson & Helms 2010).

1.5.5 Governance capitals in procurement

Capacity building of local *governance capital* is also necessary to obtain sustainable capitals including training and employment outcomes. Housing procurement can contribute to both local and regional forms of Indigenous governance. However, there is generally an imbalance in power relations and capacities between Aboriginal and non-Aboriginal governance systems, one which needs to be corrected in order to generate the best capital outputs from housing procurement. The latter includes local, state and federal government representative bodies and their associated funding cycles that require coordination at the scales of the settlement and the region. Procurement problems result when there is not a collective mindset of values and attitudes among these respective players.

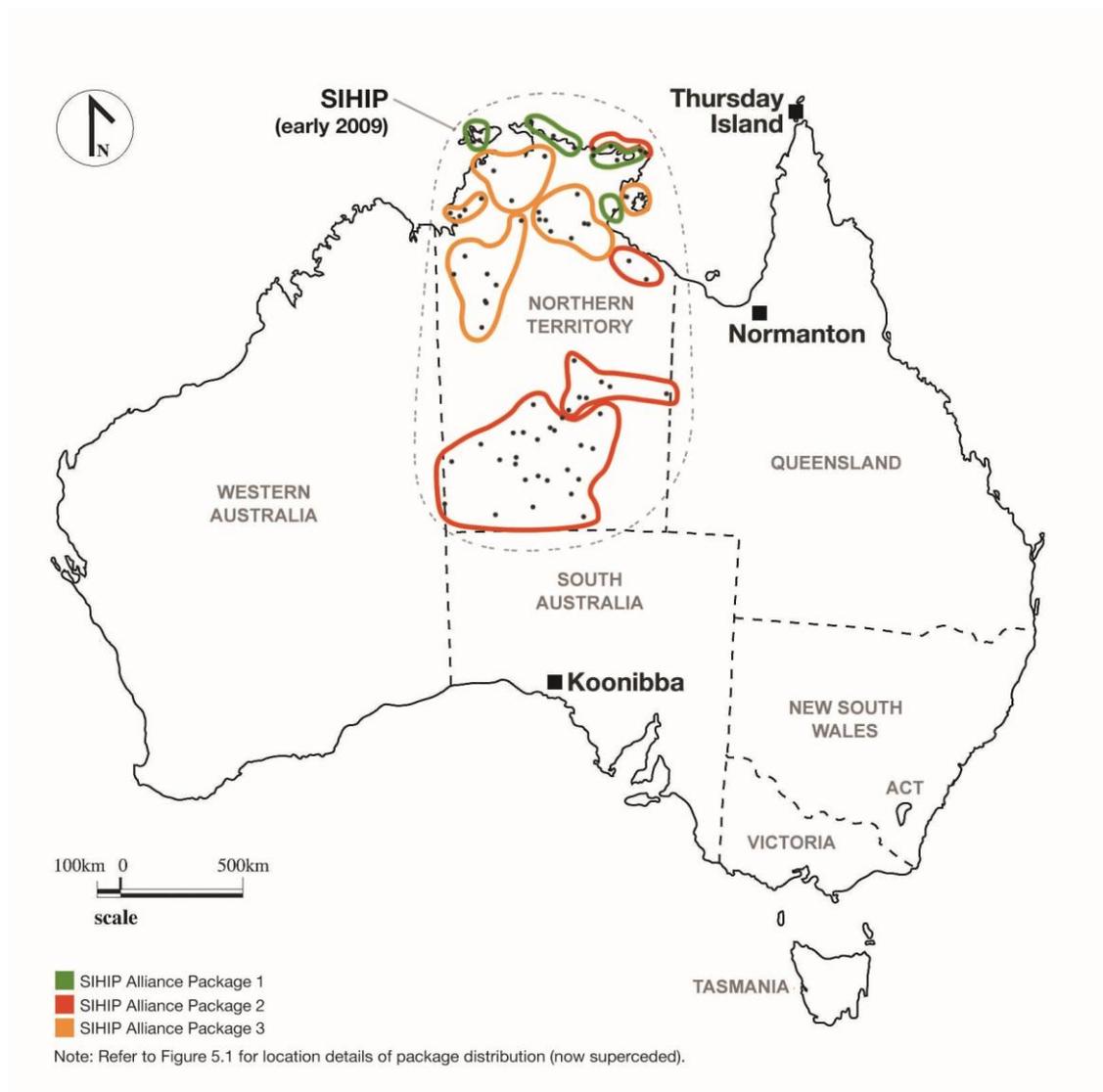
1.6 Methodological approach and case study design

While preparing the current research program, a number of early observations and further questions regarding procurement strategies, contractual methodologies and the complexities of socio-economic capital frameworks in remote Aboriginal housing arose. These questions have formed the basis for inquiry and have influenced the choice of case studies. As such, the primary case studies combine (i) literature analysis, (ii) semi-structured interviews with professionals who were involved in procurement, and (iii) field visits to a number of communities to inspect houses,

interview community leaders and residents and local Council or ICHO staff involved in housing. The final selection of four primary case studies was based on a range of criteria including the existence of project documents, gaining project document access permission, the capacity of original participants to facilitate such access, community access permissions, and the cost of community visitation, as well as the actual suitability of the case study for procurement analysis. In responding to the initial observations and associated conclusions above, the following list identifies those case studies chosen for analysis in this research program:

- The Thursday Island Redevelopment Project, ATSI Housing, Qld.
- An NAHS-funded ICHO Project: Bynoe CACS Ltd, Normanton, Qld.
- A South Australia Housing funded project at Koonibba, SA.
- The Strategic Indigenous Housing and Infrastructure Program (SIHIP), NT.

Figure 2: Case study locations



Note: At the time of writing, the packages indicated were accurate, however changes may have occurred since.

The Thursday Island Redevelopment Project (TIRP) was chosen due to its complex social and cultural agenda and is one of the largest and most successful housing and

infrastructure delivery programs ever undertaken in a remote Indigenous community in Queensland. The SIHIP project was selected due to its even more ambitious scale and complexity in being Australia's largest ever delivery program for remote Indigenous housing and infrastructure. Both the smaller-scale Housing SA Koonibba and NAHS Normanton housing projects were chosen as an important contrast to the scale of the TIRP and SIHIP projects. The logic was that a contrast of scales and complexities would generate productive outcomes in comparative discussion relevant to future procurement strategies in both large and small procurement projects.

In compiling this research report, a desktop literature review was undertaken which focused on the varying forms of economic and social capital frameworks and contractual methodologies pertaining to procurement systems in remote Aboriginal communities in Australia. Literature searches were undertaken of citation databases as well as government and community organisation websites that yielded numerous documents, including research reports and federal and state government policy documents (Davidson et al. 2010). While the main research project has combined methods of literature analysis and survey questionnaires/interviews from the four major case studies above, the previous Positioning Paper weaves the results of historical Post-Occupancy Evaluation (POE) studies of Aboriginal housing projects into the discussion of social and economic capitals for greater emphasis of specific explanations and clarity of argument. Consequently, the authors have drawn on several notable examples of Indigenous housing POE studies, all conducted using varying methodological approaches and cross-disciplinary frameworks such as psychology, sociology, medicine, anthropology and architecture; being Ross (1987), Memmott (1989a, b), Memmott (1991), Pholeros, Rainow and Torzillo (1993), Morel and Ross (1993), Memmott et al. (2000), Fletcher and Bridgeman (2000), Fantin (2003), Parnell and Seemann (2005). For the sake of this report's length, the authors have chosen to leave this review in its entirety in the Positioning Paper (Davidson et al. 2010) rather than reiterate it here.

In terms of procurement strategies in Aboriginal housing, we have drawn from a varied literature base to formulate an argument surrounding the associated benefits and risks of the contractual methodologies used in the delivery of such housing. For example, information has been collected from the Australian Institute of Architects (AIA 2009a, b) *Acumen* professional advisory database, the New South Wales Department of Commerce *Procurement Practice Guide* (AIA 2009a, b), Connell Wagner's *Discussion Paper, Procurement Methodologies Strategic Intervention Housing Program* (2007a) prepared for the Commonwealth Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), and the former Indigenous Housing Authority of the Northern Territory (IHANT) (Connell Wagner 2007a). These studies and reports generate findings that resonate into current and future housing design and delivery practices in remote Aboriginal communities.

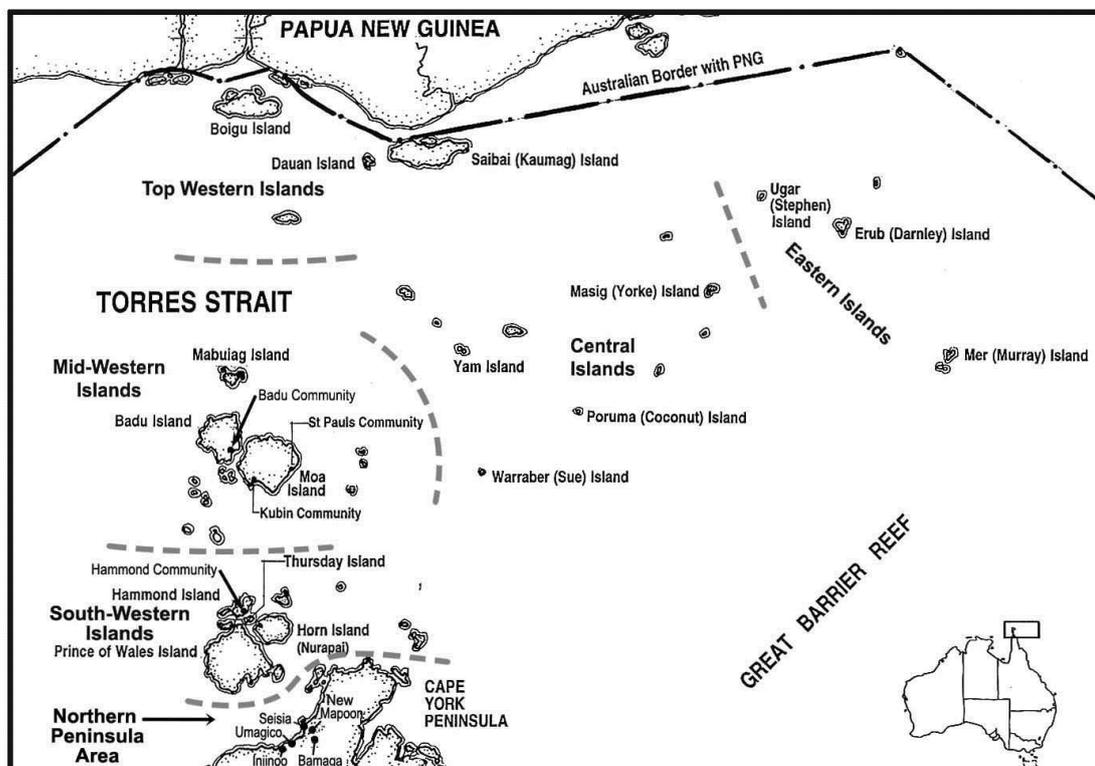
2 CASE STUDY: THURSDAY ISLAND (QLD)

2.1 Introduction⁸

The Torres Strait Islands, dispersed throughout 48 000 square metres, are the remains of a land bridge between Cape York and New Guinea that was flooded at the end of the last Ice Age. A distinctive Indigenous island-based culture evolved in contrast to the Aboriginal cultures on Cape York and the Papuan peoples along the New Guinea coast, despite regular north–south trade with these groups and constant diffusion of traits in both directions. During colonisation this demographic and cultural profile was overlaid with minorities of European, Asian and Polynesian immigrants.

Geographically, the Torres Strait Islands are divisible into five distinct clusters reflecting subcultural groupings; the island communities within each cluster having a tradition of close intermarriage and exchange. The South-Western, Mid-Western, Central, Eastern, and Top-Western Islands contain a total of 15 discrete settlements (Figure 3). Most of these communities have populations of about 200 or 300 people (Table 2), although the largest (Badu) has over 700. A sixth sub-region is the Northern Peninsula Area (NPA) on the tip of Cape York. Although this area was traditionally occupied by Aboriginal groups, the Queensland Government established new communities (Bamaga, Seisa) and new Aboriginal communities (New Mapoon, Umagico, Injinoo) during the 20th century and residents have since inter-married. The population sizes of these NPA communities are similar to the islands (200 or 300), the exception being Bamaga with about 700 people. The total Indigenous population of the region as per the 2006 census was 9567.

Figure 3: Map of the Torres Strait and Northern Peninsula Areas, showing division into six sub-regions (Eastern, Central, Top-Western, Mid-Western, South-Western and NPA)



⁸ This description has been previously published in Memmott, P. 2010, *The Australian and New Zealand Journal of Criminology*, Volume 43, Number 2, pp. 338–340.

The regional centre of the Torres Strait is at Thursday Island (population 2551 of whom 1847 are Indigenous) with an associated urban centre at nearby Horn Island (population 587), which also has the regional airport and to which daily flights from Cairns arrive. Travellers then commute by bus and short ferry trip to Thursday Island. Here there is a division between the CBD precinct (Port Kennedy) where 60 per cent of population are Indigenous, and the western precinct of the town where 90 per cent are Indigenous. Many of the non-Indigenous people are government workers and non-government organisation (NGO) service providers. Asiatic people who originated from the 19th century pearling industry have merged into the permanent population.

Small planes make daily connecting flights from Horn Island to the various outer island communities. The only other ferry service operates between Thursday Island and Seisia in the NPA. Indigenous people often travel throughout the region in dinghies with outboard motors, to buy supplies at Thursday Island. According to the 2006 Australian Census, 81 per cent of the population of the Torres Strait was of Torres Strait Islander origin, with more than 13 per cent of the region's total population living on Thursday Island. The remoteness of its location makes access to basic services and the organisation of civil administration extremely difficult to manage which has contributed to a history of 'neglect' in the provision of housing and infrastructure services for the Island.

2.2 The Aboriginal and Torres Strait Islander Housing Unit

Aboriginal and Torres Strait Islander Housing (ATSIH) was a discrete unit and a specialist housing provider within the former Queensland Department of Housing. It also offered advice and support to assist other service providers, as well as agencies (such as QBuild) delivering housing outcomes for Indigenous people. (B.A. 2010) ATSIH recognised the special needs of Indigenous households and provided a set of culturally appropriate services and products. The unit was responsible for a state-managed portfolio of approximately 2500 rental properties throughout Queensland and provided grant funding for community housing in 34 discrete Indigenous communities. The overall housing program was supported by program development, a planning and policy service, as well as project management, design, construction, technical advisory and tenancy management services. In managing the Rental Program, ATSIH construction units undertook new build, maintenance and upgrading activities and provided direct training, apprenticeships and employment opportunities for Aboriginal and Torres Strait Islander people.⁹ Construction managers also provided support and assistance to Indigenous community councils in housing delivery in discrete communities. In 2001, ATSIH received the Queensland Premier's Award for service delivery in Indigenous housing.

ATSIH was responsible for direct delivery of housing in urban and regional areas, including Thursday Island, as well as supporting housing delivered by Aboriginal and Torres Strait Islander Councils on discrete DOGIT communities. Within the directly delivered program, ATSIH delivered an integrated range of functions including construction, tenancy and property management. The directly employed construction teams were in major regional centres and in other areas ATSIH contracted out construction, including to QBuild. On Thursday Island, as in other parts of Queensland, this involved management of housing both in freehold areas and on Reserves. Government management of housing on Thursday Island Reserve lands was sensitive due to community aspirations for self-determination and control of the Reserve lands. Within the community program, ATSIH provided capital funding for

⁹ Queensland Government Department of Housing 2000, pp.3–4 Queensland Government Department of Housing 2000, '2000–2003 ATSIH Plan. Aims to improve access for Aboriginal and Torres Strait Islander people to secure, affordable and appropriate housing throughout Queensland'.

housing, oversight of construction, specialist project management where requested by Councils and policy advice and sector development to support Councils in their housing management roles. (R.P. 2010)

In 2004, ATSIH was restructured after a Queensland Government decision to mainstream service delivery in Indigenous communities. This resulted in many of the Unit's functions¹⁰ being moved to mainstream areas of the Department. At the time it was dismantled, 80 per cent of all senior ATSIH managers were Indigenous, and 110 out of 140 staff identified as Indigenous people (A.A. 2010). Furthermore, ATSIH had a range of active training and employment programs with 80 Aboriginal people employed in construction-related activities and over 150 people in total across both the Rental and Community Programs at the time (B.A. 2010). The Unit was also responsible for the development of the minimum construction standards for remote Aboriginal housing delivery in Queensland (B.A. 2010). During A.A.'s time as ATSIH general manager, rental arrears (four weeks or more) fell from 36 per cent to 5 per cent across the state, which reflected ATSIH's policy of working with people rather than resorting to immediate legal action, as can be the case of current mainstream social housing in Queensland (A.A. 2010). Also, an improvement in regular maintenance regimes resulted in a direct reduction in rental arrears.

2.3 The Thursday Island Redevelopment Project

In 1996, against the backdrop of an acute housing shortage on Thursday Island, the Queensland Government, through the Aboriginal and Torres Strait Islander Housing (ATSIH) unit of the Department of Public Works, initiated a broad scale master planning process to resolve the overcrowded living conditions on the island. History shows that, at the time, Thursday Island had the state's highest recorded wait times of more than 12 years for residents applying for public housing in Queensland. Not only was there an inadequate supply of housing, but local infrastructure had also exceeded its capacity, raising health concerns. Accordingly, the Thursday Island Redevelopment Project was established in partnership with the Torres Strait Regional Authority (TSRA) and Torres Shire Council (TSC) 'to upgrade, replace and develop new housing and infrastructure, which would provide the basis for developing safe, secure and more culturally appropriate housing in the community'.¹¹

There was a great need for housing on TI at this point. For example, one of the existing reserve houses had 21 people living in it ... in the end this family was allocated 12 bedrooms spread across a number of houses with bedroom allocations falling under the State's Allocation Policy for household numbers. (M.B. 2010)

The conditions were particularly poor with, for example, families in one community living in one-bedroom accommodation that had been constructed as temporary accommodation during the war. One resident said to us: "Please don't paint my housing inside anymore because it just reduces the space even more." The same tenant took us to see white ants falling into the baby's basinet. (R.P. 2010)

The initial reason for choosing the Thursday Island Redevelopment Project as a case study lay with A.A., the former general manager of the Aboriginal and Torres Strait

¹⁰These functions included tenancy and asset management, regional construction centres, apprenticeship program, and the Unit's policy advisory role on the national committee for Building a Better Future.

¹¹Department of Housing, (QLD) 2001 'A Review of the Thursday Island Redevelopment Project', Aboriginal and Torres Strait Islander Housing, p.2.

Islander Housing unit in the Department of Public Works.¹² A.A. recommended TIRP on the basis that it was one of the most positive housing projects he had been involved with in his 25 years working for Queensland and Australian Governments on Indigenous projects. A further reason for choosing TIRP related to the scale of its development and the overall relevance to a number of the specific 'capitals' we have been seeking to elucidate through this research. TIRP delivered 69 additional houses, 55 replacement houses and 113 upgraded homes, and accounted for the employment of 383 people and the training of 49 people, but not all of these were of Aboriginal and Torres Strait Islander descent.¹³ TIRP had a complex social and cultural agenda and is one of the most successful housing and infrastructure delivery programs ever undertaken in a remote Indigenous community in Queensland. The process by which TIRP was established arose as a direct reflection of the policy agenda of the then Minister for Housing and Public Works, Ray Connor. At the time there were 15 communities on Thursday Island with seven under serious housing pressure. (I.D. 2010)

Minister Connor had a statewide policy of reducing waiting times for public housing and ensuring wait times were similar across the State. It was notable that he did not differentiate TI, as a remote, primarily Indigenous community. When presented with the data on wait times and overcrowding he said "What will it take to bring TI wait times down to the state average". We did the numbers and identified a dollar amount to build the required houses. Given the shortage of freehold land, the poor condition and overcrowding on Reserves, limited infrastructure (water is an ongoing issue in the T.S.) and the high level of sensitivity in the community about housing issues, we advised the Minister that a planned approach was needed that resulted in the best long-term benefit for the community, including maximising local employment and training opportunities. This seemed like an ideal opportunity to demonstrate good and integrated social and physical planning. (R.P. 2010)

In accordance with the Minister's stated aims that funding would be committed to TIRP on the proviso that a planned approach to housing would be put in place, a consortium consisting of a town planner, a cultural heritage consultant, an engineer, architect and quantity surveyor was formed to assist ATSIH in the design, documentation and project management of the development (I.D. 2010). Accordingly, through the TIRP consortium, an extensive project brief was developed by the department, to guide the redevelopment strategy. In consultation with key stakeholders, including local community members, the Torres Strait Regional Authority, Island Coordinating Council and various state government departments (DNRM, DPWH, DH, DTMR, DPI), this briefing document 'examined the opportunities and constraints in relation to the potential physical, social and environmental impacts of the project'.¹⁴ The aim of this initial program of consultation and planning was to investigate the desired population capacities of potential sites and the cost implications and effectiveness for 'providing and maintaining both the physical and social infrastructure required supporting such a population,'¹⁵ as well as ensuring

¹² A.A. also identified the Northern Peninsula Area (NPA) 'Healthy Housing' program completed by ATSIH in the early 2000s as another best practice example of Aboriginal and Torres Strait Islander people leading the procurement process. The Healthy Housing project saw the building of houses in Bamaga, Seisa, New Mapoon, Umagico and Injinoo in North Queensland.

¹³ Department of Housing, (Qld) 2001 'A Review of the Thursday Island Redevelopment Project', Aboriginal and Torres Strait Islander Housing, p.10.

¹⁴ Department of Housing, (Qld) 2001 'A Review of the Thursday Island Redevelopment Project', Aboriginal and Torres Strait Islander Housing, p.6.

¹⁵ Department of Housing, (Qld) 2001 'A Review of the Thursday Island Redevelopment Project', Aboriginal and Torres Strait Islander Housing, p.6.

development was staged in both an environmentally and socially appropriate manner. The investigation also identified appropriate strategies for waste, water and energy management for the designated development sites. This course of early research and consultation led to the Thursday Island Housing Redevelopment Strategy master plan which then became the basis for the implementation of the redevelopment project, and the justification for funding allocation required by the Housing Minister and Cabinet at the time.

A particular governance issue that made this possible in TI was the autonomy of the TSRA and the ability to coordinate with Australian Government infrastructure funding. Similarly the long-term commitment of housing and infrastructure funding gave credibility to the planning process because there was a commitment and the funding to implement the plan. This is most unusual and demonstrates that the overarching governance and funding arrangements have to support long-term and integrated planning. (R.P. 2010)

The selection of land available for development relied heavily on knowledge garnered during early community consultation, and involved an in-depth analysis of existing land use patterns. In the early stages of the process, the management group investigated land use patterns on Thursday Island with a principal focus on the state-owned reserve land, zoning and available infrastructure and services (I.D. 2010). Due to the historical neglect in procuring appropriate housing numbers up to that point, the reserve communities were also those in greatest need of new and refurbished/upgraded housing and infrastructure services such as sewerage and water supply (I.D. 2010). The reserves were also those areas of Thursday Island with the closest traditional and family links to communities on the outer islands of the Torres Strait; thus, the potential for a wider positive impact on the whole region. The auditing process resulted in development being undertaken in those areas requiring urgent housing assistance in the first stage of TIRP. The close relationship and the goodwill that had developed towards the project during the initial phases of the project resulted in the Torres Strait Regional Authority gifting a large parcel of land on Pearl Street for incorporation into the redevelopment project. In addition to the Pearl Street allocation and the existing reserve land, the Queensland Government also purchased property on Douglas Street and undertook the removal of the existing houses to make way for the new housing stock proposed on the site. (A.A. & M.B. 2010)

2.4 Project planning strategies

An internal review into the project carried out by Aboriginal and Torres Strait Islander Housing in November 2001 pointed out that the first stage in project planning was project identification involving problem definition and the plausibility of project design. Problem definition involved understanding the potential issues influencing the long-term outcomes for the project, and included:

1. the external environment relating to broad community consensus, standards and public opinion
2. the internal environment involving knowledge of the local cultural context and the enormity of the sub-standard housing conditions present at the time
3. the political priorities of the funding authorities in place at the point of project inception. Consideration of these issues then assisted the plausibility of project design through the formation of an original consultancy brief which outlined the main objectives, the issues to be considered (as detailed above), and a timeframe for implementation.

Before initiating the broader master planning process, ATSIH formed a Housing Redevelopment team¹⁶ based in Brisbane to oversee and coordinate the various government departments involved in the project. According to a number of interviewees, the success of TIRP began with good communication and coordination between the various government stakeholders themselves (A.A., M.B., B.A. & I.D. 2010). One of the first steps in project management was the establishment, by the Redevelopment team, of a Program Management position to ensure project administration was in accordance with the stated aims of the Housing Redevelopment Strategy (B.A. 2010). The Program Manager's role involved coordinating the entire process from early strategic decision-making to community liaison, training and employment through to project completion. This role was also complemented by the activities undertaken by the Regional Manager (B.A. 2010) of ATSIH's Northern Construction Division who oversaw the delivery of the project on Thursday Island.

... the governance and delivery arrangements were important. Having a Brisbane based team that could lead coordination of state agencies and act as a conduit between the state and the local cross agency coordination structure was critical. It was also important that this was supported by Management of delivery by Bob Allen in Cairns who had a long history and knowledge. It was also important to have the local office with Caroline Cloudy who had such a good knowledge of community issues and could feed them into the process. (R.P. 2010)

Furthermore, in organising the higher level management strategy for the TIRP, the ATSIH Redevelopment team chose a two-tier management structure comprising of a first-tier Steering Committee¹⁷ made up of representatives from various government departments and agencies including ATSIH, DPW, ATSIPD and DFYCC; and a second-tier Community Reference Group comprising the TSRA, TSC, the TRAWQ Community Council, the Kaureg Land Council, members of the Waiben, Aplin, Tamwoy, Rose Hill and Quarantine communities, an Environmental Health Officer and a Social Planning Consultant. According to a number of interviewees, adoption of this innovative two-tier organisational structure resulted in improved communication between government and the local community, clearer role definitions and responsibilities among the various individuals, and speedier resolution of stakeholder problems. Regular Steering Committee and Community Reference Group meetings were held which led to an enhanced relationship between all stakeholders leading to greater respect for local social and cultural values, recognition of stakeholder concerns and the general goodwill of all participants towards the project.

2.5 Project management and staging strategies

In addition to the two-tier management strategy described above, an incremental and staged approach to development was called for so as to reduce the level of inconvenience to local residents while the project was being implemented. This approach also resulted in better inter-agency coordination with regard to general service provision. Additionally, the division of this large-scale project into smaller parcels that could be staged (four stages in total) accordingly resulted in greater control of contract conditions, monitoring of project outcomes and also the ability to

¹⁶ Comprised of A.A., M.B. and B.A. (B.A. 2010).

¹⁷ The Steering Committee was made up of Alex Ackfun, General Manager, Aboriginal and Torres Strait Islander Housing ATSIH; Melda Boundy, Manager Program Development ATSIH; Robert Allen, Regional Manager, Northern Construction ATSIH; Tony Martens, Program Officer ATSIH, Caroline Cloudy, Team Leader, Thursday Island Area Office ATSIH; Brian Sheehan, Far North Area Manager, Department of Housing; Bob Moorish, North Queensland, Property Services Office, Department of Public Works; Representative from Social Impact Assessment Unit, Department of Families, Youth and Community Care.

adapt and modify project design and procurement processes as the stages progressed. Due to setting up regular (monthly) meetings and reporting procedures between the steering committee, community reference group, contractors and project managers, earlier phases of the development were constantly being evaluated for quality outcomes in order to inform the design and delivery processes for latter stages.

Furthermore, in choosing a contractual mechanism for the implementation and delivery of houses, the ATSIH Redevelopment team were guided by the Queensland Government *Purchasing Policy* (now the *State Procurement Policy*) that stipulated the use of the Traditional Lump Sum contracting for all public housing projects (A.A. & M.B. 2010). The specific form of contract used for TIRP was AS2124–1992 General Conditions of Contract, which, according to I.D., was a good choice at the time due to the scale and budget of the project (I.D. 2010). When questioned as to the potential use of other forms of contract for TIRP, such as AS4300–1995 Design and Construct, I.D. reiterated that under D&C forms of contract and due to its specific contract conditions, the project manager is never really sure of what the outcome will be on project completion; whereas there is more perceived control in the traditional construct-only building contract. A.A. and M.B. stated that the regular reporting procedures called for in the AS2124 contract assisted with the reporting processes back to the Steering Committee which greatly assisted the planning of future stages of the project.

In order to achieve TIRP's major objectives, an accelerated program of building activity was called for. Given the overall positive outcomes of the project, it is interesting how such an accelerated timeframe enabled this to occur. On reflection, the majority of interviewees stated that the relationships developed between government and the local community through good consultation practices and liaison was crucial in facilitating this outcome via an efficient communication strategy. Furthermore, having C&B Group as the lead consultant working in parallel with ATSIH as one point of contact for the government, made the administration of TIRP much simpler (I.D. 2010). I.D., head project manager for C&B Group, reported that ATSIH were an extremely professional organisation, and that without ATSIH's local knowledge and experience in Indigenous communities and their relationship-building exercises on Thursday Island, TIRP may never have eventuated. (I.D. 2010)

A number of interviewees reported that due to the size, scale, cultural complexity and remoteness of TIRP, there was a lot of initial resistance to the project at the executive level of the Queensland Government. In order to alleviate this concern, the Redevelopment Team evaluated that the best process to manage political risk was to break the project into smaller, more manageable components (A.A. & M.B. 2010). Consequently, the master planning design work and engagement of sub-consultants occurred in May and June 1996 with the community consultation and final design, including construction documentation, completed in the six months to December 1996.

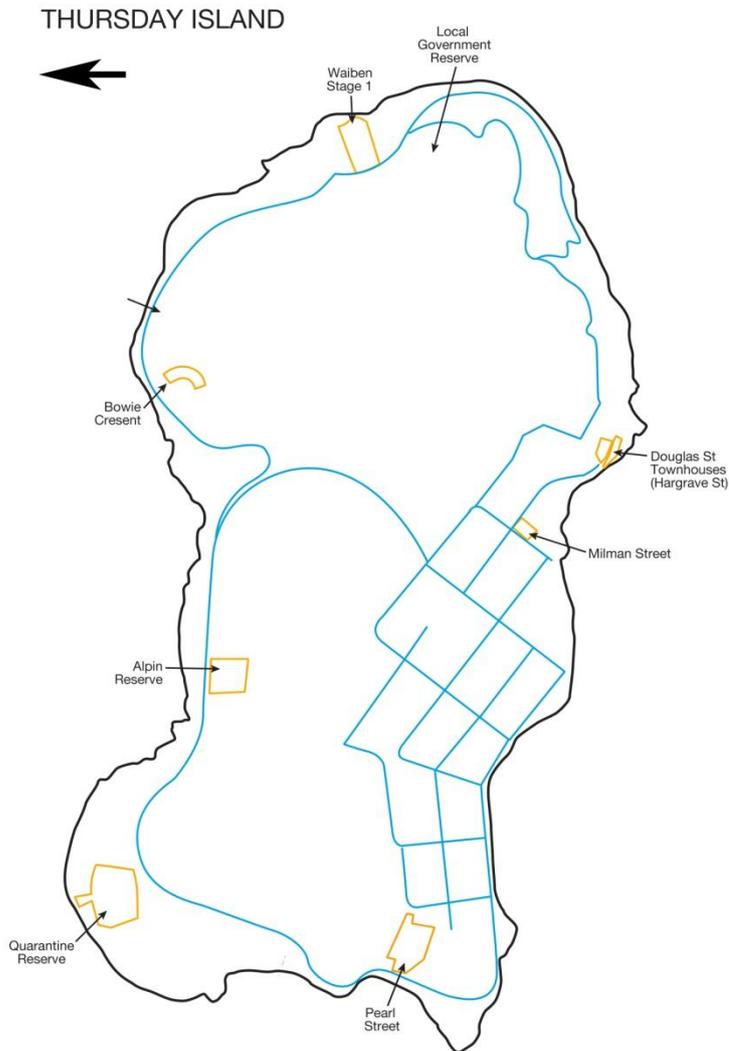
2.5.1 TIRP staging strategies

I.D., on behalf of C&B Group, oversaw the master planning of the initial Stage 1 of the project, including consultant engagement, design documentation and construction. He also sub-contracted to a number of local Cairns-based architects to design and manage the contract administration process. In terms of actual staging strategies, TIRP was broken into four stages:

1. Stage 1—the construction of 14 houses at Aplin Reserve (see Table 2), four houses at Rose Hill (Bowe Crescent) and 14 demountable houses on a site nearby to Aplin.
2. Stage 2—the construction of 24 townhouses at Pearl Street, four townhouses at Milman Street and eight houses and two duplexes on the Waiben Reserve.

3. Stage 3 included 18 houses at the Quarantine Reserve, 19 further townhouses at Pearl Street and ten townhouses at Hardgrave/Douglas Street.
4. Stage 4 incorporated the upgrade of 15 individual houses at various locations on Thursday Island.

Figure 4: Map of Thursday Island showing the location of staged packages of the Thursday Island Redevelopment Project



Source: AERC 2010. Graphic extracted from Map of Project Stages for TIRP by C&B Group.

The information for each stage is detailed in Table 2 below.

Table 2: The four major stages of the Thursday Island Redevelopment Project illustrating the specific details of each stage of the project

TIRP CONTRACT STAGES AND BUDGET								
	No.	Types	Contract Awarded	Contract Completed	Contract Amount*	Cost / Unit	Project Manager	Building Contractor
Stage 1								
Aplin Reserve	14	Duplex & detached houses	7/07/1997	30/01/1998	\$3,483,476	\$248,820	C&B Consulting	Cordukes Ltd
Rose Hill (Bowe Crescent)	4	Detached houses	9/09/1997	27/03/1998	\$902,223	\$225,556	C&B Consulting	Peter Frazer Sunacco
Stage 2**								
Pearl Street Stage 1	24	Townhouses		3/08/1998	\$4,758,315	\$198,263	C&B Consulting	Cordukes Ltd
Waiben Reserve	8 houses 2 Duplexes	Duplex & detached houses	27/03/1998	9/11/1998	\$2,499,213	\$249,921	Project Services Consortium DPWH	Cordukes Ltd
Milman Street	4	Townhouses	19/04/1998	7/09/1998	\$832,561	\$208,140	Project Services Consortium DPWH	Peter Frazer Sunacco
Stage 3								
Quarantine Reserve	14	Detached houses	N/A	30/06/1999 est.	\$4,931,552	\$352,254	C&B Consulting	Cordukes Ltd
Hargrave / Douglas Street	10	Townhouses	N/A	N/A	\$2,349,998	\$235,000	C&B Consulting	Peter Frazer Sunacco
Pearl Street Stage 2	19	Townhouses	30/10/1997	28/09/1998 est.	\$4,419,360	\$232,598	Project Services Consortium DPWH	Cordukes Ltd
Stage 4**								
Replacement houses	12	New houses			N/A			Peter Frazer Sunacco
	3	New houses			N/A			Clark Homes
Upgrades	22	Existing houses	c.1999		N/A			Peter Frazer Sunacco
Upgrades	91	Existing houses			N/A			Q-Build
TOTAL \$24,176,698								

N/A - Not available

* Including most civil and building works, consultants' fees (including project manager) as well as additional variations to the contract. Figures do not include building certification and demolition costs.

** Managed by Project Services Consortium, DPWH (Information obtained from RTI: Ref (Project Services Thursday Island Redevelopment Program — Status Reports))

Additionally, to provide accommodation while their existing reserve houses were being replaced, and so not to further exacerbate accommodation pressure on Thursday Island families at Aplin Reserve, 14 demountable homes were constructed near the site before construction.

Aplin was completely demolished so these people would have nowhere to go (except to further crowd other areas of TI) if the department had not provided alternative accommodation and relocated households to it. This village was also used to house people whose homes were demolished in subsequent stages. The need for temporary accommodation was considered from the beginning because the Department's policy was to relocate/rehouse tenants when the department withdraws dwellings from its portfolio. (M.B. 2010)

I.D. reported that Stage 1 proceeded well which assisted in generating a large amount of community goodwill for the rest of the redevelopment stages (I.D. 2010). M.B. reported that this goodwill included the gifting of land by the TSRA for the Pearl Street development in Stage 2. Under probity pressures from the Executive, ATSIH retendered the project management services for Stage 2 of TIRP (I.D. 2010). Unfortunately, due to a lack of knowledge of local context and project history, the Stage 2 building contracts were not run as well as those in Stage 1 and resulted in the reinstatement of C&B Group's services for all subsequent stages of the project. This further exemplifies the importance of longevity in participation and the necessity of continued corporate knowledge in projects of such scale and complexity.

Due to the staged approach to the development, there were varying time periods for each individual contract, however a review of the project details illustrates that the majority of major building contracts were carried out between a six and nine-month timeframe. The local building contractor, P.F., won the tender for the smaller housing packages, while the larger contracts were tendered to external large-scale companies from Cairns. Overall, there were minimal extensions of time given to awarded contracts. In relation to cost variations, both I.D. and B.A. reported that these were also kept to a minimum with the only issue arising towards the end of the final Pearl Street contract whereby the building contractors claimed an additional \$2 million in contract sum variations on top of the \$4 million construction cost (I.D. 2010). The project proceeded down the legal route and settled for approximately \$100 000, 18 months after the project had reached final completion. Additionally, there were no variations claimed by the local building contractor and the construction contingency was not used. (P.F. 2010)

2.6 Capitals of the TIRP procurement process

2.6.1 Social and governance

According to all interviewees, one of the major positives to emerge from the TIRP procurement process was the high level of community consultation evident in the project. The initial two-tier management system of Steering Committee and Community Reference Group was set up to improve stakeholder communication and consultation in all layers of the project, from Cabinet whose decision it was to provide the funding, to those delivering housing on the ground, and the end occupiers. B.A., ATSIH's regional manager at the time, saw good communication between these groups as the key to delivering positive outcomes for the project. (B.A. 2010)

There were project steering committees on the Island and in government which resulted in a good overall process. By engaging people in the community in the process, the resultant outcome is improved significantly. The community, through the TSRA, donated land to the project which resulted in a sense of ownership over the project. (M.B. 2010)

As discussed previously, in choosing the various locations for development, the TIRP team relied heavily on consultation with community and local government authorities, the ICC, the TSRA, TSC and members of the local community through the CRG. The fact that there was significant local input into the project, not only at a strategic level but also at the level of delivery and design, resulted in a sense of community ownership over the project. Organised and administered by Caroline Cloudy, each reserve community had its own Residents' Group, which resulted in further dissemination beyond the formal CRG and Steering Committee. The local media through the actions of then radio personality, Wayne See Kee, played an important role in information dissemination (A.A. & MB 2010). Consequently, the main participants in TIRP were regularly interviewed on local radio regarding project-related issues and objectives, progress updates were given and the community were encouraged to call in with suggestions etc. (A.A. 2010). This engagement was not fleeting and continued for the term of the project. Furthermore, this consultation exercise was able to draw out a number of important local cultural practices that were then incorporated into the design parameters for the project. For example, how people lived with activities such as boat storage, places to clean fish etc., were all taken into consideration. (A.A. & MB 2010)

Additionally, this extensive community consultation process had a major positive impact on the overall quality and longevity of the project. Not only did it assist with ideas, the continual communication was able to raise awareness of potential conflicts before they occurred. According to M.B., being one of the earliest stages of the redevelopment project, the Aplin Reserve subdivision had more time spent on focused community consultation and design master planning which resulted in a very good outcome, evident to this day. (M.B. 2010)

On returning to Thursday Island some ten years after its completion, the author can attest that the housing delivered through TIRP, and especially the Aplin Reserve, is still of a very high quality when compared to the remainder of the Thursday Island housing stock. The only housing parcel from the original redevelopment that appeared to be in a current state of moderate disrepair was the Pearl Street townhouses which appeared to be suffering from overcrowding. According to local Mayor, Pedro Stephen, who was a local Council representative for TIRP, the Pearl Street townhouses were originally for old people but as there is no current housing program on the Island, young people have moved in with families, so issues with overcrowding and noise have risen (P.S. 2010). It was also one of the first project stages and was designed for greater density in an attempt to quickly reduce housing stress (A.A. p.c. 2010). The authors note that if there had been a continual staged process of housing renewal and provision since the completion of TIRP, then Pearl Street may not be in such an overcrowded state. One outcome of the Pearl Street project was the adjustment of future TIRP stages to include bigger yards and more communal space. (P.S. 2010)

Figure 5: Image showing the current layout of the Pearl Street duplex housing in June 2010



Source: James Davidson (2010).

Furthermore, one of the most important components of the consultation process was the engagement of architect Bruce Clark of Clark and Prince, Cairns, as part of the original project consortium. This early involvement of a design professional, in consultation with the end-occupiers, resulted in the tailoring of house designs in accordance with community needs and values. For Stages 1 and 3, the outcome was the design of four standard detached houses for the reserve sub-divisions, each with the possibility for slight modifications to suit individual family situations (I.D. 2010). Houses were also designed for their site and climatic condition, with single one-room width floor plans for cross-ventilation. All duplex houses were built with concrete slab-on-ground construction for disabled and elderly access while the majority of detached houses were two-storey, built on timber posts which could be built-in underneath at a future date, if required (I.D. 2010). It eventuated on post-completion of TIRP, that the majority of the clearway spaces under the two-storey houses functioned as family gathering spaces for singing, dance and religious discussion. (A.A. 2010)

Figure 6: Image from June 2010 showing a house in the Quarantine Reserve



Note: two-storey detached housing with space underneath the house for cultural activities to take place.
Source: James Davidson (2010).

Figure 7: Image showing both single-storey duplex and double-storey detached housing located at Aplin Street taken in June 2010



Note the retention of established trees, a direct request from the local community.
Source: James Davidson (2010).

Running in parallel with the early cultural liaison carried out by the C&B Group, the architect and the community representative in driving the consultation process were the social mapping and household surveys carried out by Gordon Grimwade, the consortium's lead social scientist (A.A. & M.B. 2010). Grimwade's widespread social mapping paid dividends as the project progressed. The redevelopment team were able to synthesise Grimwade's information with the requirements of ATSIH's Housing Allocation Policy which set guidelines for numbers of bedrooms per house in accordance with the age and gender of its occupants. (I.D. 2010)

2.6.2 Training and employment

Results of the interview process illustrate that one of the most successful components to the entire TIRP program were the training and employment outcomes achieved for local Torres Strait Islander people. Official figures show that 383 people were employed, and 49 people began their training during the TIRP program, but not all were of Aboriginal and Torres Strait Islander descent. The training program involved a range of activities including apprenticeships and vocational certificate courses. The training and employment of local Indigenous peoples was called for as part of the contract conditions, however, the practicalities of incorporating these terms were left up to the individual contractors as employers. It was reported that, at the time of original tender, one of the main building contractors originally said that they would employ local people, but in fact flew their own people in from Cairns (I.D. 2010). In contrast, the local building contractor did employ local labour and had a number of apprentices on his two projects; however, due to the short timeframes and discontinuity between construction stages, none of the local apprentices completed their apprenticeships during the TIRP program (P.F. 2010). Once TIRP had finished, the majority had to seek traineeships elsewhere, for instance in QBuild. (P.F. 2010)

Furthermore, while adherence to contract conditions calling for local training and employment was not always assured, the majority of training and employment outcomes on TIRP arose in large part due to the formation of a local government-sponsored training organisation—TRAWQ. As part of their commitment to the training outcomes for local people, ATSIH, through QBuild, also ran their own training scheme, having seven or eight Aboriginal apprentices working on the TIRP program. According to B.A., the majority of CDEP labour was used to clear sites and construct fencing and driveways with QBuild providing the materials for the program. On a positive note, B.A. reports that some labourers and apprentices gained ongoing employment and apprenticeships with QBuild once the project had finished. The training outcomes for TIRP took a great deal of time and energy to organise, with an imperative being that all key stakeholders were drawn into the process. B.A. estimates that it took over a year to organise the training arrangements for the TIRP program (B.A. 2010). He also stated that the ongoing success of the training program was due to good communication between local, state and federal training authorities.

In discussing the TIRP project, a number of relevant observations arose regarding the viability of training and employment strategies in Indigenous communities. B.A. was responsible for ATSIH's training programs prior to it being disbanded and has since been involved in the employment and training of Aboriginal people in the private sector. One of B.A.'s main concerns regarding training practices in the construction industry related to the current funding scenario for apprenticeships which sees government providing financial support for three out of the four years of an apprenticeship. B.A. stated that, in his experience, this partial funding stream resulted in building contractors accepting the government support and then retrenching those young people when the funding ran out after the third year, resulting in many Indigenous apprentices not seeing their apprenticeships through. (B.A. 2010)

According to B.A., in the Queensland context, the previous ATSI Housing Unit had a policy to support Indigenous apprentices whereby on completion of their apprenticeships, newly qualified carpenters were assisted in finding employment with QBuild. 'ATSIH had an 80 per cent success rate for apprentices seeing their training through to completion and registration.' He also mentioned that some of the previous ATSIH apprentices are currently foremen in communities such as Doomadgee and serve as role models for local children. B.A. made one further observation in relation to the role and value of CDEP in association with training and employment programs in remote communities. He stated that if organisations have a desire to implement an

apprenticeship program in a given community then it is important to engage with young people before they are exposed to CDEP programs as, in his opinion, CDEP work programs can result in a poor work ethic due to welfare dependence. 'Normally, kids wanting to do apprenticeships are keen and will not want to be on CDEP'. (B.A. 2010)

2.6.3 Health capitals

There was one aspect of TIRP that almost all interviewees thought could have been implemented better and that was the understanding of the social context surrounding the under-reporting of disability in the Thursday Island community. Interestingly, there was a lot of initial resistance from locals to the single-storey houses due to a lack of space for boats and other cultural activities such as feasting, dancing and cleaning fish etc. The reason for this was not immediately apparent, and became more so as the houses in Stage 1 began construction. For example, due to disabilities being under-reported in TI, the redevelopment team had no idea of the extent of disability access needed for most of the houses. This became one of the biggest issues as the project progressed and resulted in subsequent stages being redesigned and earlier stages of the project being retrofitted for disability access. Apparently, the reason for not reporting the level of disability in the community was the local fear of being deemed ineligible to receive housing due to being disabled. For example, the project team reported that they had no idea that 11 out of the 19 families in the Waiben reserve had family members with a disability until the project had already begun. (A.A. & M.B. 2010)

According to B.A., TIRP was a seminal project in the establishment and upkeep of the ATSIH Construction Minimum Standards document termed a 'live document' subject to continual refinements as more practical information came to light regarding processes and material products. The ATSIH Minimum Standards document was designed to offer alternatives for the different areas and climatic regions of Queensland. In terms of hierarchy, it took precedence over the Building Code of Australia and was specifically developed for Indigenous housing in urban, regional and remote communities (B.A. 2010). The ATSIH document eventually became a major component of the National Indigenous Housing Guide as members of the ATSIH unit were part of the national working group in charge of designing the NIHG. (A.A. & M.B. 2010)

2.7 Recommendations for procuring housing in remote Indigenous communities

In reflecting on the TIRP housing process, a number of key findings arose that are relevant to future procurement in remote or specifically very remote townships like Thursday Island consisting of substantial Indigenous populations, alongside non-Indigenous populations. These findings not only hold direct relevance to projects of a similar size and scope, but those of smaller scales as well. As stated previously, the main emphasis of this investigation was on the positive outcomes and lessons learned in best practice scenarios that could be carried forward into future housing procurement in remote communities. Thus, the following discussion focuses on the positives, and the potential improvements arising from the case study analyses. Due to the semi-structured nature of interviews, the following discussion presents points of general relevance to housing procurement in remote Indigenous communities, not limited to the Thursday Island Redevelopment Project. Furthermore, leaving open the possibility for divergence away from the main discussion points, resulted in a much more fruitful exchange regarding the general state of housing procurement and how it can be improved in remote communities.

2.7.1 Major positives arising from TIRP

When questioned as to the major positives arising from the TIRP process, there were a broad range of answers given by interviewees dependent on the level of their scope and involvement in the project. Analysis shows that all interviewees saw the deep involvement of the community, through consultation, as the major positive in the project. The fact that house designs and land selections were tailored to community needs generated an important sense of community ownership over the TIRP process. From their level of strategic involvement, A.A. and M.B. saw the reduction in public waiting lists and the overall increase in quality housing on Thursday Island as another major positive. AA also stated that he was particularly happy that overcrowding had been reduced by homes of an appropriate size for family needs (A.A. 2010). 'The original aim was to reduce public waiting times to less than four years and hold them; we were successful in that.' (A.A. & M.B. 2010) From his management perspective, B.A. saw the training and employment outcomes for the local community as another positive arising from the project, and believed that good training management could definitely be carried forward into future housing delivery strategies. (B.A. 2010)

The way to implement it is to sit down with the main local, state and federal government stakeholders—DEETA, CDEP, Centrelink and discuss what is proposed in order to get everyone on board with the idea. This takes a long time. For the TI project it took at least a year to organise. (B.A. 2010)

B.A. also saw the refinement of the minimum construction standards initially developed by ATSIH and eventually leading to its incorporation in the NIHG as another positive outcome from TIRP that had specific relevance to future housing procurement (B.A. 2010). Furthermore, there was general consensus among all interviewees that the main reason that these positives arose during TIRP was ultimately through good communication between all stakeholders and participants in the process, from the Steering Committee to the involvement of local media through to the Community Reference and local Residents' Groups. An internal review of TIRP by ATSIH resulted in two clear recommendations for future projects. The first was the adoption of the two-tier organisational structure which they believed clearly contributed to the success of the Thursday Island Redevelopment Project, and the second was the extent and continuity of community consultation that was an integral part of the project. ATSIH itself concluded that consultation with residents should be consistent and directly monitored by the Steering Committee (ATSIH Review, p.16). As R.P. confirms:

It may be useful to recognise that there are aspects of the governance and funding arrangements in the Torres Strait that made this approach more feasible than it might be in other communities. In particular the expertise and autonomy of the TSRA were important in allowing a partnership approach and coordination of infrastructure. Also the expertise and the authority of the ATSIH unit at the time enable us to be fairly influential within State government while at the same time understanding the local community issues and being able to engage with the community. (R.P. 2010)

Furthermore, all interviewees reported that the continuation of consultant involvement and knowledge of the process was very important to the long-term success of TIRP. With regard to project management strategies, I.D. saw the TI process of a two-tiered system of management as suited to that form and scale of project, however, he also made the point that not all housing procurement in Indigenous communities is of such a large scale and therefore would require a different approach to project management. In addition, I.D. confirmed that there was a greater economy of scale in building large numbers of houses than one-off houses in remote communities as preliminary

expenditure (such as establish and set up costs) could be spread across a larger number of units (I.D. 2010). I.D. did not agree with drip-feeding housing supply over many years. (I.D. 2010)

In terms of contracting for construction services in remote communities, I.D. stated that it was always better to try and let building contracts to local contractors than non-locals due to their knowledge of local context and history (I.D. 2010). This also assisted in raising the capacity of a given place and its people. Furthermore, A.A. and M.B. stated that if there was a skills shortage in a given community then the program for deployment of housing should take this into consideration. Following a similar argument, I.D. stated that one of the main problems he saw in remote communities, was that Indigenous people and organisations were asked to do things outside their experience levels, and due to a fear of losing funding, or not receiving it in the first place, they accepted terms and conditions beyond their capacities (I.D. 2010). Similarly, A.A. recommended that if a skills shortage existed in a specific location, it may be feasible to stage or scale a project so as to up-skill local people in building future capacity. This would be on a community-by-community basis as no two communities have the same social, economic or cultural situations (A.A. & M.B. 2010). A.A. also thought it was possible to achieve this through an alliance contracting methodology whereby either/both government and private building contractors entered into a partnership contract with local Indigenous people to achieve a particular outcome. (A.A. & M.B. 2010)

2.7.2 Potential improvements in TIRP

In relation to potential improvements in the TIRP procurement process there were a range of different responses. A.A. and M.B. stated that, in hindsight, there was a lack of experienced local building contractors on the Island from which to draw. This led to the contracting of an external building company, which brought in their own labourers and carpenters from outside the community and did not lead to longer-term capacity building for local people (A.A. & M.B. 2010). Future processes would need to evaluate the potential skill base in the given community in order to appropriately manage the development of local expertise in a meaningful way. Furthermore, as discussed earlier in this report, A.A. and M.B. reported that greater understanding and awareness of local disability issues, especially the level of potential non-reporting, was necessary (A.A. & M.B. 2010). Additionally, they also thought that greater awareness of local context and cultural fears existing in communities when dealing with government agencies was important to consider for future procurement processes (A.A. & M.B. 2010). I.D. talked about one home where the tenant was so afraid of being moved out that he planted the most beautiful rose garden in order to keep his house tidy. He had moved back to TI to live because he received a house and didn't want to lose it. (I.D. 2010)

From I.D.'s perspective, an improvement could be made to government procurement processes in relation to the timing and urgency of procuring housing within a short timeframe. For example, a lot of problems are caused when all design, documentation and construction of a given project is required within a given financial year. To explain this situation, I.D. used the example of the Pearl Street Stage 2, where 'in August of 1997, the government allocated funding for the project and by December that year the project had to be designed, documented and tendered, then the 19 houses were expected to be built by the new financial year when the funding cycle began again—a savage process' (I.D. 2010). I.D.'s opinion was that more recognition needed to be given to the conditions of geographic remoteness and seasonal (climatic) variations in such isolated environments (I.D. 2010). It appears that to tie these regions into the same funding cycles as mainstream procurement systems in less remote areas results in undue stress and strain on those not only procuring the product, but also the

quality and standard of the final product when the delivery has been rushed to meet funding obligations.

Furthermore, I.D. thought that a separate site inspector on the ground for each stage/package could have resulted in better management during TIRP. His opinion was that remotely administering a project (from Cairns in this situation) created problems when monitoring the actions of a commercial building contractor on the ground in the community. Remote administration resulted in much less awareness of potential problems which could easily have been resolved but went unnoticed or unreported until the opportunity for rectification had passed. There was also less incentive for building contractors to report problems if remote administration is occurring. The employment of a separate site inspector would have resulted in greater administration costs to the project; however, considering one of the stages during TIRP became a legal issue, I.D. thought the money would be well spent to ensure greater awareness of areas for potential conflict. (I.D. 2010)

One further area that I.D. thought could have been better managed was the servicing of infrastructure, such as water and sewerage for TIRP. He stated that due to the accelerated timeframe necessitated at the strategic level, the provision of services had not been decided upon until very late in the process, which caused a number of onsite coordination problems. This also resulted in confusion over which entity was actually responsible (TSRA or ATSIH) for service provision and eventual ownership. (I.D. 2010)

Moreover, another area of concern for I.D. was government processes of deciding building contracts based on tendered prices alone. I.D. felt that the government predilection for proceeding with the lowest tenderer in all cases was problematic. He proposed that a better option would be to not only evaluate initial tender prices but also final contract sums and time overruns from past projects, specifically analysing tendered versus final contract sums which accounted for cost variations as well as extensions of time claimed (I.D. 2010). This process would result in greater awareness of a given contractor's approach to time and cost management, as well as their track record in working with, or against, project administrators and funding authorities.

I.D. also thought that government processes of continually retendering for consultancy services can also undo projects given that, as they progress, more knowledge of project scope is known by existing consultants with a resultant increase in fees (I.D. 2010). However, on the flip side, as the project progresses, greater knowledge of project scope can lead to potential longer term savings, whereas, the potential savings on consultant fees can backfire later in the process, as happened on TIRP between Stages 1 and 2.

P.F., building contractor for three of the nine TIRP construction parcels, agreed with I.D.'s assessment, stating that evaluating projects on completion was a good idea so that good builders can be picked or given precedence for projects based on final prices rather than falsely attempting to win projects based on tender prices and then recouping losses through variations during the contract. He made the point that, due to his local knowledge and expertise, he did not claim the contingency on the projects he built, whereas builders from outside the community presented a \$2 million variation on a \$4 million project. He felt there was no reward for those builders who showed expertise in management that directly benefited and enhanced project quality and saved money at the same time. He also stated that due to its procurement and contracting policies, the government missed out on the potential for value for money through developing capacity in remote areas. He stated that there was no incentive for

a builder to improve or enhance the quality of a given project if there was no reward for successful completion and bettering projected targets. (P.F. 2010)

P.F. discussed the importance of evaluating projects on completion so that good builders can be picked or given precedence for projects based on final prices and their good project management (P.F. 2010). In his opinion, government processes of constantly tendering for each new project or stage does not take into consideration a local builder's knowledge in such remote environments. In retrospect, I.D. also felt that the majority of the building work for TIRP should have been tendered to local building contractors rather than external builders, simply due to their better grasp of local climate, social conditions and cultural context (I.D. 2010). Although, members of the redevelopment team have stated that there was a distinct lack of large-scale building capacity on Thursday Island at the time.

2.7.3 Additional considerations

While not a specific focus of the TIRP analysis, a general discussion arose during the interview process as to inappropriate procurement systems for remote communities. One of the main areas for concern related to the apparent over-reliance by government agencies on transportable and prefabricated buildings as a solution to providing large numbers of houses in remote Indigenous communities within a short timeframe. The majority of those interviewed saw advantages in the system regarding speed of delivery and subsequent installation; however, a number of Aboriginal respondents questioned the cultural appropriateness and long-term construction quality in remote contexts. For example, A.A. stated:

If you were an Indigenous person in a remote community and you were given a house which came on the back of a truck and was not tailored to your needs or lifestyle (being too small etc.) would you feel respected? Would you find it easy to respect that house and what it represented? Transportable buildings are not going to work due to lack of consultation in their design and their lack of quality construction. (A.A. & M.B. pers. comm. 2010)

It appears that while transportable housing delivers a quick fix, short-term solution that may suit the policy frameworks of certain jurisdictions for the rapid supply of large numbers of houses within a short timeframe to Aboriginal communities, they also present a possible long-term exacerbation of the unmet demand they are meant to alleviate.

2.7.4 Final statement on the TIRP case study

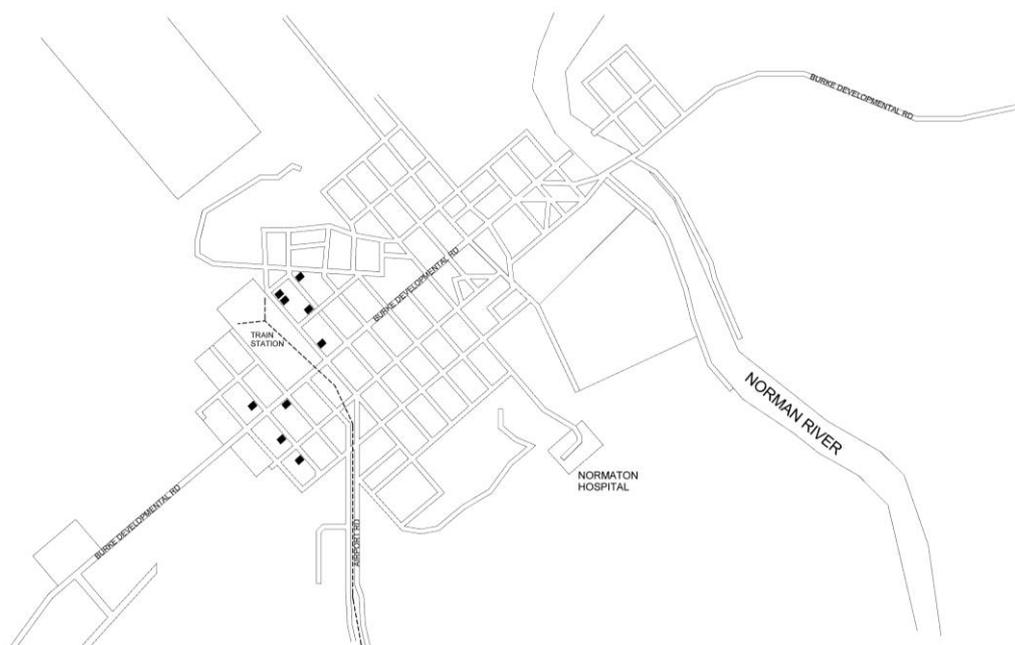
Taking the above case study analysis into account, it appears that the positive incorporation of Indigenous social and economic capitals into the housing procurement process was the direct result of good administrative processes at national, state and local government levels. The central role of the ATSIH unit throughout the TIRP process cannot be understated and illustrates that while linear contractual processes such as lump sum traditional forms of contract were used, they did not restrict the incorporation of particular capitals during the housing delivery process. This goes to show that contractual processes are simply a reflection of their governance processes, therefore, good governance structures at the higher levels in TIRP led to excellent outcomes on the ground in the community. Furthermore, best practice consultation processes and cultural mapping at the grass-roots level resulted in greater awareness at the level of government. The value of the TIRP case study illustrates that government systems can produce best practice housing outcomes in remote Indigenous communities; however, in saying this, the design of the procurement system needs to reflect meaningful strategic management and community engagement processes in order to produce such good outcomes.

3 CASE STUDY: NORMANTON (QLD)

3.1 Introduction

Normanton is a small cattle town on the Norman River in northwest Queensland. The town itself was established in 1867–68 as the principal port for the southern Gulf of Carpentaria, northwest Queensland and the Barkly Tableland. Its prosperity peaked with the Croydon gold rush in the mid-1880s and declined once the railway from Townsville was connected no further than Cloncurry to the east; further decline occurred in the 1960s with the introduction of cattle-train trucking technology. Although it continues as a local pastoral centre, Normanton is no longer a wealthy town. Most of its economy is derived from servicing its large Aboriginal population which, according to the 2006 census, was 661 people out of a total population of 1100.¹⁸ The town is the administrative centre for the Carpentaria Shire Council.

Figure 8: Map showing the location of NAHS housing procured during 1997–98 in the township of Normanton



In terms of local Indigenous history, there is evidence of at least three town camps for different Aboriginal tribal groups being established on the outskirts of Normanton by the turn of the 20th century. This number had expanded to at least six by the 1920s. The Kukatj and Kuthant people to the west were dispersed in camps on the southwest side of town, while northern groups, such as the Kurtjar, occupied camps to the north on the opposite side of the Norman River. The Normanton Reserve was gazetted in 1948 around a town camp known as the Ridge Camp and a set of compound buildings were later constructed there. Humpies also continued to be built and occupied on the Normanton Reserve during the 1960s and early 1970s. During this period, government houses were constructed in town for the town camp and compound residents, with their humpies being removed during the period 1968–75.

¹⁸ Australian Bureau of Statistics (25 October 2007). 'Normanton (Urban Centre/Locality)'. *2006 Census QuickStats*. <http://www.fahcsia.gov.au/sa/housing/progserv/affordability/affordablehousing/Pages/NPA> Retrieved 1 September 2010-09-01.

3.2 Overview of Bynoe CACS¹⁹

During 1972–74, the Normanton community informally established its own housing organisation 'Bynoe'. This was precipitated by the establishment of the Commonwealth Office of Aboriginal Affairs which later transformed into the Department of Aboriginal Affairs, to be eventually incorporated under the current banner of FaHCSIA. This department offered housing grants to those Aboriginal groups who were prepared to become incorporated under the newly established simplified Commonwealth legislation for forming incorporated Aboriginal Associations. Nevertheless, the Bynoe Community Advancement Cooperative Society (BCACS) Limited was eventually to become registered under the state's *Co-operative and other Societies Act 1967–74*. In April of 1975 the Aboriginal community of Normanton held a General Meeting to elect Bynoe's first Board of Directors. Consequently, Bynoe CACS Ltd. was officially incorporated and purchased an initial stock of two houses. Over the last 35 years, the Cooperative has grown steadily to the point where today Bynoe CACS Ltd manages a wide range of community development and support programs. As stated in their constitution, the main goals of the Bynoe organisation are:

- To form an organisation which shall unite all Aboriginal and Torres Strait Islander peoples in working for the betterment of such people in attaining lasting and effective economic and social standing within the community in the preservation of Aboriginal and Islander culture.
- To promote and provide a better community family and personal life for Aboriginal and Torres Strait Islander peoples and others who desire to avail themselves of the services offered.
- To promote knowledge and understanding of the special problems of Aboriginal and Torres Strait Islander peoples in cultural and social welfare fields.
- To co-operate with, organise or provide community services for Aboriginal and Torres Strait Islander peoples to supplement other services.
- To collect data and conduct research into matters relating to community, family and personal issues relating to matters associated with Aboriginal and Torres Strait Islander problems.
- To bring matters affecting social, health, education, culture, recreation, employment and welfare of Aboriginal and Torres Strait Islander peoples before the public, and to the attention of appropriate authorities.
- To provide measures to improve areas of needs identified above.
- To co-operate with other organisations and persons with a view to assisting Aboriginal and Torres Strait Islander peoples to obtain social welfare and other services.
- To promote measures in such services to improve relations with Aboriginal and Torres Strait Islander peoples.
- To conduct training courses for volunteer workers and employees of the society to enable them to assist in carrying out the objects of the society.

Furthermore, in 1990, Bynoe CACS Ltd. became the management body for the local Community Development Employment Program (CDEP) to Normanton. Through close liaison with the Carpentaria Shire Council and the local private sector, Bynoe has undertaken a planned approach to training and employment for a large number of

¹⁹ This description has been previously published in 'From the Curry to the Weal: Aboriginal Town Camps and Compounds of the Western Back-Blocks' in *Fabrications*, The Journal of the Society of Architectural Historians, Australia and New Zealand, Volume 7, 1996.

Aboriginal people in Normanton. Currently, Bynoe comprises of a Board of 10 Directors and is structured into a series of portfolios including: Child Care, Enterprise Tourism, Burial/Reserve/Land, Health/APH, Education/TAFE, CDEP, Media, Women's Issues, Youth Recreation, Housing, Training/MIGATE/Employment and Social Justice/Legal Issues. Decisions by the Board are communicated via the President to the Chief Executive Officer (CEO) for implementation. Answerable directly to the CEO are the Financial Controller (responsible for accounting and office staff), Community Development Officer and Project Management Consultant (responsible for CDEP and Building Program). In addition to the CDEP program, Bynoe CACS Ltd currently administers a wide range of programs including:

- Management of housing stock and vacant land.
- Homemaker program.
- Training and apprenticeships schemes.
- Aged Persons Hostel (Kukatja Place).
- Various sport and recreation programs including the annual 'Gulf Carnival'.
- Cultural awareness program.
- Various welfare, health and counselling programs in conjunction with other departments.
- Emergency relief program.
- School tuckshop catering program.
- Equipment hire enterprise.

With regard to housing services, Bynoe aims to have its housing controlled and managed solely by Aboriginal people to a consistently high standard of administration in also providing low cost housing to Aboriginal people.

3.3 Overview of NAHS

The National Aboriginal Health Strategy (NAHS) was developed in 1989 by the Federal Government to oversee the delivery of Aboriginal housing and infrastructure in Australia. Originally funded together with the Community Housing and Infrastructure Program (CHIP) administered by ATSIC, the larger-scaled NAHS program was dismantled in September 2006 when CHIP became part of the Commonwealth Department of Families, Community Services and Indigenous Affairs (FaHCSIA). As a capital works program, NAHS focuses on improving environmental health conditions in indigenous communities across Australia in providing housing, water, sewerage, power, drainage, local roads and tip facilities. Since 1996, the consulting engineering and project management firm, Arup Ove Arup Pty Ltd (Arup), has been the Program Manager overseeing the delivery of the NAHS Environmental Health Program in Queensland, the Northern Territory and New South Wales. As the Program Manager, Arup's main responsibility was to oversee the progress of each project while providing support to the grantees (community members) as well as monitoring the work of the individual Project Managers engaged to administer each project. In administering the project, the Project Manager oversees design consultation and superintends construction contracts on behalf of the grantee community. History shows that the majority of NAHS housing programs were procured using a select tender, lump-sum contract methodology, controlled on a community-by-community basis by Indigenous Community Housing Organisations (ICHOs).

3.4 Project planning strategies

The Normanton NAHS project was initiated to alleviate environmental health concerns relating to overcrowding and the poor standard of some of the Bynoe CACS Ltd houses. According to Arup's Final Completion Report (Q079), Queensland Health had raised major health issues concerning ineffective sewerage disposal through the existing septic tank and absorption trenches at most dwellings.²⁰ This was particularly evident through the wet season when its proximity to the Norman River saw the local water table rise resulting in inefficient subsoil percolation. In November 1996, Bynoe CACS was offered an NAHS housing grant of \$2 420 000 to assist in addressing these concerns by constructing ten new houses, in addition to major renovations to a further ten existing houses and the connections of 80 properties to the proposed town sewer system. The current authors were unable to establish the basis on which these numbers were chosen as the completion report states that two additional houses were also identified as needing major renovations but were unable to be completed within the scope of the NAHS project at the time.²¹ Due to being the local housing and tenancy manager, Bynoe CACS Ltd determined which vacant land was available for the siting of new houses and which houses were in the most need of renovation. The available land was then leased for 99 years from the Queensland Government with the project funds covering the land cost. (G.P. 2010)

3.5 Project management and staging strategies

In April 1997, after an initial EOI and then select tender process, ARUP appointed JCR Evans Architects based in Cairns as the project manager for the NAHS housing. JCR Evans were engaged to design the houses and administer the building contract with architect Gayle Plunkett, their representative on the ground in Normanton. Initially, the Bynoe Housing Cooperative applied to Arup to build all ten new houses. However, after a full skills-register of the community was submitted to the project management team, it was decided that Bynoe only had the capacity to build four houses and that the remaining five should go to a mainstream building contractor from outside the community (F.P. 2010). In addition to the four new houses, Bynoe CACS Ltd was also given funding for the refurbishment of six additional houses. As the Bynoe Housing Cooperative was not a registered building contractor in its own right, the project management team, along with Bynoe, interviewed a series of QBSA registered builders who were willing to be directly employed by Bynoe and effectively 'loan' the Cooperative their building licence. The reason Bynoe were not able to apply for their own building licence lay in the society's constitution whereby all members assumed any risks associated with the Cooperative's activities. The Directors of the Housing Cooperative themselves also had to give financial guarantees to the Building Services Authority which was deemed too great a risk due to problems associated with building activities in remote areas. (G.P. 2010)

According to G.P., the project management team initially investigated using the Bama Ngappi Ngappi Aboriginal Building Company from Yarrabah near Cairns to assist Bynoe, however the problem was a lack of experienced staff capacity and the team were afraid that Bama Ngappi Ngappi would be stretched too thin on the ground if having to also work in Normanton (G.P. 2010). In consultation with the PM team, Bynoe then proceeded to interview a number of potential builders, eventually settling on Laurie Bowater (L.B.), a registered builder from Townsville (G.P. 2010). Both Bynoe and L.B. had hoped that a long-term relationship would develop with ongoing

²⁰ ARUP, *Normanton Housing: Final Report*, National Aboriginal Health Strategy—Environmental Health Program (NAHS—EHP), prepared for FaCS.

²¹ ARUP, *Normanton Housing: Final Report*, National Aboriginal Health Strategy—Environmental Health Program (NAHS—EHP), prepared for FaCS.

projects once the initial round of NAHS housing was completed. However, this long-term relationship did not eventuate and Bynoe today remain without an open building licence (F.P. 2010). In addition to the carpentry work, Bynoe also had a joinery operation with the capacity to take on the cabinetry subcontracts for the NAHS housing.

Figure 9: A current photograph of the NAHS housing constructed in 1997–98



Source: James Davidson (2010).

In November 1997, the tender to construct the remaining five non-Bynoe houses was won by Tenni and Arbouin (T&A) Pty Ltd of Atherton, north Queensland. According to G.P., T&A were a well-organised, hands-on, small building contractor who completed the project with minimal fuss (G.P. 2010). T&A's management of the Normanton project saw Arbouin as the site administrator whose role was to set up camp in the community and establish early site works, with Tenni the project estimator and manager/administrator. T&A subcontracted to local Normanton-based tradespeople (plumbers & painters) and hired the heavy equipment necessary for the project from Bynoe. L.T. stated that one of the most difficult issues in Normanton was finding appropriate accommodation for their building team; they were to eventually hire a two-bedroom donga and caravan which was set up in one of the local backyards. T&A's team comprised three non-local carpenters for the main house construction, and two labourers from Bynoe's CDEP program. The CDEP labourers assisted with the construction of driveways, landscaping, fencing and some joinery. T&A chose not to use the CDEP labour for carpentry as they had skilled carpenters on their work crew and training was not a direct requirement under their contract (G.P. 2010). In addition to the Normanton project, T&A were also building NAHS houses at Doomagee and Mornington Island.

Arup's Completion Report shows that the Bynoe and T&A houses were all procured using the AS2124-1992 traditional lump sum building contract. According to G.P., this form of contract was chosen as it suited the small-scale nature of the project (G.P. 2010) The first package of five houses was awarded to Tenni and Arbouin on 21 November 1997 and completed (handed over) on 3 August 1998 with the remaining four new houses and six refurbishments awarded to Bynoe on 27 February 1998 with the work completed on 25 September 1999. The five T&A houses were built simultaneously which, according to L.T., was the most efficient sequence. For

example, concrete could be poured on the same day across the five houses, and materials could be ordered for all houses at the same time. The Bynoe houses were also constructed in sequence with the first three built simultaneously and the fourth at a later stage (G.P. 2010). The refurbishments were staged prior to the four new builds so as to alleviate housing need through minimal disruption to tenants over a shorter time frame. There were no cost variations applied for in either contract, and the only extension of time occurred on the Bynoe project in response to delays associated with training and employment objectives. According to G.P., the builder assisting Bynoe, L.B., worked to keep house costs down through an open book process where he disclosed all project costs to the Bynoe Board. Bowater did not take any profit from the project and worked altruistically towards the project in supporting its desired community outcomes (G.P. 2010). Further details on L.B.'s role are presented in a later section of this report.

Table 3: Table showing the details of the Normanton NAHS project 1997–98*

<i>Contractors</i>	<i>House No.</i>	<i>House types</i>	<i>Contract awarded</i>	<i>Contract completed</i>	<i>Contract amount*</i>	<i>Cost / Unit</i>
Tenni & Arbouin	5	Detached houses	21/11/1997	3/08/1998	\$920,700	\$184,140
Bynoe CACS	4	Detached houses	27/02/1998	25/09/1999	\$705,900	\$176,475
	6	Renovations			\$418,000	\$69,667

* Including all civil and building works as well as additional variations to the contract.

On returning to the community some ten years after the completion of the NAHS housing, the authors can report that the majority of homes remain in very good condition. Only one house appeared in significant need of repairs. In giving feedback on the house designs, Bynoe's housing manager reported that most tenants would have preferred carports to have been constructed as part of the original scheme so as to shade vehicles and double as covered outdoor gathering space. Also, another problem reported in the house designs was the location of wet areas (laundry & bathrooms) near the front entrance. Apparently, tenant complaints have resulted in more recent Bynoe housing being designed with carports, and laundries and bathrooms at the rear, away from the more public areas of the house. (BHM 2010)

Figure 10: A current photograph of the NAHS housing constructed in 1997–98



Source: James Davidson (2010).

3.6 Capitals of the Normanton NAHS procurement process

In undertaking an investigation of the capitals incorporated into the Bynoe NAHS housing, the current authors were limited by the original work scope of the housing program. For example, due to the small-scale nature of the original project, it was only possible to identify social, cultural, governance and training and employment capitals for discussion and further analysis. In supplementing this lack of broader information regarding procurement ‘capitals’, the case study author encouraged interviewees to give additional recommendations in relation to delivering housing in remote Indigenous communities, which is presented in a subsequent section of this analysis.

3.6.1 Social and cultural

In terms of community engagement, house designs were workshopped with the Bynoe Board rather than prospective tenants (G.P. 2010). The architect/project manager met with the Bynoe Board on three occasions over a period of six weeks with meetings comprising the presentation of models, design documentation and visits to house locations. Due to their role as tenancy managers, the Bynoe Board acted as the community reference group in the decision-making process, meeting on occasions with prospective tenants to discuss the configuration of house plans and associated needs. Prospective tenants were selected by urgency/need rather than political allegiance with Bynoe, although all recipients were members of the Bynoe Cooperative (G.P. 2010). Due to the small-scale nature of the project, there were no public meetings organised to discuss the project. This consultation process led to three standard designs consisting of: 1) a special needs house (for either two families living together or groups of young people sharing) with four bedrooms and two bathrooms; 2) a second house with three bedrooms where each room could be separately locked to assist privacy for extended/nuclear family situations; and 3) two additional three bedroom houses for nuclear families. According to G.P., the standardisation of house designs was the result of strict budgetary requirements (G.P. 2010).

3.6.2 Governance and leadership

According to both the project manager and the mainstream builder, the successful outcomes of the Normanton housing project owed a lot to the good governance structures within the community, specifically the Bynoe CACS organisation and its board members. During the interview process, the importance of good quality leadership was discussed on a number of occasions, with special mention being made to the role of Fred Pascoe (F.P.). During the Normanton NAHS project, F.P. was the chairperson of the Bynoe Housing Cooperative and local shire councillor. At the time of writing, he held the position of Mayor of Carpentaria Shire Council. G.P. reported:

The Bynoe Board were a switched-on group of people who knew what they were lacking and acted accordingly. They had a huge input into the overall management of the NAHS project and gave all support when requested. The strength of the whole Bynoe project was Fred Pascoe. He was the leader who supported the training and employment side of things and implemented the skills register of qualified and interested community members. (G.P. 2010)

In discussions with Fred Pascoe, it was reported that the biggest reason for the overall success of the Bynoe NAHS project was due to Bynoe having control of the funding for the project. F.P. reported that having control over the funding enabled Bynoe to be flexible and strategic with the administration side of the project and gave the Cooperative a greater sense of stability in approaching their project management in an innovative way that suited their remote context. They were not tied down to a particular methodology and way of doing business and could design the procurement system to support a number of additional needs and local enterprises. F.P. stated that Bynoe employed L.B. on a decent salary and ran the project as a professional building contract (F.P. 2010). He was disappointed that the program did not develop into a longer term building program for Normanton and reported that if Bynoe were to do the NAHS housing again today they would push for a four to five year program to support training and capacity building. The longer time frame would also bring financial security to the Bynoe organisation. (F.P. 2010)

Furthermore, F.P. reported that another major disappointment of being an Aboriginal organisation in a remote community is missing out on potential work. He stated that this had occurred on a number of occasions over the last ten years, with external contractors being favoured in lieu of Bynoe. For example, in 2006 Bynoe were overlooked for an NAHS kitchen refurbishment project even though they had the capacity within their local cabinetmaking enterprise. In lieu of being contracted to supply and install the 70 flat-packed kitchens, Bynoe were instead engaged to remove the building rubbish on the completion of the project. Furthermore, an additional problem with the kitchen project was the disruption it brought to the existing tenants of the social housing being refurbished. According to F.P., many families were upset with the disruption while the work was being undertaken. He maintained that had Bynoe been engaged on the project, they would have better managed the disruption due to their understanding of the social context involved in tenancy management services. (F.P. 2010)

3.6.3 Training and employment

Since the completion of the project in 2000, all post-construction maintenance has been controlled by Bynoe through their local CDEP program. It was their management of CDEP that led to the direct targeting of training and employment through the NAHS process. Contractual clauses pertaining to the training of local community members were written into the Bynoe contract but not into the Tenni and Arbouin contract (G.P. 2010). The reason for this difference lay in the different expectations attached to the

procurement process. Bynoe for example, had a definitive desire to see training and employment outcomes for local people and informally challenged the legitimacy of time restrictions under the contract, whereas T&A abided by their strict time requirements to complete their contract. L.T. remarked that 'it was easier to get the job done in the timeframe required by the government than spend the time organising training' (L.T. 2010). He also questioned the value of training in light of short contractual timeframes, given that better knowledge transfer occurs over longer periods of time, being accumulative and easily forgotten if continuity is disrupted. (L.T. 2010)

In some places, the building contract was for six to eight months and we were asked to train Aboriginal people, but what happened after we left? There needs to be continuity of work to maintain and build a work ethic. We tried to bring blokes down to work in Atherton and other Aboriginal communities so as to get the continuity, but they didn't want to leave their home community. It takes a significant time investment to incorporate meaningful training into projects. (G.P. 2010)

Bynoe's commitment to training was no more evident than in the time investment of builder, L.B., who not only lent his licence to the Housing Cooperative but also organised the TAFE training accreditation for the CDEP labourers (G.P. 2010). Laurie personally gained a TAFE training certificate so as to mentor on site, as well as oversee the mandatory school-based modules. He also organised a TAFE literacy and numeracy module as part of the mandatory requirements for the theory-based assessments. According to ARUP's Completion Report, there were 13 trainees and two apprentices working on the project, with the result being that two carpentry tradesmen received qualifications, while four others received Construction Level 1 Certificates and three more attained improved construction skills that would count towards future recognition of prior learning (G.P. 2010). This is interesting as the project manager reported that only the painting apprentice completed his trade certificate as he had already attained three years of prior learning (G.P. 2010). The authors were unable to ascertain how and why this discrepancy occurred. Furthermore, interviewees reported that on such short timeframes it was difficult for trainees to see their apprenticeships through, with most having experienced prior learning but were unable to gain enough practical experience over an extended period of time for there to be meaningful knowledge transfer. G.P. stated: 'There is a real need for programs that last at least four years so the trainees can see their training through and become fully certified carpenters in their own right' (G.P. 2010). Due to this lack of consistent full-time employment on the NAHS program, many of the carpentry trainees maintained additional employment:

Most of the blokes training to become carpenters were also musterers from Delta Downs. One of the guys went on to the Century Zinc mine to work, but I'm not sure what became of the others. It was really hard to get people into long-term apprenticeships as this project only lasted 18 months. As a general observation, it's important to make sure that the guys are doing things (construction systems and methods) that they will do again and again. It is also important not to experiment too much as it is hard to control, plus people don't generate the appropriate skill level in one particular activity. (G.P. 2010)

In being the local CDEP manager, Bynoe have been impacted by the Federal Government's changes to CDEP rules. As of 1 July 2009, all CDEP participants now register with Centrelink for payment. The negative in this for Bynoe is that previously all CDEP participants were managed directly by Bynoe which meant greater accountability and management of participants whereas now, participants sign on with Centrelink and then attempt to avoid participation in Bynoe work-related activities.

This has resulted in a major drop in CDEP participation on Bynoe programs from 120 to 55 people currently in the program, resulting in a labour shortage at times for many of the basic services that Bynoe offers. Bynoe's operation is run professionally with a 'clocking in and clocking out' system to monitor a given person's time. Bynoe's housing manager mentioned that some of the CDEP participants have worked with their program for more than ten years, so to now register with Centrelink and start the interview and training process again would be a difficult undertaking for many long-term CDEP participants. It is the author's understanding that Bynoe have been given assurance by the Federal Government that all existing CDEP programs will remain funded as long as they have registered participants. Furthermore, Bynoe are now not permitted to add any further participants to the program, and if any CDEP participant chooses to leave in favour of Centrelink then Bynoe lose that individual's funding. (BHM 2010)

3.7 Recommendations from NAHS Bynoe for housing procurement in remote Indigenous communities

In reflecting on the Bynoe procurement process, a number of key findings arose that are relevant to future housing procurement in remote Indigenous communities. These findings hold direct relevance to projects of a similar size and scope to the Bynoe NAHS housing. Based on their experiences either during the NAHS Normanton project or broader remote housing procurement, interviewees were asked what perspective they could bring to future housing procurement activities in remote Aboriginal communities. Thus, the following conclusions begin with G.P., project manager, move through L.T., building contractor, and finish with F.P., ICHO chairman.

3.7.1 A project manager's perspective

According to GP, many of the problems she had seen in remote housing projects were the result of a lack of understanding by the funding authorities to the diversity and complexities of procuring housing in remote regions. One of the major areas for concern was the perception that all remote communities required a 'one size fits all' scenario and were treated as such through: tight budgetary and contractual time constraints; ill-considered training and employment requirements in communities with insufficient worker numbers or no existing labour scheme; an over-reliance on 'minimum design standards and guidelines' which are inappropriate to a given cultural and environmental setting, among others (G.P. 2010). Additionally, G.P. was also critical of an apparent continual experimentation that occurs in remote Indigenous settings, including the testing of the latest design and technical solutions when many best practice examples already exist in remote communities, having been tested in previous generations in similar conditions (G.P. 2010). In terms of project management strategies, G.P. stated that for projects of a similar scale to the Bynoe NAHS housing, the current method of calling for an expression of interest (EOI) prior to a select tender process was the best situation as it assisted administrators in thoroughly checking the facts and details, namely referees, previous projects and the capacity of those applying to tender. (G.P. 2010)

According to G.P., one of the most difficult avenues for an ICHO in a remote community was first attaining, and then retaining, an open building licence. A lack of such would lead to the Bynoe situation whereby the organisation had to rely on an individual person, typically from outside the community, to loan their building licence for a given project. This situation was not ideal as it resulted in the disempowerment of the ICHOs in self-determination and increased risks related to potential conflicts as the project proceeded. GP stated that even when the builder lending the licence, such as L.B. on the Bynoe NAHS housing, approached the project from an altruistic position of working to benefit the community, there were increased risks related to the

physical and emotional burn-out of that individual given the amount of time and energy needed to procure a complex project. For instance, G.P. reported:

Towards the end of the project, Laurie the Bynoe builder got burnt out as he was doing everything for the Co-op. He also got bogged down in the paperwork for the project which resulted in a falling out with the Bynoe Co-op and Board. He should have had help with the administration side of things but was unable to receive this as there were no systems set up to assist with this. (G.P. 2010)

The discussion above raises another avenue for consideration; that of mentoring Indigenous organisations in order to capacity build staff skill levels and knowledge within that organisation. Mentoring would play an important role in mitigating the effects of organisations in remote communities being asked or required to take on responsibilities outside their existing skill set.

The best situation for procurement is if you can get a good local builder on the ground in the community to team up with an Aboriginal builder in a mentor role and also have the capacity for training to feed into that. (G.P. 2010)

Furthermore, an additional area for concern related to CDEP labour being used on government build projects. G.P. believed that in order to generate a better work ethic and build capacity in remote communities, CDEP labourers should be paid at commensurate levels as per the apprenticeship rules and not less. She also stated that CDEP was good when properly organised. In her experience, Bynoe was one of those organisations she believed to be a professional organisation when it came to running its CDEP programs whereas in other communities (not named), a lack of organisation had led to problems. G.P. stated:

In Indigenous communities, a strong foreman on projects is really important, someone who is willing to see the project through at any cost. For example, driving around the community making sure the labourers turn up to work. If he's Aboriginal himself then that's the best situation, someone they respect. (G.P. 2010)

3.7.2 A building contractor's perspective

Les Tenni (L.T.) of Tenni and Arbouin Pty Ltd has over 20 years experience working in Aboriginal communities. He retired from Aboriginal work in 2007, preferring to build in his home community of Atherton in North Queensland (L.T. 2010). In working in remote communities, L.T. and his team would travel from Central Queensland to the Torres Strait Islands and into the Northern Territory. They chose to work in remote communities for the lifestyle and connection to the bush. In Aboriginal communities, T&A had the following rules for their work crew: 1) could drink beer but not spirits; 2) never give alcohol away; 3) never fraternise with local women; 4) no marijuana; and 5) no fighting. Apparently, the more remote the work, the easier it was to control these rules. Workflow was typically six weeks on the job and one week off, working 10 hours a day, six days a week. As L.T. stated, 'If you're going to work in the bush you have to be a hands-on person, otherwise it's never going to work'. (L.T. 2010)

In order to work efficiently in remote communities, T&A had their own concrete batching plant, backhoe, bobcat, tip-truck and semi-trailer. Their aim was to be completely self-sufficient. L.T. reports T&A knew which communities were easier to work in than others, and such was their experience, they could price refurbishment projects without having to enter the house. For example, in Mornington, T&A knew to cart their own brick material from Atherton whereas to work in Doomadgee during the wet season, they had to truck supplies to Gregory Downs and then fly the rest of their gear into Doomadgee. For this purpose, T&A had their own plane for wet season work

when the roads were flooded, which according to L.T. was a huge advantage over other building contractors who had to rely solely on road transport, which meant it was important to have all materials into communities before the rains began. T&A's policy was to continue to work through the wet season and use their plane if needed. (L.T. 2010)

L.T. reported that the government funding cycle made organisation very difficult for building contractors as funds would be delivered in September of a given year with the result that the project had to be designed, tendered and initiated before the wet season began in December. The typical completion timeframe for projects was a financial year, so work begun in December one year was required to be completed by June the following year. L.T. reported that this process placed a great deal of stress on all participants, from the program/project managers through to the designers, builders and subcontractors. He stated that the short contractual timeframes gave no incentive for mainstream contractors to include training and employment capitals in their overall work agendas. Furthermore, in discussing training capitals, L.T. advised:

In relation to training and employment, the government should consider that instead of, say, building 1000 houses, they should build 700 and use the difference to employ local labour and develop skills in Aboriginal communities—and do not put time limits on contracts. If the government wants to improve the training and employment of Aboriginal people in remote communities, then they should not put time limits on builders in building contracts. The builders should be given an opportunity to state a timeframe which takes into consideration the time needed to employ local Aboriginal people and implement training programs. (L.T. 2010)

Furthermore, in his experience in remote communities, L.T. reported that the majority of government start-up meetings had called for the use of local labour as much as possible; however, this was typically not enforced or audited during the construction period. L.T. stated that if building contracts did call for the use of local Aboriginal labour, he would typically add a contingency of \$50 000 to the contract to cover time delays associated with organising training. In addition, L.T. reported that if the local employment component was not being checked against contract conditions, then a lot of builders could easily take advantage of this situation and increase profits by not actually employing local Aboriginal people, even though they had costed this into their tender. He stated that, in some communities, the builder's contingency could be less if local people had a good work ethic, resulting in less risk for the building contractor and economic savings for the project's proprietor. (L.T. 2010)

In discussing the work ethic, L.T. underscored the importance of developing role models in remote communities in order to incrementally improve the work ethic. He stated: 'if children don't see their parents working then why or how are they going to develop a work ethic? It is imperative to build a work ethic, but you can't do that if there is no work?' (L.T. 2010) L.T. gave further insight into remote community work:

Building in Aboriginal communities is not the same as building in mainstream white communities. Time is typically not an issue for Aborigines who have spent a long time on welfare payments so overcoming that is quite hard. For remote communities it is important to facilitate traditional customary behaviours and have a good work ethic as well, otherwise these communities are not going to catch up. (L.T. 2010)

In a reflection of the discussion with G.P. presented earlier, another area that L.T. thought important to discuss was preventing employee burn-out. 'A new bloke comes in and everything is 100 mile an hour, all the gear gets brought in and then they get burnt out and leave'. He stated that the long-term solution to this problem was to find

good people from within the community themselves who are committed and skilled, underscoring the importance of education and capacity-building programs in remote communities. Les also thought it was good to have architects and project managers involved in coordinating projects so as to take that responsibility away from the builder. (L.T. 2010)

3.7.3 *An ICHO perspective*

At the time, Fred Pascoe was the chairperson of the Bynoe Housing Cooperative and current Mayor of Carpentaria Shire Council. He had a number of specific views related to broader procurement issues that fell outside the NAHS specific housing case study. The authors thought this discussion was important to include in providing an important local (and ICHO) perspective on housing procurement processes in remote communities. In discussing tenancy management, F.P. reported that the Bynoe Housing Cooperative are flexible in working with tenants when they fall behind in payments, resulting in a 92–96 per cent rental collection standard. Bynoe also have a policy of managing any housing maintenance issues within 24 hours and immediately in emergency cases. Wilful damage is also charged back to the tenants. According to FP, Bynoe's good tenancy management processes have resulted in requests from some non-Bynoe public housing tenants in Normanton to move across to Bynoe housing (F.P. 2010). 'It's better to work with people versus coming down heavy on them and they leave and you don't see any of the money you're owed'. F.P. reports that this situation is much better than state housing for example, which, if the tenants are behind in repayments by two to four weeks, they can face potential legal action and eventual removal from housing (F.P. 2010). For all ongoing social housing repairs and maintenance work, Bynoe uses CDEP labour.

In terms of future building work in the region, Bynoe wanted more involvement in refurbishment projects. According to F.P., refurbishment timeframes tend to be more flexible due to the difficulty of their scope of work. This flexibility in timeframe would give greater opportunity for the incorporation of training capitals into the procurement process. Also, given their history of R&M and their CDEP management, Bynoe as an organisation are better set up for refurbishment work. The cooperative has a desire to once again employ a registered builder and start apprenticeships. Furthermore, according to F.P., the future for Bynoe lies in private and joint venture development projects. The J.V. process would assist in capacity-building and enable the Bynoe organisation to build skills in moving to eventual ownership of the original J.V. company (F.P. 2010). F.P. cited the example of Myuma Pty Ltd from Camooweal in northwest Queensland as a precedent.²² Bynoe also hopes to play a major role in the formation of a regional Aboriginal building company to service the Gulf of Carpentaria. (F.P. 2010)

As a final note with regard to Aboriginal housing in remote communities, F.P. stated that 'although government actions appear to suggest otherwise, one size does not fit all in remote Indigenous communities; there are however core principles and concepts underlying Indigenous communities that can be used in different contexts' (FP 2010). This suggests the importance of facilitating capacity building in remote communities over a long period of time and with real projects. F.P. reported that Bynoe were not interested in new build projects if they were required to construct inappropriately designed houses (being too small and not culturally sensitive) or they were asked to install one of the transportable houses currently being delivered by government in many remote Indigenous Queensland communities. In reflecting a similar position to A.A. in the previous TIRP case study (see Section 2.7.3), F.P.'s concern was that

²² Myuma Pty Ltd leveraged up from a joint venture project with the QLD Department of Main Roads.

transportable houses were not culturally appropriate and lacked quality construction, which only exacerbated social problems in remote situations. (FP 2010)

3.8 Final statement on the Normanton case study

Taking the above case study analysis into account, there appears no difference in the quality of housing procured by Bynoe as the local Aboriginal ICHO or Tenni and Arbouin as the external mainstream contractor. The only difference in project outcome was the length of time to construct the individual dwellings, with T&A taking significantly less time in reaching practical completion compared to Bynoe CACS, who maintained a definitive commitment to training and employment capitals throughout; thus, necessitating time extensions under the contract. However, case study analysis illustrates that, in terms of long-term community benefit, the Bynoe approach is superior given the training outcomes which have facilitated employment for some community members in Bynoe's ongoing repairs and maintenance program. Furthermore, the case study above has shown that for a remote ICHO to be sustainable, a diversity of economic activities and good governance structures need to be in place. Housing procurement is just one element in the overall picture.

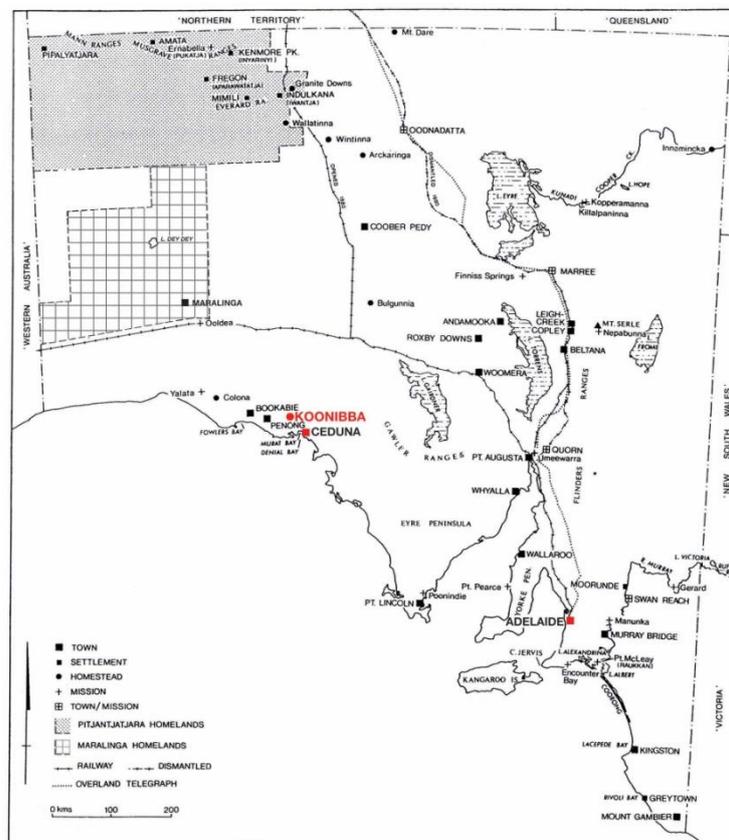
This case study has illustrated the situation at the grass-roots level of an ICHO struggling to maintain meaningful involvement in the procurement process, and showed that, with good support, the professionalism of the ICHO came to the fore regarding an understanding of local context re cultural appropriate, skills basis of community and tenancy management.

4 CASE STUDY: KOONIBBA (SA)

4.1 Introduction

Koonibba Aboriginal community is a discrete very remote settlement with a varying population of 210–250 residents. It is located 43 kilometres northwest of Ceduna and 800 kilometres northwest of Adelaide in South Australia.²³²⁴ It was established in 1899 as the Koonibba Aboriginal Mission by the South Australia Synod of the Ecumenical Lutheran Church of Australia on land leased from the South Australian Government (George 2005, Section 5:2–5:3). At this time it became the South Australian west coast depot for the distribution of government rations. Indigenous people who had pre-existing attachments to Koonibba occupied a traditional camp that coexisted with the Mission settlement until the 1940s²⁵ (DEHSA 2010;²⁶ Mattingly & Hampton 1992, p.203).

Figure 11: Location of Koonibba near Ceduna, South Australia



Source: Adapted from Mattingly and Hampton (1992, p.ii) 'South Australia' from 1836.

By the 1950s, Koonibba Mission was 'home' to one of Australia's largest Lutheran congregations, comprising about 600 Aboriginal Christians scattered over Eyre Peninsula²⁷. In 1963, the South Australian Government acquired the Mission through the Aboriginal Lands Trust, with the goal of equipping its residents for assimilation into

²³ ABS (2003, p.21) Remoteness Areas, ASGC 2001 edition.

²⁴ Web: <http://www.wangkawilurrara.com/koonibba/default.htm> Access date: 03 September 2010

²⁵ Web: <http://www.auspostalhistory.com/articles/963.shtml>

²⁶ DEHSA (2010) Showcasing SA Heritage Places. [Web: <http://www.environment.sa.gov.au/heritage/pdfs/koonibba.pdf> Access date: 29 June 2010]

²⁷ Web: <http://www.auspostalhistory.com/articles/963.shtml> Access date: 20 September 2010

the broader community (Mattingly & Hampton 1992, p.209). From 1972, management of Koonibba was taken over by the elected Council of Koonibba residents.²⁸

In 1988, the site was purchased through the Aboriginal Lands Trust and land title was formally transferred to the Koonibba Aboriginal Community (Laundy 2007, p.10) The Koonibba land parcel has remained relatively intact with the settlement site surrounded by approximately 7000 acres of land. State-owned and managed housing is interspersed with administration buildings, school, childcare centre, hall, health clinic, workshop and the old Mission Church of the Redeemer. Approximately 4000 acres are used for farming purposes and are leased to a local farmer with a percentage of the profits coming back into the community with the remaining land retained as native vegetation. (Housing SA 2009, p.6).

The Koonibba Council Incorporated (KACCI) was established in 1989 with the stated vision to establish, promote, operate and coordinate services and facilities for the advancement and welfare of the residents of Koonibba through social, educational, recreational, cultural and sporting activities (Laundy 2007, p.10). In 2008, the management of the Community Council consisted of nine elected members.²⁹ Long-term residents of Koonibba are descendants of Wirangu (alt sp. Wiringu), Gugatha (alt. sp. Kokatha, Kokata, Gugada), Mirning (alternate term Yirgala), Pitjantjatjara and other wider regional language groupings.³⁰ From its language group make-up the community has social networks that extend throughout the Lake Eyre Peninsula, west across the Nullarbor Plain and north into the APY lands.

This case study centres on the activity of the Koonibba Building Pty Ltd and its relatively low volume of building activity over the last decade. The region's procurement program consists of parcels of work, mainly small repairs and maintenance, new and replacement housing, and is funded solely from state and Commonwealth governments. A small portion of this funding is captured by a small building enterprise operated from Koonibba. This research has used a combination of desktop references along with semi-structured interviews with key individuals in government, including the current director of the Koonibba Building Pty Ltd.

This case study has also provided an opportunity to examine, in addition to procurement activity, the related procurement context in greater detail and how this impacts on employment, training and enterprise outcomes for discrete very remote communities in similar circumstances. A closer examination of macro and micro measurements of housing need has assisted in gaining a clear understanding of where gaps in meeting unmet need have occurred. These gaps in service delivery have a bearing on generating social and economic capitals, and if these gaps are significant, as indicated at Koonibba, then vulnerabilities increase. A central question that will arise in this case study is whether sufficient social capital exists in the Koonibba community's existing social networks to secure enterprise contracts in the other Aboriginal communities of the region and hence reduce its economic vulnerability.

4.2 Measuring housing need in SA

Indigenous enterprise development at Koonibba is strongly related to the social housing market operating in the region and related nearby regions. In order to understand the relationship between economic and social capitals generated from

²⁸ DEHSA (2010) 'Showcasing SA Heritage Places'. [Web: <http://www.environment.sa.gov.au/heritage/pdfs/koonibba.pdf> Access date: 29/06/2010]

²⁹ Web: <http://www.wangkawilurrara.com/koonibba/default.htm> Access date: 03/09/2010

³⁰ J.T. 02/09/2010, Mattingly & Hampton 1992, p.203, [Web: <http://www.wangkawilurrara.com/koonibba/default.htm> Access date: 03/09/2010]

procurement, this study has included measurements of housing need against these different procurement outcomes. The national macro measurement of Indigenous housing need is collated in 'Indigenous Housing Needs, A multi-measure needs model' (AIHW 2009a). Based on 2006 Census data using multi-measurement methods through the quantification of five criteria, the AIHW reports on 36 National Reporting Framework (NRF) housing performance indicators for Indigenous housing and provides projections of estimated Indigenous housing need to inform resource allocation. The five broad measures used to qualify this estimate are: (i) extent of homelessness, (ii) extent of overcrowding, (iii) level of affordability, (iv) current dwelling condition, and (v) connections to essential services (power, water and sewerage) (AIHW 2009a:ix). All these measures impact on Indigenous livelihoods. Commencing at the state level, and extracting the comparative overcrowding measure across states and territories, the South Australian rate is 11.7 per cent as a proportion of total Indigenous households by tenure type, compared with the highest rate of 38.5 per cent for the Northern Territory (AIHW 2009a, p.14). By further comparison, the proportion of moderately overcrowded Indigenous households measured by remoteness is 11 per cent in remote regions, and 33 per cent in very remote regions as a proportion of Indigenous population by region classification (AIHW 2009a, p.15).

Within the state of South Australia there are regional differences in how funding is distributed; it is comprised of broad geographic and administrative regions with the Anangu Pitjantjatjara Yankunytjatjara (APY) lands identified as a distinct region. This administrative separation of the APY Lands from other regions and remote centres is a consequence of its establishment as an independent statutory authority under the *APY Land Rights Act 1981*. By way of example, a significant funding injection was announced in 2008–09, where the South Australia Housing Trust secured an agreement with the APY Council under the National Partnership Agreements between the Commonwealth and states/territories, to meet priority needs of supply and quantity across the APY Lands and key regional centres through a negotiated lease agreement with the SAHT (DFCSA 2009b, p.9, p.35). The new agreement for a major housing program valued at \$25 million³¹ commenced with the planning of a total of 33 new dwellings, comprised of 17 in Amata and 16 in Mimili with Programd construction anticipated to commence in late July 2009 (DFCSA 2009b, p.9, p.36, p.87). This funding injection is by far the largest amount for new Aboriginal housing in any part of South Australia and the authors would argue that any Aboriginal building company who was unable to participate in the APY Program would be at an economic disadvantage. We shall return to this point when we consider the Koonibba case study in more depth. (DFCSA 2009b, p.9, p.35)

Housing SA is meeting accommodation needs across the remainder of the state through a range of programs, some of which are culturally specific. In contrast with the allocated APY budget above, the total Indigenous Community Housing Program in 2009 for the remainder of the state was \$9.912 million. However, this figure excludes allocations for SOMIH. Although a detailed examination of these other programs is outside the scope of this report, in brief, some programs appear to innovatively tackle related housing issues in a range of ways. One such program, titled 'Mobility Assistance' aims to lead to policy outcomes through AHURI sponsored research. Others include transitional accommodation centres at Ceduna and Coober Pedy, among other smaller related housing programs responding to family violence. Finally, there are provisions for Anangu visitors who are either rough sleeping or cross border visitors at the reserve in the City of Charles Sturt Council, Adelaide (DFCSA 2009b, p.36, pp.38-40, p.87).

³¹ Web: http://www.papertracker.com.au/index.php?option=com_content&task=view&id=155&Itemid=83
Access date: 14 September 2010.

Further details of replacement and new housing unit production are contained within the SA Housing, Statistical Supplement, Housing in Focus 2007–08. The Supplement reports in Appendix 1 that new housing units are recorded under broad geographic categories of ‘country’ and ‘metro’. The Appendix table includes a long-range record of output spanning from 1938 to 2008, and noting in 2007 a total of 26 detached houses where, in 2008, ten detached houses were delivered in the ‘Country’ region. This reference to ‘Country’ could possibly be interpreted to include some new builds for Indigenous people in remote and very remote discrete communities. A footnote reference on the 2007–08 Newbuild Program, notes that Aboriginal housing properties were included in this count, but were not quantified separately for reasons not stated (DFCSA 2009a, pp.80-81). The Supplement reports in Table 44, titled ‘Public, Aboriginal and community housing construction’, ranging over financial years from 1998–99 to 2007–08, notes new housing for 2007–08 was not available for Aboriginal clientele (DFCSA 2009a, pp.54-55).

The SAHT Annual Report (2009) contains data on crowded households at 30 June, 2009, noting the need for a total of 672 new housing units across all tenures in South Australia. Also, given that this projection is based on nuclear household models, some adjustment of this figure would need to occur on closer examination of the circumstances of individual communities. However, in the case of Koonibba this figure needs to be significantly adjusted upwards to tackle its unmet need. A key qualification of the State measurement of need are the specifics of existing housing stock, including (i) age of the housing stock; (ii) overall condition of housing stock, and (iii) house connection to services (DFCSA 2009b, p.41).

The Report (DFCSA 2009b) further identifies production of new housing units, as distinguished from SOMIH new unit production for Indigenous Community Housing Organisations (ICHOs) under the Indigenous Community Housing Program (IHP), with capital funding received for two new builds and 17 upgrades (1 July–31 December 2008). A further seven new builds and five replacement houses were to be completed by 30 June, 2009. Reference was made to 11 additional housing outcomes for Aboriginal housing stock which were not replacement houses (DFCSA 2009b, p.37). This output is considerably small in comparison to the measured unmet need, and appears to be consistent with low volume housing outputs across the state over several financial years preceding the 2009 APY agreement. It is difficult to conclude whether this deficiency in overall delivery is due to the Housing SA policy of decreasing state managed properties (reduced by 23% in 2009) with a simultaneous increase in Aboriginal community housing stock by 60 per cent or if this is due to a gap in meeting demand delivery (DFCSA 2009b, p.46).

4.3 Measuring housing need at Koonibba

By comparison, and moving to the specific housing information available on Koonibba, a greater need is revealed than that reflected in the State average reported in macro-measurement overview by AIHW (2009a, p.14). There are currently 45 community housing allotments at Koonibba. Two allotments are vacant with houses on 43 allotments. Five houses out of the total housing stock are derelict and unoccupied with housing stock averaging 21.4 years. A further eight houses were undergoing major upgrades and unable to be occupied at the time of this study, leaving a total of 30 functioning houses distributed among 210–250 residents. The following summary shows the construction timeframes in which the existing 43 houses were built:

- Twelve houses built in 1980, of which four were derelict buildings.
- Six houses built in the 1980s, one of which was derelict, but two marked for demolition.

- Twenty houses built in the 1990s.
- Five houses built in 2006³² (Housing SA 2009, p.16).

In order to examine the age and condition of housing stock at Koonibba, a brief government overview across the state of South Australia notes that 30.8 per cent of overall housing stock was built before 1968 and deemed *first generation*. Where *second generation* stock constructed between 1968 and 1988 comprises 44.3 per cent, and 'third generation' stock built after 1988 is 23.9 per cent (DFCSA 2009a, p.48). At Koonibba, second generation housing stock constitutes 42 per cent of the total housing stock, numbering 18 houses with the remainder being third generation stock at 58 per cent, totalling 25 houses.

Figure 12: Community housing site plan 2007, Koonibba, South Australia



Source: Department for Communities and Families (2007).

It was also notable that six occupied houses of the total housing stock had no toilets installed. Three of the houses built within the 1980s were transportable and, of these, two contained asbestos and were marked for demolition (Housing SA 2009, p.16). A table noting the total number of bedrooms available at the time of the study is provided below.

³² A.M., DFC, 15/07/2010.

Table 4: Housing with listings of numbers of bedrooms, Koonibba, SA*

<i>Number of houses</i>	<i>Number of bedrooms</i>
9	0*
2	1
2	2
25	3
5	4
Total: 43 houses	Total: 19 bedrooms

*One-bedroom house type not specified. Source: Housing SA (2009).

There was a significant under-supply of housing in Koonibba at the time of research with nine of the available 36 houses demonstrating crowding. Seventeen families occupied these nine houses and Housing SA has calculated the average crowding rate to be 27.3 per cent, and indicated that 25 per cent of the houses required one or more additional bedrooms. Adding to this need, there were three bush camps at Koonibba where people had been sleeping rough. It was estimated that the community required an additional eight houses to alleviate crowding and three more houses to address homelessness (Housing SA 2009, p.14). It is notable that if bedroom occupancy alone is used to calculate crowding rates, of the available total of 19 bedrooms, there would be an occupancy rate between eleven to 13 persons per bedroom based on the current population estimate of 210–250 persons. Thereby the calculation of occupancy crowding measured appears inaccurate.

In addition to the five new houses allocated in 2006, there were eight major upgrades with practical completion anticipated in early July, 2010.³³ It is worth noting that the houses delivered under the Community Housing Program in 2006 were not additional houses to the existing stock, but houses replacing existing derelict or uninhabitable stock. Possibly, due to the remoteness of the community, the five houses for Koonibba were bundled together from smaller annual allocations across three financial years 2003–06³⁴ in order to make the tender viable for the contractor. The perennial problem of attracting quality and reputable contractors to remote regions for small parcels of work has undermined the viability of remote housing over several decades. Similarly such small allocations also greatly affect the viability of any Aboriginal building enterprise.

The contractual method used for the 2006 houses was documented design traditional lump sum through a select tender process³⁵. The 'construct only' process in the Koonibba case study involved the proprietor, Housing SA, preparing the project intent, designs, and scope of work documents in-house. The building contract was awarded to 'Chris Vorstenbosch and Sons' on the basis of a tender submission that included a provisional sum at two per cent of the contract sum for Aboriginal training and employment. Two apprentice carpenters were employed on the project,³⁶ but they were members of the contractor's team and not local apprentices. According to a community informant, local apprentice labour employed was limited to low-skilled tasks.³⁷ According to the publication, *Employment Extra* produced by DEWR, it appears that the builder, Chris Vorstenbosch had as a part of his work team in 2005,

³³ R.T., DFC, 27/09/2010.

³⁴ A.M., DFC 15/07/2010.

³⁵ A.M., DFC 15/07/2010.

³⁶ A.M., DFC 15/07/2010.

³⁷ J.T., KBPL 02/09/2010.

two Aboriginal carpentry apprentices in the final year of their four-year apprenticeship and a first-year Aboriginal carpentry apprentice from Ceduna (DEWR 2005, p.6).³⁸

Figure 13: Locally trained tradesperson working on new housing construction at Koonibba 2007



Source: Housing SA Photograph (2007).

Another related and ongoing procurement initiative forming part of Housing SA's maintenance program across select communities is Health Habitat's program, Fixing Housing for Better Health (FHBH). The FHBH program is funded as a distinct Australian Government grant, but it is not clear if the allocation is calculated as an additional sum to the State Owned Managed Indigenous Housing (SOMIH) maintenance programs, totalling \$6.4 million (DFCSA 2009a, pp.49–55; DFCSA 2009b, p.89).

4.4 Koonibba housing procurement and related initiatives

In terms of repair and maintenance expenditures in South Australia, the Fixing Housing for Better Health (FHBH) program has provided a modest budget input in the last decade. A summary of the FHBH program in the state, including survey results from Koonibba, follows.

4.4.1 Fixing Housing for Better Health (FHBH)

The 'Fixing Housing for Better Health' initiative has been delivered to Aboriginal communities across South Australia through a contractual arrangement between the firm 'Health Habitat', the Australian Government's Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) and Housing SA (Housing SA 2009). The FHBH technical surveys focus on health and safety related measures by carrying out a program of maintenance critical to hardware function. There are three stages to each FHBH project: (i) preliminary survey and repair immediate items, (ii) first fix and secondary survey, and (iii) final fix works completed by licensed tradespersons (DFCSA 2008, p.29, p.30). The program provides employment opportunities for local community members to participate in conducting household surveys and who are trained to undertake minor repairs and maintenance not requiring qualified trades (FACSIA 2006, p.xii).

³⁸ DEWR, *Employment Extra*, Issue 15, March 2005. [Web: www.workplace.gov.au/NR/rdonlyres/CE5541B0.../EE_march_2005.pdf Access date: 31 August 2010]

In a review of the FHBH national program, FACSIA engaged SGS Economics and Planning to assess FHBH surveys completed over four years from 2001 to 2005, receiving a total funding allocation of \$9 million. The relevance of referring to this report is that it included two South Australian centres and it also assessed the skill outcomes derived from FHBH programs. Summarising the training outcomes across four exemplar diverse state and territory locations it was noted that there was an excellent skill transfer of simple fix techniques, data entry and survey check processes. However, it was concluded that long-term program uptake in skill transfer was limited by community capacity and ability to independently use skills gained in the survey process (FACSIA 2006, p.xii, p.1, p.25, pp.76–77).

Koonibba formed part of the FHBH project rollout in 2004 and its results are presented in Tables 5, 6 and Figure 14 below:

Table 5: Results survey & fix 1, August 2004—Koonibba

Safety: Power, water and waste connected	65
Safety: Electrical System	2
Safety: Gas System	100
Safety: Structure and Access to House	7
Safety: Fire Egress	0
Washing People: Shower Working	33
Washing Children: Young People basin, bath or tub	42
Washing Clothes and Bedding: Laundry services with or without a washing machine	30
Removing waste safely: Flush toilet working	44
Removing waste from all other areas: All drains working	21
Ability to store, prepare and cook food	14
Total Houses	43

Note 1: Numerical data indicates percentage of houses performing to the eleven performance criteria

Note 2: Total houses vary from survey 1: 43 to survey 2: 38.

Source: Unpublished data provided by HealthHabitat (2004).

Table 6: Results survey & fix 2, November 2004—Koonibba

Safety: Power, water and waste connected	100
Safety: Electrical System	84
Safety: Gas System	100
Safety: Structure and Access to House	55
Safety: Fire Egress	3
Washing People: Shower Working	87
Washing Children: basin, bath or tub	77
Washing Clothes and Bedding: Laundry services with or without a washing machine	87
Removing waste safely: Flush toilet working	92
Removing waste from all other areas: All drains working	82
Ability to store, prepare and cook food	28
Total Houses	38

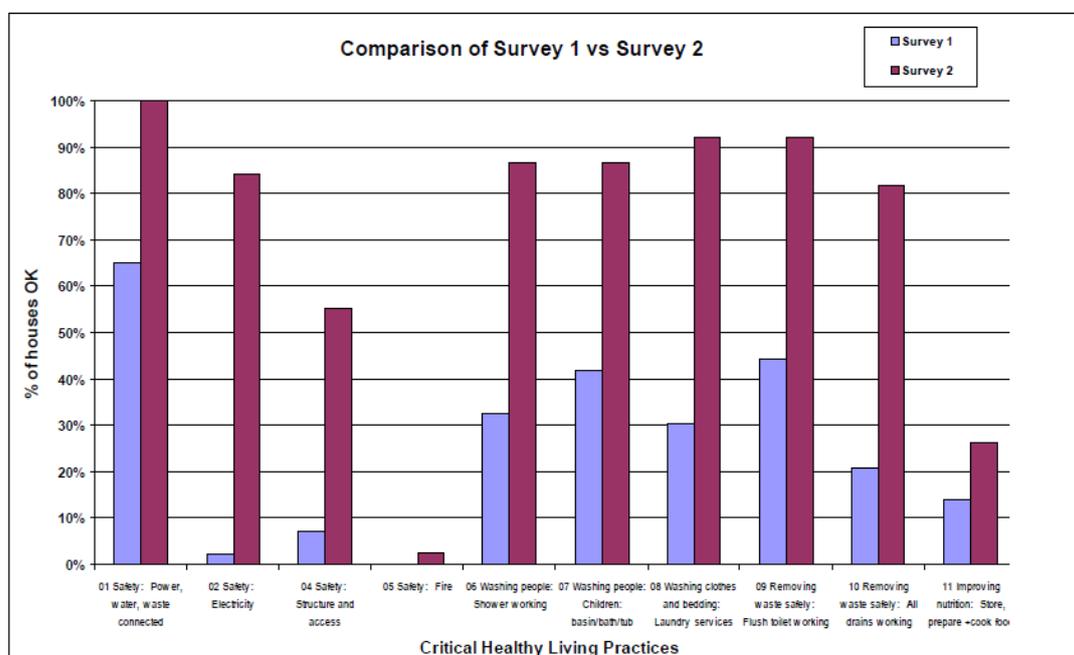
Note 1: Numerical data indicates percentage of houses performing to the eleven performance criteria

Note 2: Total houses vary from survey 1: 43 to survey 2: 38.

Source: Unpublished data provided by HealthHabitat (2004).

The comparative survey results represented in Figure 14 indicate that a substantial percentage increase in functionality was achieved by comparing the results of total houses surveyed in two different survey timeframes. However, the total houses differ between Survey 1 and 2, as reflected in Table 5 and Table 6 above, and therefore are not as lineally comparable as that implied in Figure 14 below.³⁹

Figure 14: Comparison of survey 1 vs. survey 2, Koonibba, 2004



Note: Item 03 Safety: Gas System not included in Figure 14 above.

Source: Unpublished data provided by HealthHabitat (2004).

³⁹ See Statistical analysis of FHBH Data Cubes at [Web: <http://www.aihw.gov.au/indigenous/datacubes/fhbh.cfm>. Access date: 31 August 2010]

Specifically in SA In 2007–08, FHBH projects included 84 stage 1–3 surveys on houses in Port Lincoln, Oak Valley, Ceduna and surrounding areas. Further Stage 1 surveys were completed on 121 houses across five communities in the APY lands (DFCSA 2008, p.29, p.30).⁴⁰ Later 2008–09 FHBH projects completed a total survey of 222 houses, in nine remote centres in the APY lands, and other centres in South Australia, totalling \$1.8 million with an average cost of \$8108 per house (DFCSA 2009b, p.37). The FHBH Initiative has been downsized in subsequent programs proposed for South Australia for the 2010–11 financial year to 105 surveys and the program will cease in 2012. Housing SA will then oversee a program of repairs and maintenance.⁴¹

The Housing SA Maintenance Program constitutes a major component of the investment in Indigenous housing as reported in the Statistical Supplement, *Housing in Focus, 2007–2008*. The maintenance program budget totals \$6.6 million on tenable Aboriginal housing stock numbering 1256. Of this sum, \$4.6 million was provided for responsive maintenance, \$1.1 million for program maintenance and \$0.9 million for capital maintenance that included 40 Aboriginal housing property upgrades (DFCSA 2009a, pp.50–52, p.76). Notably, for Community Housing sector properties, Housing SA does not have program maintenance, which is deemed the responsibility of the individual community housing organisation funded from individual submission of an eight-year forward maintenance plan to Housing SA (DFCSA 2009a, p.52). Of State Owned and Managed Indigenous Housing (SOMIH) properties, a total of 1018 property condition audits were conducted as part of a two-year rolling assessment between 2007–09 found that 216 (21%) properties required major maintenance attention (DFCSA 2009b, p.38).

Housing SA maintenance program targeting SOMIH properties has provided an opportunity for some remote Indigenous centres to engage in small-scale training and employment as a means of generating meaningful outcomes. Related to such maintenance programs is the former West Coast Building Training (WCBT) an accredited training initiative in the building industry by Aboriginal participants at Ceduna and Koonibba. The WCBT was led by the since disbanded, South Australian Aboriginal Housing Authority (SAAHA) (now incorporated under Housing SA (HSA)), which provided the forerunner for engagement of a handful of Koonibba and Ceduna residents in the building industry, eventually leading to the development of a small building enterprise, called the Koonibba Building Pty Ltd (KBPL). A brief overview of KBPL follows the summary of the WCBT Initiative below.

*4.4.2 The West Coast Building Training Initiative (2000–2006)*⁴²

The WCBT Initiative required multi-agency involvement of three key state bodies; (i) the SAAHA, (ii) the Department of Education, Training and Employment—Office of Employment and Youth (DETE-OEY), and (iii) Department of Employment Workplace Relations and Small Business (DEWRSB), as well as Ceduna CDEP Tjutjunaku Worka Tjuta (TWT) and Koonibba Community and Homelands Representatives, (SAAHA (2000a, p.3). After conducting a skills audit and fielding interest in the scheme, a high degree of interest was expressed by people attending a briefing session held in mid-2000 and an assessment of 28 people from ten communities were identified as having potential for traineeships (SAAHA 2000b, p.2).

Emerging outcomes from the WCBT Initiative were reported in the period from 2001–05, noting six Indigenous apprentices completed Certificate III in General Construction

⁴⁰ FHBH project number was not identified in the report.

⁴¹ C.R., 09/07/2010.

⁴² See Appendix 8 for a more detailed overview of the West Coast Building Training Initiative.

as a result of continued support by key agencies; the SA Aboriginal Housing Authority (SAAHA), Tjutjunaku Worka Tjuta (TWT) Ceduna CDEP, Career Employment Group and TAFE SA, Ceduna.⁴³ It is believed that three of the six participants continued to work at Koonibba and completed their carpentry apprenticeships. Two Aboriginal carpentry apprentices who worked for the Ceduna builder, Chris Vorstenbosch, were near completion of their apprenticeship by March, 2005. Another Aboriginal carpentry apprentice may be the sixth person referred to as a part of the cohort of completed apprenticeships, but it appears that a separate DEWR program was operational at this time, offered by the emerging entity, the New Apprenticeship Centre, Career Employment Group (DEWR 2005:6).⁴⁴ This modest outcome after a decade was a long way from the original interest expressed in the WCBT Initiative by 28 potential trainees.

A number of challenges to the WCBT were (i) insufficient supply of housing to sustain larger training numbers, (ii) structural problems within the SAAHA funding program to allow flexibility to allow time for training within the construction program, (iii) reluctance of the workforce to work outside Koonibba and Ceduna (see Appendix 7). The outcomes in terms of completed apprenticeships matched what was economically sustainable from the limited social housing and capital works budget derived from the Ceduna region in particular, minor works contracts from government-funded capital works programs undertaken by Aboriginal building enterprises. As a consequence, community build teams employing apprentice labour under an intermittent delivery system have limited opportunity to obtain a diverse skill base and management capacity. These small building enterprises operating either locally or regionally rely upon a skill base consisting of low education achievement, which in turn limits the labour capability and enterprise capacity. Limited capacity adversely affects the ability to competitively operate in a broader regional building context. The small output from the WCBT initiative economically reflected what was achievable within the region, and in hindsight may have prematurely raised community expectations of government-funded building programs. Programs based on small capital investment in social welfare housing are simply not capable of producing large employment gains and cannot solve the deficits of skilled trades in remote centres.

It is the authors' view that in order to reduce economic vulnerability bounded by dependency upon the state, and to increase sustainability, Indigenous access to the broader housing procurement economy through training initiatives must ensure that proposals are inter-connected to the regional economy. If this is not achievable, Indigenous training and employment will continue to have limited outcomes and opportunities, for both long-term viability and expansion. This is no more self-evident, than from the examination of the struggling Koonibba Building Pty Ltd and its attempts to engage in enterprise activity.

4.4.3 Koonibba Building Pty Ltd

The Koonibba Aboriginal community saw involvement in housing as an opportunity to provide employment, training and economic activities for community members. A separate building company synthesised out of the WCBT Initiative was formed with the objective to undertake repairs, maintenance and capital works projects using local labour. In the initial operation of establishing a building enterprise, KACCI was the vehicle for undertaking building construction works under 'Koonibba Constructions'. This was achieved by changing the community's constitution to ensure that a non-Indigenous employee of the Association who held a current builder's licence was

⁴³ Source: <http://www.ceduna.net/site/page.cfm?u=506#westcaost>.

⁴⁴ DEWR, *Employment Extra*, Issue 15, March, 2005 [Web: www.workplace.gov.au/NR/rdonlyres/CE5541B0.../EE_march_2005.pdf - Access Date: 31 August 2010].

eligible to become a member of the council and its nominated building supervisor (Laundy 2007, p.4). This arrangement continued until early 2010 when the registered builder left to pursue other interests.⁴⁵

The KACCI was then deemed to be the holder of a building licence and Koonibba Constructions successfully tendered for housing repairs, maintenance and upgrades funded by SAAHA, including the construction of the transitional facility at Ceduna, the Wanka Wilurara Accommodation Centre.⁴⁶ The formation of a separate body occurred after a KACCI audit report noted that the building activities had to be carried out under a separate entity. The KACCI then embarked on setting up a separate body, the 'Koonibba Building Association' (KBA) and then intended to apply for a builder's licence. However, subsequent advice from an accountant suggested that obtaining an incorporated body licence would be a difficult exercise (Laundy 2007, p.4).

Consequently, an accountant was then engaged to establish a new company, the Koonibba Building Pty Ltd (KBPL) as a trustee of the Koonibba Building Association. This discretionary trust's beneficiaries were the Koonibba Aboriginal Community Council Inc. and its members. Subsequently, 20 000 shares valued at \$1.00 each were issued in the company with those shares being paid to the extent of 0.01 cent/per share (totalling \$200) with the uncalled capital being \$19 800. The Building Licensing Authority (SA) advised that, based on this financial information, the company would be limited to contracts not exceeding \$100 000, so the ordinary share issue was increased to 40 000. This ensured that the building company was licensed to engage in building contracts restricted to \$200 000 with liability to the Koonibba Aboriginal Community Council to the level of the uncalled capital amount (Laundy 2007, p.5). The licence restriction is a standard requirement when a company does not hold sufficient balance sheet assets above \$100 000. In order to obtain an open building licence, the company has to have a building supervisor who is registered to construct residential buildings up to three storeys and have total assets holdings above \$100 000.⁴⁷

For reasons not immediately clear, while Koonibba Building Pty Ltd was operating, two additional bodies were formed in 2008 to undertake training, employment and develop economic initiatives through building works. The Koonibba Enterprises Aboriginal Corporation (KEAC) was registered in 2008, listed with eight non-liable directors to undertake primary activities of training and employment in 2009 (KEAC 2008a, b). The Koonibba Building Aboriginal Corporation was also formed in 2008 (KBAC 2008a, b). There were compliance issues in setting up these two Aboriginal corporations with eight directors due to the requirements for directors and committee members under the *Associations Incorporation Act 1985*. These issues were largely due to the over representation of local Aboriginal people in the criminal justice system which renders many if convicted of an offence, ineligible to serve as directors, office bearers or to manage Aboriginal companies.

This circumstance, including operational inactivity, caused the dissolution of these newly-formed entities, with both KEAC and KBAC reporting no employees, income or expenditure in 2009 resulting in deregistration on 21 June 2010 by the Registrar of the Office of Indigenous Corporations.⁴⁸ Similar issues beset Koonibba Building Pty Ltd (KBPL) resulting in a reduction of the initial number of directors. The KBPL was restructured to have only one director; with KACCI retaining 100 per cent ownership of

⁴⁵ J.T., KBPL 02/09/ 2010.

⁴⁶ T.S. 30/07/2010.

⁴⁷ P.C.: Representative from the Office of Consumer and Business Affairs, Adelaide, SA 22/09/2010.

⁴⁸ Office of the Registrar of Aboriginal Corporations [Web:
<http://www.oric.gov.au/PrintCorporationSearch.aspx?corporationName=Koonibba&icn=>]

all shares. The company is also registered as a charitable organisation in order to benefit from the provisions that status provides (Laundy 2007, p.6).

Early in 2010, KBPL engaged another licensed builder on probation, but this arrangement was soon discontinued due to KBPL's inability to maintain ongoing credit arrangements with local suppliers due to their association with this builder. The withdrawal by local suppliers was not due to financial impropriety on KBPL's part.⁴⁹ This situation highlights two aspects of vulnerability experienced by small remote building enterprises, (i) they often do not have the capacity to obtain a stand-alone building licence, and (ii) due to remoteness they have only a limited pool of reputable staff to draw upon. Such arrangements make these small building enterprises fragile operations, increasing vulnerability and limiting economic sustainability.

At the time of writing, KBPL was responsible for all repairs and maintenance work on 130 Housing SA houses in Ceduna and surrounding areas valued at \$200 000, and was undertaking other small-project contracting work through using their connections to other Aboriginal organisations. The company has completed housing upgrade contracts using the Minor Works Contract (Principal Administered) AS4906–2002 and AS4949–2006 Works Order and successfully tendered another contract with the Yalata Women's Centre to the value of \$114 000. KBPL have also undertaken additional work at the Ceduna CDEP Tjutjunaku Worka Tjuta (TWT), building a small office to the value of \$70 000.

Figure 15: Community house undergoing upgrade, 2007, Koonibba, SA



Source: Housing SA (2009).

In 2010, KBPL was awarded a contract for eight major upgrades of houses at Koonibba, achieving practical completion in early July and completed defects liability in October.⁵⁰ The work for the upgrades was not able to be completed within the designated 13 week contractual period, due to difficulties in maintaining credit arrangements with local suppliers as noted previously. This caused a delay to the commencement of works that was exacerbated by KBPL also not possessing surplus operational funds to purchase materials. This has somewhat affected the perception

⁴⁹ R.T., DFC, 27/09/2010

⁵⁰ J.T. 02/09/2010, P.C. R.T., DFC 03/08/2010, 27/09/2010.

of its capacity by its client, Housing SA,⁵¹ requiring considerable forbearance of the company's shifting capability. KBPL's reliance upon others for a building licence to operate their company clearly threatens the viability of their enterprise. Furthermore, in order for KBPL to continue to develop as a building company, it needs to overcome (i) cash flow problems, (ii) limited ability to pay for statutory warranties, as well as (iii) management inadequacies and equipment deficiencies. In order to tackle their financial problems they currently had made a special loans application for capital assistance.⁵²

At the time of writing, KBPL employed five people including the Works Manager and the Director with Indigenous staff wages partly subsidised through CDEP. The company aspired to take on more non-government contracts and become a competitive player in the building industry and has expressed an interest in relocating its offices to the Ceduna township. They were planning to tender for a number of medium-size projects on other homelands and communities in the near future, but were limited to contracts under \$200 000.⁵³

4.5 Challenges to building socio-economic capitals at Koonibba

The South Australian Indigenous community housing sector has a considerable unmet need that is partly being addressed under the new National Partnership Agreement with the Australian Government. Housing SA has applied standardised housing models to the limited number of new housing units delivered there and an appropriate and flexible Indigenous social housing model does not appear to be explored or generated. A community representative at Koonibba noted that greater emphasis needed to be placed on achieving a diversity of housing stock and they felt that various housing models would increase a range of social outcomes in the community. The current procurement process limits community choice to standardised housing types, cosmetic choices, and specialised fittings and fixtures.⁵⁴

Due to the low volume of new and replacement housing units funded over the last decade by Housing SA, the contractual method used in procuring these houses may have limited relevance to procurement methods overall. However, it was noted that the use of the documented design on new and replacement builds as part of the method of procurement process at Koonibba was seen to have a number of benefits that largely minimise risk for the client, Housing SA. Principally, Housing SA has control over all aspects of the housing procurement system in order to reasonably contain costs and quality from program release to the awarding of building contracts through to its participation as principal of the contract. SA Housing uses standardised mainstream house designs that meet programs' constraints of budget, at the risk of maintaining a social housing model unsuited to varied social and cultural needs. A challenge for South Australia is how an Indigenous social housing model(s), conforming to budget constraints, can be developed and improved in terms of socio-economic capitals generated.

It has been presented that small program releases of housing have been identified as a reason for increased building costs due to the low volume of housing units, that in turn lead to high oncosts for piecemeal contracts that do not generate value for money (Connell Wagner 2007, pp.13–14). Other economic factors pertaining to APY lands in Fien et al. (2008, p.55) noted during their study for housing delivery at Mimili were

⁵¹ R.T. DFC 27/09/2010

⁵² J.T. 02/09/2010.

⁵³ J.T. 02/09/2010.

⁵⁴ J.T. 06/05/2010.

increased labour costs, few experienced builders, trades shortages and high fuel prices. Additionally, standardised three-bedroom houses supplied at Mimili are being delivered for households requiring smaller or larger house types, such as those required by elderly or larger extended families. It appears from Fien et al.'s study that the housing needs of many households have not been met by the government's procurement strategy. (Fien et al. 2008, p.55).

Under the current procurement system of the Aboriginal housing program, cost overruns and cost savings are borne by Housing SA, eliminating financial risk to the recipient community housing organisation. Technical and housing procurement expertise per se is centralised, reducing the community's need to separately obtain administrative and technical staff. Accounting and audits are also conducted by Housing SA further reducing costs, with the argument positioned that this permits more funding to go towards actual building projects.⁵⁵ Given the low volume of output of new houses and replacement houses, it is difficult to discern if remote and very remote Aboriginal centres are benefiting from this rationale. The major housing outputs recorded by Housing SA are the allocation of \$9.912 million for ICHO operational and new build programs (DFCSA 2009b, p.87). The other major funding program, reported in Housing SA Statistical Supplement 2007–08 appeared to be a small investment totalling \$6.6 million for the maintenance program on tenable Aboriginal housing stock numbering 1256. Of this sum, \$4.6 million was provided for responsive maintenance, \$1.1 million for program maintenance and \$0.9 million for capital maintenance that also included 40 Aboriginal housing property upgrades (2009a, pp.50–52, p.76).

A key benefit of administrative centralisation has been that Housing SA has ensured compliance assessment of licences and registrations of community build teams and building enterprises. The building company at Koonibba has been required to comply and complete necessary licensing and registration in order to tender for Housing SA contracts, enabling the company to continue operating in the building industry.⁵⁶

4.6 Capitals of the Koonibba procurement process

4.6.1 Economic capitals—Koonibba Building Pty Ltd entrepreneurship

The WCBT initially provided an opportunity for the development of the Koonibba Building Pty Ltd through contracts from the former South Australian Aboriginal Housing Authority. Currently, Housing SA have assessed that KBPL have capacity, albeit limited by fundamental operational and financial requirements. Three people at Koonibba have successfully completed carpentry apprenticeships as a consequence of the WCBT Initiative, yet there appear to be considerable limitations to this skills set with notable dependence upon an external registered building supervisor. At the time of writing, KBPL was waiting upon an Indigenous person from Ceduna to obtain a building licence in order to continue its operation as a building company. Those involved in the company recognised that some work needed to be done in terms of building business skills and to develop the company into a stronger financial situation.⁵⁷ These challenges are not insignificant.

The Koonibba Building Pty Ltd is perhaps typical of the forces working against Indigenous operated enterprises levered off a small income and limited skill base, demonstrating that considerable mentoring and assistance is needed to gradually stabilise its operation. Without assistance, KBPL has insufficient resources in all

⁵⁵ C.R. 09/07/2010.

⁵⁶ J.T., KBPL 02/09/2010.

⁵⁷ J.T., KBPL 02/09/2010.

necessary areas to operate a viable construction company. Specifically, the requirements are business management, income generation, surplus capital, and equipment. In particular, it lacks access to bridging social networks to industry partners who could potentially mentor or train them in operational competency and competitiveness. It seems apparent that the Koonibba Building Pty Ltd economic enterprise seems to closely follow a pre-existing, albeit limited social capital network of what Hunter (2004, p.8) aptly described as a negative consequence of social capital. This occurs when one's social capital cannot lever economically beyond the limitations of its own social network because its ownership is largely comprised of the unemployed who are not engaged in operating businesses and therefore cannot assist competitiveness through drawing on a broader socio-economic context. Pearson and Helms (2010, p.3) are of the view that social capital has the ability to either 'enhance or retard entrepreneurial activity'.

The limitations of Koonibba Building Pty Ltd entrepreneurial operations are significant and do not appear readily resolvable. The inability to obtain an open building licence restricts current operations, and this vulnerability is further increased by reduced cash flow insufficient to employ someone with the necessary accreditation. Long-term aspirations may not be viable without significant assistance, business and operational mentoring. Overall KBPL lacks a sizable cash flow, a diversely skilled work force, as well as conformity to workplace health and safety requirements;⁵⁸ all essential elements for an effective competitive building operation to take advantages of wider building contracts in the region (e.g. in the APY Lands). Additionally, they are largely restricted by not holding sufficient assets needed to obtain an open licence registration under the Office of Consumer and Business Affairs, SA. It would appear quite difficult for a building company without an ability to fulfil these basic operational requirements to secure the necessary finances to either maintain or expand its operation. The limitations of Koonibba's enterprise appear to be a skewed disadvantage of social and economic isolation as a consequence of not only geography, but also due to its dependence upon a limited regional economy and the welfare state.

4.6.2 Social capital and governance

The KBPL is reliant upon limited social capital and economic networks to achieve sustained operation. The KBPL has emerged from and closely follows network patterns based on pre-existing social capital networks. Hence, Hunter's (2004, p.8) insight on the negative impacts of social capital where people have minimal skills is clearly borne out at Koonibba where their enterprise structure has developed following their limited social capital network resulting in negligible ability to expand on bridging social capital. Bridging capital defined by Hunter (2004, p.3) is the ability to effectively engage with overlapping networks that could make resources accessible across a number of networks. The limited ability to overcome barriers to bridging capital was observed by researchers, Brough et al. (2006, pp.401–408) as a tension between the two capitals operating in varied contexts. These contexts were defined as (i) inter-cultural, that is between Indigenous and non-Indigenous and (ii) intra-cultural, that is among Indigenous people. KBPL fragility of at least four years of operation has achieved only limited and vulnerable capacity. Yet this achievement can easily crumble and dissolve because it does not have access to bridging social capital. This vulnerability is made more acute if one single key element is withdrawn, such as the single supplier or the registered builder. Social capital, although emphasised as a potential element to lever bridging capital and hence increase economic capital in mainstream economies, in this remote context it has prohibitive and negative impacts.

⁵⁸ R.T., DFC 03/08/2010.

Meeting the requirements of procurement under Housing SA has led to some perceived disadvantages to building social and economic capitals with Koonibba. Those involved in the building company at Koonibba felt that preferred status should be given to Aboriginal companies tendering for Aboriginal housing projects.⁵⁹ Yet, it could be argued that preferred status may not necessarily increase the pressing skills deficit in management and may catalyse a collapse of KBPL due to inadequate management capacity if a large-scale contract were awarded. Rather, competency and capacity needs to be built through either joint venturing or a flexible strategic contract and project management system in order to achieve an improvement in business, management and technical skills to increase viability and competitiveness. Yet this strategy has to be clearly targeted at those Indigenous people at Koonibba with the capacity and willingness to increase their skill. The current tender evaluation matrix used by Housing SA ranks training of Aboriginal people as one matrix element, but does not sufficiently weight this parameter to prioritise training outcomes. However, weighting training must equally assess management and operational capacity of the contractor to execute the training with checks to measure this objective.

In this circumstance, remote Indigenous social capital and governance capacity does not have sufficient adaptive qualities and skill sets to lever into alternate and productive building markets. The powerful top-down governance structure that operates over remote Indigenous housing at Koonibba and Ceduna is largely dependent upon a single supplier, Housing SA. The source of a major component of Koonibba's income is in the form of minor capital works contracts. This supply is variable, with the core value of their staple work on SOMIH repairs and maintenance contracts valued at \$200 000.

4.6.3 Training and employment

The preceding case study demonstrates the broader housing procurement context faced by remote and very remote discrete Aboriginal centres in not only obtaining tenable housing, managing a struggling building operation, but also achieving accredited training outcomes, all of which are limited by their dependency upon the state and its program of local and regional allocations. Under the superseded SAAHA, there was some emphasis on the minor works procurement projects being linked to training and employment opportunities. The emphasis on addressing the considerable under-employment in remote centres allowed Koonibba to lever up from community housing construction to achieve modest training outcomes. This, in turn, led to the genesis of the small enterprise Koonibba Building Pty Ltd.

Training outcomes for those employed with a non-Indigenous contractor were reported upon in published media giving the perception of attaining outcomes sooner. Yet apprentices employed by Koonibba Building Pty Ltd also achieved accreditation, but this occurred over a marginally longer-term, through limited access to the productive building market, largely confined to Ceduna and Koonibba. Lack of accessibility to other markets, either by choice or lack of capacity, has in turn limited financial capital to carry the higher project costs of wages and materials.

This body of work, comprised largely of minor works contracts under Housing SA's maintenance program requires a relatively less sophisticated construction operational skill set which may be sufficient for KBPL's current capacity, but which presents significant barriers to achieving long-term aspirations. The adherence to timelines under the design construct and minor works contractual system, as noted elsewhere, can indirectly discriminate against the incorporation of Indigenous training having a

⁵⁹ J.T., KBPL 06/05/2010.

flow-on effect against not only incentives to include training, but also in achieving accredited training outcomes.⁶⁰

However, the continued operation of the KBPL must in part be attributed to the tolerance by Housing SA of its shifting capabilities. The housing contracts currently tendered by Housing SA are small minor works contracts and well-suited to a small building company or localised community building teams. While this has been a useful way of providing limited training and employment opportunities in the community, the lack of economies of scale has reduced opportunities and incentives for entrepreneurship.⁶¹

4.7 Final statement on the Koonibba Case Study

In reviewing the above case study, KBPL has made a concerted effort to maximise economic access to procurement opportunities within the region. Demonstrating that despite considerable obstacles, it continues to struggle forwards, due to a commitment to maintaining employment opportunities for its construction workforce who would otherwise be limited to community building programs at Koonibba. It has effectively used its social capital networks in Ceduna, but there are limits to these networks, and they prevent KBPL from stabilising its operation causing a number of flow-on effects. Although, it has performed well under minor works contracts for Housing SA, its small capital flow has affected timely delivery of these contracts. Whether or not KBPL can lever into the more lucrative building opportunities that exist in the APY Lands is uncertain. But without capacity building assistance, it will not be able to overcome its operational limitations. In order to effectively do this, it needs to be engaged within a flexible procurement system and thereby gain access to much needed building supervision and mentoring to increase on-the-ground, as well as administrative, skills. It could then, if opportunity were provided, slowly develop capacity over a period of time.

⁶⁰ J.T., KBPL 02/09/2010.

⁶¹ C.R. 09/07/2010.

5 CASE STUDY: SIHIP (NT)

5.1 Introduction

The Strategic Intervention Housing Program (SIHP) of the Northern Territory was first conceptualised during 2005–06, and then planned and tendered during 2007–08. The program, in full, commenced in late 2008 and was renamed the Strategic Indigenous Housing and Infrastructure Program (SIHIP).

SIHIP is part of the arrangement in the Northern Territory under the National Partnership Agreement on Remote Indigenous Housing agreed at the Council of Australian Governments (COAG) in November 2008. Under the National Partnership the Australian Government became the major funder of remote Indigenous housing, with States and the Northern Territory responsible for delivery. (A.G. & NTG 2009, p.5)

In mid-2009, the SIHIP program underwent a Government Review (A.G. & NTG 2009) resulting in some substantial modifications. We shall refer to the pre-Review phase as 'SIHIP Stage 1' and the post-Review period as 'SIHIP Stage 2'.

It should be noted that this program did not fulfil the selection criteria for our case studies, in that it was incomplete and was still in a relatively early stage of its life at the time of writing up this report. However, the AHURI User Group for our project specially sought to have it included due to its unique nature and topical interest to policy-makers. Data collection for this case study was ceased in June 2010. At this time, the trajectory of the program continued to be relatively controversial in the media and its future progress and outcomes were in certain ways unpredictable. Because of the program's ongoing currency, all interviewees for this case study have been given pseudonyms and, in addition, the pseudonyms for the three senior public servants administering the program who were interviewed have been merged to a single set of initials (P.S.).

It is not possible to consider all of the complex pre-planning and program planning for SIHIP in this overview, and we must therefore confine ourselves to a summary of the main principles and features that are relevant to the current analysis.

5.2 Early planning history and procurement design of SIHIP

During 2005–06, the Northern Territory (NT) Minister for Housing, Elliott McAdam, was frustrated by the massive escalation in the cost of houses in remote communities at that time. Building industry personnel were reported as advising him to program larger projects and larger contracts over longer periods of time.⁶² Even one of the strongest critics of SIHIP, NTG Member of Parliament, F.J., has agreed that in remote Australia, a housing program must, for ultimate success in terms of capacity-building benefits for communities, run on a scale of around 10 years—otherwise little will change overall.⁶³ The NT Minister for Housing approached his counterpart in the Australian Government to amalgamate funds for a large-scale housing program. By February 2007, the funding 'seed' of SIHIP had been established at about \$193 million. Around March 2007, the first master planning of SIHIP occurred, but it was only for housing, not infrastructure, and only four communities were in the program at this time.⁶⁴

⁶² P.S. 27/04/2010

⁶³ F.J. 27/04/2010

⁶⁴ P.S. 27/04/2010

In June/July 2007, the *Little Children are Sacred* Report was completed by the NTG Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse, and had a major policy impact in the NT, adding to the argument that child abuse was partly a result of household overcrowding. The report catalysed the 'NT Intervention' of the Howard Government which included more funding for SIHIP. Other catalysing dimensions of the program driven by political policy shifts were (i) land tenure reform in order to facilitate home-ownership, and (ii) a move to a public housing model for remote Aboriginal communities by the NTG (Connell Wagner 2007b, p.14). A bi-lateral MOU of late 2007 led to an extra \$400+ million to be added to the program, and just prior to the national election in late 2007, the program moved from addressing four to 20 communities. Then, in March 2008, when the new Labor Government was installed, the program expanded from 20 communities to 73 communities, or more accurately to 16 communities for new houses and 57 communities for refurbishments. The final SIHIP budget was set at \$672 million.⁶⁵

In mid-2007, the consulting firm of Connell Wagner was contracted to prepare a planning document on the 'Strategic Intervention Housing Program (SIHP), Program Delivery Strategy' for the NT Government's (NTG) Territory Housing (T.H.) and the Australian Government's (A.G.) Department of Families, Community Services and Indigenous Affairs (FaHCSIA). This document (Connell Wagner 2007b) shaped the procurement method for the SIHIP housing Program.⁶⁶

Connell Wagner generated a clear problem statement (2007b, p.13, p.14) explaining why current procurement approaches in remote areas were inefficient due to high oncosts and insufficient critical mass in the piecemeal contracts to yield value for money which, in turn, resulted in a lack of continued workflow and unsustainable employment and training outcomes. Further issues were minimal consideration for whole-of-life costing; inappropriate designs and failure of housing management regimes; all compounded by an increasing backlog of houses to address the need, with subsequent overcrowding of existing stock, resulting in turn, in further degradation of existing and new stock. The SIHIP Program aimed to address these problems and develop a new best practice approach. The Program objectives were stated by Connell Wagner (2007b, p.24) as follows:

- Housing outcomes.
The Program provides housing that meets the residents' needs and effectively reduces overcrowding in selected communities.
- Quality.
New and existing houses are constructed and refurbished to current NT Public Housing and the National Indigenous Housing Guide standards.
- Time.
The Commonwealth funded component of the Program is completed by 2013 and the Northern Territory component of the Program is completed by 2013.
- Cost.
The whole-of-life cost of delivering and managing houses is reduced from those delivered during 2005–06, through innovation in design and construction of housing.

⁶⁵ P.S. 27/04/2010.

⁶⁶ Additional inputs were obtained from a consultant on UK building procurement practice (where whole suburbs replaced using alliancing) and from the Queensland Government on its use of alliancing contracting in road and rail construction (P.S. 27/4/10).

- Social and economic outcomes.
The Program provides opportunities for training and employment of Indigenous people to achieve a sustainable workforce in each community for the ongoing construction, maintenance and management of housing.
- Management best practices.
To implement a stepped change⁶⁷ improvement in the delivery of major housing programs in the NT and use this as a basis for the delivery of a range of future housing programs and schemes.
- Relationships.
The achievement of tangible benefits for all parties, including the communities, involved in the delivery of the Program through the fostering of positive interrelationships. (Connell Wagner 2007b, p.24.)

Connell Wagner evaluated all of the principal procurement methods used in the building industry⁶⁸ (generating a similar list of contract types to that outlined in the current authors' Positioning Paper, see Davidson et al. 2010, Chapter 2). Connell Wagner surveyed 24 large project management firms on their use of contracting methods for work of this type using a multi-criteria analysis, after which it became obvious that all seven of these goals could not be achieved with traditional lump sum contracting. Connell Wagner narrowed down the final choice of procurement type to 'Managing Contractor' and 'Alliance Partnering'.

In depth consideration of the Construction Management procurement approach was had by the Working Group. The concerns of this approach are to do with the contracting of trade contractors as subcontractors to the Construction Manager. This arrangement makes no incentive for the subcontractor to, bring prices down, engage with the community and enter into arrangements for a long-term maintenance agreement. Based on these matters, the Working Group agreed to discount the Construction Manager from further consideration and reduce the ongoing detailed analysis to two options being; Managing Contractor and Alliance Partnering. (Connell Wagner 2007b, p.18)

Connell Wagner and their Working Group evaluated these two remaining contracting methodologies against their detailed weighted criteria list, which included:

Integrated teams/services, transparency (open-book), appropriate risk transfer, whole of life costing, stakeholder consultation, flexibility for variations, continuous improvement, KPI's (key performance indicators), time—optimised programs, appropriate quality, Indigenous E&T (employment and training) opportunities. (Connell Wagner 2007b, p.18)

Alliance Partnering scored higher⁶⁹ than Managing Contractor, and Connell Wagner concluded that alliance contracting was the most appropriate method to use for their program given the range of ambitious objectives for the program (see above) and the

⁶⁷ In February 2007, senior public servants had looked at 'stepped change' to housing in Indigenous communities. This approach involved looking at only some communities, not all. It emulated the CEC concept in education at the time—Community Education Centres (CECs)—those with the most potential to get secondary education—about 15 communities eligible. Government decided it wanted stepped change, in employment, economic stimulation and development, but a key underliner was education—so followed the CECs with a hub and spoke style settlement model. (P.S. 27/4/10.)

⁶⁸ Traditional lump sum, design and construct, managing contractor, construction management, Alliance partnering, design build operate and maintain, public private partnerships, and panel contracting (Connell Wagner 2007:App. B).

⁶⁹ The full list of evaluative criteria used in this comparative analysis of procurement types is contained in the Connell Wagner report (2007:App. A, pp.9, 10 and App. C).

complexity of delivery variables (Connell Wagner 2007b, p.18). This was the first time alliance contracting was to be used in Indigenous housing in Australia.⁷⁰

Within the analysis of procurement types, a distinction was made between 'Project Alliancing' and 'Strategic Alliancing'. 'Strategic Alliancing' was chosen and defined as follows:

This is quite simply a *series* or *Program* of project alliances and has proved to be even more successful than straightforward project alliancing, especially in the UK, because the private sector partners are incentivised to perform well through the prospect of more work from the Program. However, to achieve this, competition is required within the Program between a number of Alliance Partners. Therefore, the Program must be big enough (multiple projects) and long enough (duration) to provide enough successive project work for three or more private sector Alliance Partners. Also, in order to keep competition in the process, it is essential to regularly monitor the performance of the Alliance Partners through assessment against Key Performance Indicators (KPIs) and benchmarking between the different partners. All partners sit at a strategic level on a 'panel' that shares best practice such that any that do fall behind the KPIs and benchmarks are able to share best practice with the other partners to give them a better chance at improving performance. (Connell Wagner 2007b, p.34)

A final recommendation came from Connell Wagner (2007b, p.18) that a panel with a minimum of three 'one-stop-shop' Alliance Partners, creating a Strategic Alliance was to be adopted. The following Table 7 addresses procurement key criteria indicating how Strategic Alliancing was determined to be the most suitable procurement approach.

Table 7: Features of Strategic Alliancing

Key criteria	Strategic Alliance features
Integrated teams	Alliance Partnering allows the engagement of consortia with all the skills to deliver the program early in the design process
Transparency	The Alliance Partnering methodology allows the client to see the true cost of the works
Risk transfer	The Alliance Partnering brings together the full team to assess and mitigate risks
Whole of Life Costing	The Alliance Partnering methodology provides a seamless link to the operation and maintenance phase of the works
Stakeholder consultation and community involvement	Alliance Partnering promotes integrated teams which allows for realistic community involvement at an early stage
Flexibility for variations ⁷¹	As the Alliance Partnering methodology is based on open book costs, variations can be easily progressed without tension
Benchmarking and continuous improvement	The Alliance Partnering methodology allows for continuous improvement, and as costs are better understood, methods to reduce cost or get better outcomes can be developed

⁷⁰ Its former use in the Australian building industry was confined to a relatively small number of projects including the National Museum of Australia and the Northside Storage Tunnel Project for Sydney Water. Alliance contracting had become a favoured procurement method for road construction by the Queensland Department of Main Roads, which has benefitted the Myuma Aboriginal group in Camooweal (Memmott 2010).

⁷¹ Note however that the term 'variation' is usually avoided in Alliancing contract terminology. The term that is used is 'Scope Change'.

Time	The Alliance Partnering methodology provides for incentive to beat the target cost and hence an incentive to deliver more efficiently
Quality	Appropriate quality can be defined early in the process
Indigenous employment and training	The early involvement of the community-based business will provide realistic business, employment and training opportunities

Source: Adapted from Connell Wagner (2007b, p.29, p.30).

Table 8 below indicates how Connell Wagner aligned the program objectives with the strategic capacities of the 'Strategic Alliancing' procurement method.

Table 8: Outline of the SIHIP objectives

Program objectives	Procurement strategy
Housing outcomes	Integrated teams to deliver turn-key service, including land development and house construction
Quality	Early Contractor Involvement (ECI) involving specialist designers, subcontractors and suppliers
Time	Panels of consortia with capacity to deliver 50–100 houses per year each
Cost	Achieves 'Value for Money' through open-book arrangement in development of budgets with separate profit and overheads
Social & Economic outcomes	Long-term facilities maintenance commitment using local Indigenous labour
Management best practices	Non-adversarial framework involving loyal long-term partnerships focused on common program outcomes
Relationships	Integrated teams comprising community representatives in a collaborative approach

Source: Adapted from Connell Wagner (2007b:28,29).

5.3 Economic principles of alliancing in SIHIP

Connell Wagner wrote of the advantage of alliancing for accurately analysing and apportioning costs and profits in procurement:

'Value for Money' shall be ascertained by the Management Team and Specialist Consultants through an 'open-book' approach with the Alliance Partners to set a 'target cost' for a project. In this approach direct costs are disclosed with pre-agreed profit and overhead rates added. Identified high costs can be interrogated to obtain an understanding of the breakdown and a collective investigation into means for alternative arrangements to reduce costs discussed. (Connell Wagner 2007b, p.33)

This advantage was outlined to the author by the senior public servants in the program. Alliancing is in contrast with a lump sum contract, which typically has a 10 per cent contingency added—the result being that one cannot clearly see where the dollars have all gone on the project. In alliancing, all team members can see every price and every dollar; an advantage that ultimately provides trust, openness and transparency. There is a need to achieve a shared understanding of where margins are put in the elemental and sub-contract breakdowns.⁷²

Despite the logic of the alliancing procurement method in achieving these advantages, much effort has nevertheless occurred in the SIHIP to change the conventional culture of contract practice, i.e. in persuading all to disclose hidden profit margins, especially

⁷² P.S. 27/04/2010.

among sub-contractors and suppliers at the lower rung of the contract chain. This also extends to Aboriginal enterprise groups. A constant task during the program administration has been to ascertain where all parties are building in their mark-ups and multipliers, and whether or not they should be there in terms of the economic rules of alliancing. This role ultimately falls to 'the commercial manager' who must have visibility.⁷³

At the outset, an independent auditing firm undertook an Establishment Audit of each commercial participant, which calculated the average profit for each successful Alliance Partner over the last four years, and this became fixed as a maximum profit margin for the SIHIP program. The commercial framework allows for gainshare and painshare based on the alliance performance. Good performance is rewarded by a share of the savings realised, whereas poor performance will result in a reduction of the Alliance Partner fee. However, painshare is capped at the maximum value of the fee. In addition, high achievement in relation to non-cost KPIs (key performance indicators) can obtain more return from the project.⁷⁴

SIHIP Stage 1 included four broad Key Result Areas (KRAs), each of which was in turn broken down into a generic list of Key Performance Indicators (KPIs), and which were to be used in calculating the pain and gain bonuses under the alliancing agreements. The four KRAs were adapted and individualised to some degree in each Alliance Partner's contract. For example, the author observed (17 June 2009) an interesting digital 'Value-for-money' assessment exercise for the Wadeye contract package by one Alliance team, whereby the options of using existing housing lots and carrying out upgrades of existing houses were compared with the option of building new houses on new estates, using all of the following KPIs on a computer spreadsheet with weighted scores:

- Housing and settlement outcomes:
 - improve cultural and social fit
 - respond to climate
 - provide safety and security
 - support healthy living practice
 - provide accessibility.
- Achieve community acceptance.
- Life performance.
 - improve economic sustainability
 - improve environment sustainability.
- EWD (employment workforce development):
 - improve Indigenous employment
 - provide career development.
- Enable cross program cooperation.
- Reduce overcrowding.
- Reduce time of delivery.

⁷³ P.S. 27/04/2010.

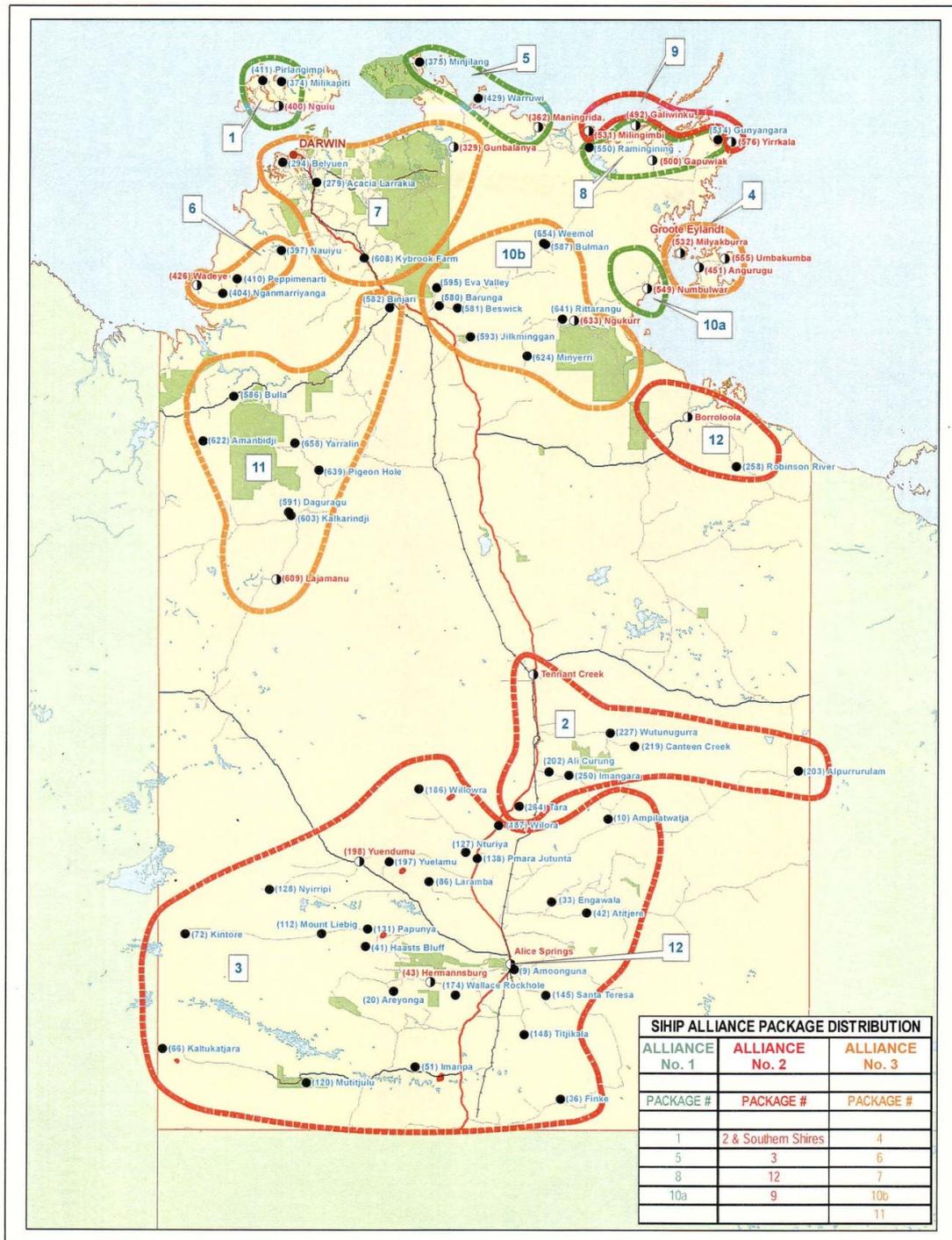
⁷⁴ P.K. Alliance No. 2, 27/04/2010.

It can be seen how the various capitals which form the various goals, can be all assessed and weighted in such a calculation.⁷⁵

One aspect of the financial management of SIHIP was to break the overall program into a series of about 12 contract packages of work, ranging in value from about \$10–\$70 million dollars. These were to be awarded successively to each alliance, dependent on their degree of success in executing the previous package and in relation to the performance of the other two competing alliances. Figure 16 below shows an early configuration of how these packages may have been awarded (this has since changed).

⁷⁵ Note that this VFM spreadsheet has not been used since the SIHIP Review and not on any packages since September 2009.

Figure 16: Strategic Indigenous Housing Infrastructure Program for Aboriginal Communities during SIHIP Stage 1 (early 2009) when there were three Alliance Partners, identified here as Nos. 1, 2 and 3



Note the number of alliances and their distribution of packages have since changed.

Source: Adapted from map by Parsons Brinckenhoff.

In understanding the cost and value of individual SIHIP houses, the following principal break-down elements need to be borne in mind:

- The alliance management cost—the overheads of the alliances which are spread across all project packages.

- The project package costs—these are the management costs of a package and are called the ‘indirect costs’.
- The actual costs of work performed on a house, called ‘direct costs’.⁷⁶

When average house costs are cited by SIHIP personnel (e.g. \$450 000), all three of these components make up the cost. In addition, it includes GST and anticipated escalation costs over the life of the project, which may be twelve to 18 months.

At the time of researching this case study, the question had been asked why there were differences in cost between the SIHIP and IBA houses that were being built side by side at Nguiu on Bathurst Island. The answer was that an IBA house project did not share all of the cost features of an SIHIP project house, including the employment workforce development (EWD) component, Federal Safety Commissioner (FSC) requirements (the 30-year house longevity goal, the forward town-planning costs, the community engagement (C.E.) process and miscellaneous administration and auditing costs. Similarly, cited costs of NAHS and IHANT project houses did not include many of these components either.^{77 78}

In reflecting on the value of SIHIP houses, the senior Architect of the No. 1 Alliance Partner made the following comparative comments about the relative costs of SIHIP and NAHS houses. He said that SIHIP houses have this escalation estimate fixed, unlike other projects where the funding cycle builds into the additional costs as escalation occurs. The impact of the Federal Safety requirements has also increased the SIHIP costs; this did not exist under the NAHS Program (its top objectives are safety and health). The Alliance on-costs can be a relatively high part of the overall budget, but all of the costs are clearly identifiable (including freight, travel, construction camps, etc.), and justifiable (whereas many are hidden in a government program based on Program Management and lump sum contracts). The base house cost under SIHIP is less than it was in the NT in 2007. And although the SIHIP houses are including a lot more program and overhead costs in their calculation, they still cost less per house than houses built under NAHS at that time. Standardisation and economies of scale thus do contribute to the lower cost.⁷⁹ (See later on other cost drivers in SIHIP 2)

5.4 Program and project governance

Two levels of program governance were originally designed by Connell Wagner (2007b, pp.46–52). The first was that of the ‘Strategic Alliance Leadership Team’ (SALT) to administer the program at an executive level which included one representative from each Alliance Partner as well as Program Directors and Managers etc. It is at this level that the team members write annual reports for their respective organisations and are responsible for spreading profit and bearing loss.^{80 81} The second level was that of a ‘Project Alliance Management Team’ (PAMT) to administer each contract package of work involving a specific sum of money for housing in one or several specific communities. The first SIHIP call of tender for professional services

⁷⁶ Alliance No. 2, 20/05/2010.

⁷⁷ GST was claimable under NAHS and IHANT as they were Grant systems and not the provision of non-creditable supplies, rental housing.

⁷⁸ P.S. 28/04/2010.

⁷⁹ R.N. Alliance No. 1, 29/04/2010.

⁸⁰ P.S. 27/04/2010.

⁸¹ The role of the SALT has transformed during the evolution of SIHIP with a decrease in its decision-making role to become more of a forum for cross-Alliance communication, coordination and the exploration of shared good practice.

within the IPT was in July 2007 for a Program Manager, which was awarded to a prominent consulting engineering firm in November of same year.⁸²

5.4.1 Design coordination

Connell Wagner identified the need to appoint a Design Coordinator (DC) for the program who was to be employed by the Program Director (the Government). The primary function of the SIHIP Design Coordinator was to help ensure achievement of quality standards in the design of housing solutions for each community. This role included liaising with statutory authorities to assist with gaining design documentation approvals; monitoring and reporting on Alliance performance with regard to quality outcomes (KPIs & benchmarking), and disseminating design best practice as it developed internally from the program or from external sources. (Connell Wagner 2007b, p.49) This role was ongoing at the time of writing. One job of the Design Coordinator was to draft the Design Guidelines for the Program (Wigley 2008) which built upon a range of base documents including the *Building Code of Australia* (BCA), the *National Indigenous Housing Guide* (third edition) (FaHCSIA 2007a) and the *Environmental Health Standards for Remote Communities in the NT* (Northern Territory Government, Environmental Task Group 2001).

The SIHIP Design Guidelines contain seven key design objectives (Wigley 2008, p.12) which also reflect the influence of the other program objectives, e.g. Employment and Workforce Development (EWD), Community Engagement (C.E.) and cost-time considerations:

- Cultural and social fit.
Culturally distinctive aspect of everyday domestic behaviour.
- Safety and security.
Against situations of violence and antisocial behaviour—a sense of ownership and personal control.
- Response to climate
Regional variations and micro-climatic conditions.
- Support for healthy living
Support healthy living practices.
- Accessibility
Must achieve *visitability* in line with Classification C, in AS 4299–1995 Adaptable Housing.
- Economically sustainable
Long-term durability, aim for 30 years life span.
- Environmentally sustainable
Communities able to manage housing and its services.

The Guidelines make reference either implicitly or explicitly to a number of social capitals. Implicit references to strengthening cultural identity are embedded in the Design Objective titled 'Cultural and Social Fit' which emphasised the need to design domiciliary environments that are supportive of traditional behaviours and lifestyles (Wigley 2008, pp.13–19). Design Objective 4, 'Support Healthy Living Practices' (Wigley 2008, pp.28–29) outlines precepts based on the well-known research of Nganampa et al. (1987) and Pholeros et al. (1993). The Design Objective No. 6, 'Economic Sustainability' contains explicit reference to 'Employment and skills development'.

⁸² P.S. 27/04/2010.

The Guidelines also include a complete section on 'Settlement Planning', which includes both implicit and explicit reference to the planning of housing layouts to suit socio-spatial clustering of kinship groups (Wigley 2008, p.41, p.42), a planning technique that also generates social capital and cultural identity maintenance. In the Design Guidelines there is also a passing reference to 'cluster housing' as a possible housing outcome for an extended family. This option has also been taken up by the Alliance Partners (see later).

The senior architect of the No. 1 Alliance Partner was to later state that the Design Coordinator's SIHIP Design Guidelines 'is a very good document—an improvement on the NAHS guidelines which appeared to have been based on the NT Environmental Health Standards'.⁸³ This was also confirmed by a professional counterpart in No. 2 Alliance Partner.⁸⁴

5.4.2 Reducing crowding

Reducing overcrowding⁸⁵ in Aboriginal communities was one of the main drivers of the SIHIP program, as prescribed by SIHIP objective No. 1 (see earlier). In SIHIP Stage 1, a variety of design techniques were identified by the Design Coordinator and the Values Manager to alleviate crowding and were being adapted for measuring the reduction of crowding achieved by the Alliance Partners, including assessments of private space, social spaces, wet areas and neighbourhood spaces.⁸⁶ In SIHIP Stage 1, the reduction of overcrowding was to be an alliance KPI.

5.4.3 Planned local community involvement

The generation of community capitals from the procurement process was clearly embedded in the alliancing plan. In their report, Connell Wagner explained how community-based outcomes were to be spread across a number of the SIHIP goals.

[Program] objective four recognises that for whole of life costs to be achieved, communities need to be engaged in the long-term maintenance of housing stock. This infers objective five must also be achieved and refers directly to the development of sustainable employment and training outcomes in building a maintenance labour pool. Objective six commits to a step change process involving active engagement of the community fitting within this Program Delivery Strategy as a best practise model. Objective seven aims to develop long-term relationships with the communities to achieve tangible benefits for all parties. A real commitment that will involve Community Engagement specialists to foster cross-cultural relationships in addition to construction delivery services is required in order for these Program Objectives to be realised. (Connell Wagner 2007b, p.62)

The senior public servants on the project have described how the community was to have some ownership over the contract packages, e.g. in design, tenancy, housing mix, employment, training, and how the Alliance Partners must deal with local community governance, Shires, local contractors, and sub-contractors. There was to be use of Local Industry Participation Plans (LIPPs), and a goal to incorporate regional and local NT tenderers for sub-contracts; it was government policy to engage local firms, particularly Indigenous ones.⁸⁷

⁸³ R.N. Alliance No. 1, 29/04/2010.

⁸⁴ G.L. Alliance No. 2, 01/08/2010.

⁸⁵ The term 'overcrowding' is used in contemporary government policy with regard to Indigenous housing, but the preferred social science term is simply 'crowding'.

⁸⁶ P.S. and K.H. 17/06/2010

⁸⁷ P.S. 27/04/2010.

Education and training were to be foundation elements of the program, to ensure ongoing opportunities for local Aboriginal workers to engage in the SIHIP program, as Connell Wagner prescribed:

Education and Training is a major objective at all levels of the Program. At the Project Director level the CRC [Community Relations Coordinator] in close consultation with the Education and Training Coordinator (E.T.C.) (Australian Government Rep.) will identify and access [government] funds to develop and support long-term training in the communities to CERT III in Building and Construction and Business Administration as a minimum. Where possible other trade certificates will be encouraged if the right candidates and support networks are available. This will require a continuity of work in line with the training program. The proposal to maintain the Alliance Partner in the community for at least a period of two years will facilitate completion of education and training programs and maximise usage of available community resources ... (Connell Wagner 2007b, p.65)

The issue concerning the ongoing repairs and maintenance (R&M) of houses in communities after SIHIP was flagged by Connell Wagner, together with the prospective growth of an Aboriginal R&M industry:

It is proposed that an agreement is reached with the Alliance Partners in which either they stay in the community to assume a long-term maintenance role for a two [to] five year period or they facilitate handover to local SME [small to medium enterprises]. A local SME could be "incubated" through the management structure of the alliance members (and assistance from the SIHP Management Team) developed for this purpose. (Connell Wagner 2007b, p.34)⁸⁸

The program also thus identified the need to support small and medium-sized enterprises (SME) in the targeted communities.

The community market sounding activities undertaken indicated a diverse level of capacity to participate at the labour market level, SME involvement level, and management capacity level within local communities. It was apparent that for communities to achieve the social and economic outcomes desired there would need to be a range of innovative engagement and support initiatives developed at the community level. The Australian Government and the Northern Territory Government have a range of programs designed to assist with this but ultimate responsibility for the success of local community involvement will fall to the [program and project management] teams. It is for this reason that both teams contain Community Relationship Consultants. (Connell Wagner 2007b, p.62)

Connell Wagner also identified the issues surrounding 'life after SIHIP', namely if capacity was built in Indigenous communities in terms of skills and enterprises, how could it be sustained in the long-term after the program ceases?

A core objective of the Program ... is to achieve long-term sustainable training and employment opportunities for local Indigenous communities. Alliance Partners will be expected to train and employ a local workforce in each community but this workforce will not have ongoing employment after the completion of the refurbishment works of three years duration, unless a maintenance budget is allocated to this Program ... It should also be noted that the market sounding included ... maintenance organisations who are very

⁸⁸ The subsequent policy framework set out in the National Partnership Agreement was to later address this issue.

keen to be involved in this Program. They would likely team up with NT based builders but would have limited opportunity to do so unless there is a medium to long-term commitment to maintenance funding for these communities. (Connell Wagner 2007b, p.9)

Connell Wagner foresaw the desirability of the two governments (A.G. & NTG) to pre-plan further contracting opportunities in the post-SIHIP period. 'The alliance panel should be flexible enough to allow future community projects not in the current Program to be added ...' (Connell Wagner 2007b, p.38). The failure to incorporate such additional contracts was a point of contention for some parties at the time of writing.

Connell Wagner (2007b, p.45) also recommended that where there was geographical proximity of communities and a possibility for Aboriginal workers to operate across these communities, that the work in such communities be clustered into contract 'packages' to achieve a suitable scale of work for an Alliance Partner. This was to be reflected in the plan for the Alliance teams.

It is to be noted that some of these objectives set out by Connell Wagner on improving community capitals through housing procurement were later incorporated into the 'National Partnership Agreement on Remote Indigenous Housing' of the Council of Australian Governments that was released in early 2009 (COAG, 2009).

5.4.4 Engaging the Alliance Partners/or teams

A rationale was presented by Connell Wagner to contract and create three 'one-stop-shop' Alliance Partners or teams (Connell Wagner 2007b, p.33). Twenty-four EOIs from proposed alliance teams were thus reduced to a shortlist of five and then, in late 2008, three of them were invited to participate in Alliance Partner contracts, in keeping with Connell Wagner's original recommendation. However, competition was to be engendered between the three Alliance Partners in the way these contract 'packages' were to be awarded.

The Management Team was to award each Alliance Partner with one community in the first year and then subsequent contract packages each year of the program based on regular monitoring of performance. Should one partner perform poorly during the duration of the program, having three panel members gave the option to remove this partner from the program and still retain competition between the two remaining partners. (Connell Wagner 2007b, p.38). This caveat proved appropriate as in March 2010 one of the Alliance Partners was removed from the program by government.

5.4.5 Risk identification and allocation

Connell Wagner identified some of the program risks as well as the alliancing principle of collective (owner/contractor) management of risk as follows:

This Program has a large number of stakeholders, a complex approvals process and involves remote areas with high-risk logistical and weather issues. This is one of the key reasons that the alliancing procurement approach was selected as the preferred procurement methodology for this Program. Alliancing allows for collective management of these unpredictable risks during the ECI (Early Contractor Involvement) design development stage. The "design-freeze" point only occurs when the PAMT (Project Alliance Management Team) believe that sufficient risk has been mitigated and agree that they are happy with the proposals for risk allocation from that point forward. At this point in time, immediately before the target cost is agreed, the risk allocation should be sensible ... (Connell Wagner 2007b, p.74).

Risk mapping and mitigation was commenced in the Connell Wagner Report (see Table 9 below)—a process repeated many times during the contract period using a Risk Register. Achieving the program’s social capitals, which are clearly embedded in its goals, constitutes a major component of the risk ‘map’.

Table 9: Initial risk assessment and control measures as reported at the outset of SIHIP

<i>Objectives</i>	<i>Possible risk in relation to objective</i>	<i>Mitigation/control</i>
Housing outcomes	Does not meet needs of community and reduce overcrowding	Engage community in all aspects of planning—Community Relation Coordinator (CRC) to be key support to Project Manager (PM).
Quality	Standards are not achieved	Alliance contractual arrangement would penalise poor workmanship/defects.
	Design documentation is not followed	Onsite Construction. Superintendent provided by Project Director (PD).
Time	Decisions are not made in timely manner	Appointed PD will have appropriate delegation powers and authority.
	Program delivery does not occur to schedule	Appointed PM will have sufficient skills and resources to drive program to targets.
Cost	Whole of life is not achieved	Maintenance arrangement included in alliance partnership.
	Design innovation and construction is not implemented	Alliance procurement methodology involves ECI that will foster innovation.
Social and economic	Overall participation of Indigenous people in housing programs does not improve	Community engagement specialists are part of all management teams to support existing capacity and develop new approaches.
	Indigenous people’s residual capacity to participate in ongoing programs does not improve	Inclusion of both an employment & training (E&T) representative at PD level and linking maintenance into works packages.
Management best practice	Delivery of housing is not improved	Procurement delivery strategy must be developed using current international best practice.
	Program structure is not transferable across communities	Communication and engagement frameworks have been developed and will be continually evaluated.
Relationships	Tangible benefits are not achieved for all parties: a) Government b) Alliance Partners c) Communities.	(a) Alliance risk sharing model is best for Program Objectives, (b) Open book, pain/gain and long-term work fosters non-adversarial relations, (c) Active participation is fundamental to Program performance (KPIs).
	Develop negative relations/feelings of exclusion	Community engagement has been built into all processes and management structures.

Source: Adopted from Connell Wagner (2007b, pp.74–75).

5.5 The Alliance Partners

Note that the identities of the final two Alliance Partners who were engaged in SIHIP at the time of the analysis, have been kept anonymous in this analysis and they are simply referred to as the No. 1 and No. 2 Alliances.

The No.1 Alliance Partner was appointed on 26 October 2008 to deliver its first package for the Tiwi Islands 'Originally we were a very small team and it took six months to build a large team'; it took virtually one year's work (2009) to develop the c.\$38 million package. This intense preparation period was metaphorically described as building a ship by the Project Team Leader as follows: '... have to build the oil carrier, get it to port, fill it, get it out of port and under steam—this has taken one year'.⁸⁹

This Alliance Partner was anchored in a long-standing relation between two construction firms who already had a track record of targeting selected projects of significance as joint ventures. All specialist consultants such as architects, engineers, project managers and community management personnel were then engaged into the Alliance Partnership. At the time of interview, there were about 60 staff in the Darwin office of No. 1 Alliance Partner, led by a senior architect (R.N.) who had a lifetime career in Aboriginal housing work. The Alliance Partner Manager reflected thus on his team:

We had a strong work relation with [the other engineering firm] from past experience—the same workplace values—this flows through the other entities we put in the Alliance. Need a couple of very strong personalities—otherwise will get fluffy and not achieve. Selection of an Alliance Partner is incredibly difficult. You need to hand pick what sort of people are in the team. [Then] to get people to actually fit—we made two mistakes—choosing people/entities with the wrong philosophy—they were [soon] moved out ... In our Alliance we have still got everyone we started with—this is our strength ...⁹⁰

Housing evaluation research suggests masonry provides the most durable shell for Aboriginal housing longevity. The Ritek masonry wall system was chosen by the No. 1 Alliance Partner for both longevity and to maximise Aboriginal employment. The Ritek system involves a frame of PVC/aluminium 'joists' with 6mm (f.c.) sheeting as insitu form work. Vertical and horizontal bars are inserted and then concrete is poured into the cavities. The Ritek system has the advantages of a prefabricated kit system and is easy to erect without resorting to complex fixtures. Although a lack of literacy and numeracy may preclude many Aboriginal workers from carrying out the initial set-out on the concrete slab, nevertheless some Aboriginal workers in the Alliance have gained these skills.⁹¹ The 'Ritek' masonry building system, because of its relative simplicity and ease of use, has been evaluated and promoted as an SIHIP asset to community enterprise development.

The No. 2 Alliance was led by a large Australian construction firm that had 60 per cent control, with the smaller partners including an engineering firm and a company from Western Australia that was partly Aboriginal-owned having some 250 Indigenous employees. This Alliance Partner was awarded its first packages in Tennant Creek, Central Australia and at Wadeye.⁹² Wadeye was one of the largest discrete remote

⁸⁹ R.N. Alliance No.1, 29/04/2010.

⁹⁰ E.F. Alliance No.1, 20/05/2010.

⁹¹ R.N. Alliance No. 1, 29/04/2010.

⁹² This is a very large package. One public servant said '[No. 2 Alliance Partn'r] has strong buying powers here, e.g. 600 or 800 stoves—this is buying power—can do a whole run of stoves for that' (P.S. 27/4/10).

Aboriginal settlements in Australia and, at the time, had a range of social problems, with one of the highest overcrowding rates in Australia.

The following Table 10 shows the various approved and proposed contract packages and the prescribed distribution of new houses, rebuild houses and refurbished houses in the SIHIP program as of early 2009 (extracted from working document, subject to revision; read in conjunction with map in Figure 16).

Table 10: SIHIP planning data in early 2009

Package nos.	New	Rebuilds	Refurbs	Sub-totals
Approved packages:				
1. Tiwi Islands (stage 1)	29	88	127	244
2. Tennant Creek Town Camps	2	78	-	80
4. Groote Eylandt (stage 1)	26	50	25	101
4. Groote Eylandt (stage 2)	54	-	-	54
5. Maningrida	109	16	79	204
5. Minjilang	-	-	31	31
5. Warruwi	-	-	47	47
8. Galiwinku	90	22	83	195
Packages under development:				
1. Tiwi Islands (stage 2)	61	-	-	61
12. Alice Springs Town Camps	85	50	100	235
6. Wadeye	105	28	77	210
6. Nganmariyanga	-	-	26	26
6. Peppimenarti	-	-	23	23
6. Nauiya	-	-	43	43
7. Gunbalanya	62	10	50	122
7. Acacia Larrakia, Belyuen	-	-	37	37
3A. Southern Region Refurbishments	-	-	757	757

Note that several other Packages were also developed later in 2009, including P10, Ngukurr and surrounds, and P11, Lajamanu and surrounds. It should also be noted that some of these figures have changed as the program has evolved.

5.6 The early package scoping and its issues

In terms of developing community briefs for contract packages, Connell Wagner simply stipulated that:

Individual programs will depend on the amount and type of work required in each community and the Alliance Partner shall have the capacity to undertake design and construction of works such as infrastructure and land development. (Connell Wagner 2007b, p.33)

For package brief development, the Program Owner (A.G. & NTG) first issued a Package Scoping Proposal (PSP), i.e. a request to the Alliance Partner to submit a Package Return Brief (PRB). The Alliance teams then had to submit a PRB that demonstrated how they would do the work. Then, if the government accepted the PRB, the team proceeded to prepare the Package Development Report (PDR).⁹³ The Alliance Partners then submitted the PDR, similar to a feasibility study and outlining

⁹³ G.L. Alliance No. 2, 04/08/2010.

the proposed extent of work in the Package and the various housing product outcomes as well as other outcomes and KPIs, such as employment and training, all conforming to the design guidelines prepared by the Design Coordinator.⁹⁴

In SIHIP Stage 1, the scoping of the extent of work in each community was thus not initially prescribed by the Owner (A.G. & NTG) but left up to each Alliance Partner to determine, being guided by the SIHIP goals and through a process of intense community engagement.

This engineer explained how the team members of Alliance Partner No. 2 ‘ ... spent time to do necessary assessment at a whole community/town level; [we] did a full demographic study—social mapping had not been done before; even mapped where the gangs are. [We] managed to get 22 family groups to make joint decisions (nobody had done that before) ... What we did at Wadeye was very good. A value for money matrix done initially—using software. Various options compared. \$70 million of infrastructure now going in’.⁹⁵

The Manager of the No. 1 Alliance described their experience as follows:

We certainly did not understand [the scope] at first. We assumed government knew the scope. But we had to develop up the numbers. This was new to us. The whole thing was a moving target a lot of uninformed stakeholders entering through the process. But [Alliance No. 1] had a better database at the time of developing the first PDR than the T.H. (Territory Housing); we could tell them who was living in each house—e.g. if it would split into two residences or would it stay as one, together as a single group (extended family)? We achieved an in-depth understanding of community needs. And of products: fittings, fixtures, materials—a big effort was made. Without the alliancing model, you cannot do that; you won’t get a quality outcome ... If a consultant did this, they would remain disconnected; but with the Alliance approach, the designers, constructors and the owner are making joint decisions to get the best results.⁹⁶

The No. 1 Alliance senior architect also commented later on infrastructure planning and design as a hidden risk factor in the program that was only revealed in the early stages of Alliance engagement and briefing.

... We started identifying that the infrastructure was in such poor condition in many communities—we had to do infrastructure planning by default—e.g. headworks for water. For example, at Maningrida, Nguiu, Galiwin’ku, headworks, ponds, bores etc. are needed. Separate additional funding is only just arriving now for this. The scoping of such works is done in all the communities where we are working.⁹⁷

One of the advantages of the large-scale contract packages was the flexibility and capacity to incorporate holistic planning and design that encompassed everything from settlement infrastructure on the one hand to targeted socio-economic capitals on the other.

⁹⁴ R.N. Alliance No. 1, 29/04/2010.

⁹⁵ L.R. Alliance No. 2, 27/04/2010.

⁹⁶ E.F. Alliance No. 1, 20/05/2010.

⁹⁷ R.N. Alliance No.1, 29/04/2010.

5.7 Identification and engagement of socio-economic capitals

The identification of Aboriginal socio-economic capitals began early in the SIHIP program. The front end of the program went beyond the process of preparing in-depth design briefs, to one of extended Community Engagement (C.E.) as originally stipulated by Connell Wagner:

Community consultation needs to commence at the front end of the Program to maximise the community participation rates. This requires the Management Team to determine the willingness of each community and their capacity to participate in the Program. This engagement should identify whether a labour pool is available as a minimum level of participation or if an SME [small to medium enterprise] exists which could subcontract with the Alliance Partners ... Prior to the commencement of construction, the Management Team accompanied by the Alliance Partners will consult the community to develop participation frameworks with the goal of developing a sustainable workforce through the new build works. This workforce can then remain in the community and undertake refurbishment works with a link to long-term maintenance arrangements. (Connell Wagner 2007b, p.39)

The No. 2 Alliance's Community Engagement and Employment Workforce Development Manager described how her team used a wide range of best practice C.E. techniques ... 'a whole set of tools including Cultural Protocol Handbook for each community, newsletters, before and after photo boards, and a cross-cultural training course; also community meetings and bus tours (people love them) of new works and a barbecue to look at finished works before handover'.⁹⁸ The No. 1 Alliance's good practice in Community Engagement Strategy was outlined as follows:

1. *Background research* on the people, before any community visits (various team members already had strong links to communities).
2. *When visiting*, listen to all issues; establish relationships with stakeholders; become recognised as a face and an organisation—use of the Alliance uniform and logo.
3. *Introduce ourselves and our methodology*. 'We shall be honest and open with you. If impacts occur on the program, we will let you know. We might have to say there may be "things you don't like", because government has imposed rules, but we advise them "you can challenge government if you don't agree. We shall try to fit your expectations to our package brief'.
4. *Plans, models, and house walk-throughs* were the best-practice techniques utilised for design consultation and development.
5. Post occupancy evaluations (POEs) are carried out recording both positive and negative comments; but noting that all idiosyncratic preferences cannot be addressed.⁹⁹
6. *Feedback on progress to community*. Maximum community engagement occurs to get up to the Package Development Report (PDR) stage, then there is a gap between the PDR approval and the construction camp establishment; this can be several months at least whilst waiting for approvals, but there is a need to maintain feedback in that period. So regular Housing Reference Group (HRG) meetings are held (the HRG is primarily a Housing Management reference entity set-up by Territory Housing as part of its rental policy management policy). A story

⁹⁸ G.L. Alliance No. 2, 20/05/2010.

⁹⁹ R.N. 29/04/2010.

book is used to detail the house construction process, which each HRG member takes back to their families.

The senior architect of Alliance Partner No. 1 gave the view that many observers ‘think consultation is at the beginning, but it is an ongoing process—often there is little recognition of the value that local people contribute to the process, e.g. at Nguiu there have been about 20 meetings of its HRG. These meetings have a positive impact on housing knowledge—members of the HRG develop a critical analytical capacity’ (R.N. 29 April 2010). This knowledge is gained and exercised around decision-making, trade-offs, briefings and design translation by the community’s consultative housing group (HRG). This is an important governance capacity generated by the process, leaving behind a type of housing governance group in the community.

5.7.1 *Employment capital in SIHIP*

Generating Indigenous employment was an overall SIHIP goal, as well as being embedded in the Design Guidelines.

In addition to construction and housing management employment opportunities there are a range of semi-skilled and part time employment opportunities that should be considered by consultants, [e.g.] the local manufacture of building components such as: internal storage units; basic household furniture; external storage containers; raised decking platforms for outdoors; and curtains or blinds. (Wigley 2008, p.34)

The Design Coordinator also made a passing reference in the Program Design Guidelines to the fact that Alliances are to report on ‘the ease of assembly’ of houses, the inference being whether the construction approach is achievable within future Aboriginal construction practice. Part of the SIHIP program has addressed this latter criterion.¹⁰⁰

At the time of writing, both Alliance Partners had generated strong economic capital for the targeted communities in their contract packages with respect to employment, which was identified as EWD (employment workforce development) in the SIHIP language. DEEWR not only provided funding but allowed one of their senior staff to be seconded into the SIHIP Program Management Team to assist with EWD outcomes. Table 11 below indicates the official FaHCSIA Indigenous employment figures in mid-May 2010, for both Alliances in total.

Table 11: Summary of SIHIP’s Aboriginal Employment and Workforce Development (as at 11 May 2010)

EMPLOYMENT AND WORKFORCE DEVELOPMENT		
	Current Indigenous employment	Indigenous Full-time Equivalent since commencement (per cent of total workforce)
Total	213	
Average Total		37%

Source: P.C. from Kristi Stinson and Bianca Birdsall, FaHCSIA, 21/5/10).

In attempting to assess the SIHIP employment outcomes in quantitative terms, efforts were made to identify Indigenous employment figures on other housing projects, but it seems that employment has never been well tracked nor systematically recorded for

¹⁰⁰ The Design Coordinator also refers to ‘Home Ownership and Sweat Equity’ in his Design Guidelines which is “the contribution made to the construction of the house by individuals using their time and labour” (Wigley 2008:35), and referred to the pioneering work of architect Paul Haar (2003) in this field. However, none of the Alliance Partners had engaged in ‘Sweat Equity’ with individual householders.

comparison in the Indigenous housing sector. It is hypothesised that SIHIP will generate more Aboriginal employment than any previous Indigenous housing program, but this is only conjectural and depends on how terms such as 'program' and 'employment' are defined and interpreted.

The Manager of the No. 1 Alliance Partner noted that EWD in their Tiwi package resulted in higher than 50 per cent Aboriginal employment in the package contract workforce.

The drivers are not in conventional tendering to do this [high sustained Indigenous employment] and there is a lack of understanding how to do it as an ongoing interactive process. There are many small steps to learn: e.g. pick the workers up; in the morning meals including breakfast; create a critical mass who want to come to work, then more want to join; engage mentors in the community (works well); use local Indigenous employment brokers and support that employer broker with capacity building systems ... etc. These are all the ingredients we need—package it all together to make it work.¹⁰¹

The Senior Architect of No. 1 reported that 'at Nguuu, in April 2010, some 62 to 64 were Tiwi Aboriginal people. The Construction Camp contained 60-odd Tiwi people, and sometimes as high as 80 people. This was the whole workforce including cooks, drivers, cleaners, safety officers. Most Aboriginal staff are local Tiwi. At the start everyone in the Tiwi communities said Tiwi people do not want to work, but this has been proved wrong'.¹⁰² The Senior Architect explained further aspects:

The Project Manager and Site Manager meet with workers' families to uncover any recurring Aboriginal employee absenteeism issues: issues such as cultural avoidance, peer group pressure (shame), having other priorities (e.g. court, community service hours), whereby they typically have not told anyone. We use Aboriginal mentors to find out what's going on. Then the Manager visits the family, and sorts out the issue and makes allowance for it. For example, an individual keeps their working pay and does an extra two hours a day to do community service in the construction camp. This was an absolute first in my experience.¹⁰³

5.7.2 *Generating enterprise capital in SIHIP*

In their original design of the SIHIP program, Connell Wagner (2007b, pp.50–51) identified the possible inclusion of Aboriginal enterprises in the Project Alliance Management Teams (PAMTs), having the potential status of a 'community SME' (small to medium enterprise). The early SIHIP call for EOIs, addressed Indigenous enterprise groups and sought out sound Indigenous leadership in such registrations of interest. At the time of writing this report, the following Indigenous enterprises were being identified by the Alliance Partners as gaining a good track record within the SIHIP program.

→ Tiwi Enterprises

The No. 1 Alliance partner had engaged with 'Tiwi Enterprises' who provided the employment and labour hire service, not only in the Tiwi Islands but also for separate imminent packages at other communities because there was no equivalent employment broker there. Tiwi Enterprise was to run the employees' payroll for Galiwin'ku and Maningrida.

¹⁰¹ E.F. Alliance No. 1, 20/05/2010.

¹⁰² R.N. Alliance No. 1, 29/04/2010.

¹⁰³ R.N. Alliance No. 1, 29/04/2010.

- GEBIE Civil and Construction (GCC)
The Anindilyakwa Land Council had formed 'GEBIE Civil and Construction' under a Sub-Alliance to Alliance Partner No 1. It was to undertake all housing refurbishment and rebuild activity on Groote Eylandt and Bickerton Island and the construction of the Umbakumba subdivision.
- Bathurst Island Housing Association (BIHA)
Alliance No. 1 have given a number of Stage 2 houses to BIHA to build using the Ritek building system—four or five by the end of 2010, together with advice.¹⁰⁴

The benefits of the Ritek system—it is one of the greatest Alliance benefits—a community [who learns to use it] should not need a contractor to build a house again. It is a simple basic system; a modular solution—and robust. In addition to the walls, pre-cut timber truss components are brought from Darwin. A mobile plant is taken to the community. Local labour is used to cut the timber and press plates. Every house has the same standard truss. These skills are left behind. This part of the process is undersold. Block houses take a higher skill level [than Ritek].¹⁰⁵
- Ingerreke Aboriginal Corporation
In Alice Springs—were contracted by the No. 1 Alliance to do the first four renovations. This organisation wanted to build capacity and obtain a lion's share of the SIHIP work. They formerly did a lot of the Community Clean-up contracts.¹⁰⁶ At the time of writing, Ingerreke was also employed by No 2 Alliance as a sub-contractor on Package 3a, the Southern Region refurbishments.¹⁰⁷
- Tangentyere Council
The No. 1 Alliance Partner engaged Tangentyere Design as an architectural sub-consultant for the Alice Springs Town Camps, as well as Tangentyere Employment Services. At the time of writing, this employment agency had 24 people in pre-employment start—which involved six weeks of training.
- Thamurrur Aboriginal Corporation
No. 2 Alliance Partner was also generating partnerships with Aboriginal entities and endeavouring to create offshoot Aboriginal businesses, with its biggest success story (at the time of writing) emerging at Wadeye. At the commencement of SIHIP, Thamurrur at Wadeye were developing a pre-fab tilt-up concrete panel house. SIHIP will allow Thamurrur to gross up to \$30 million in two years. In April 2010, Thamurrur had employed an additional 20 men on top of their base staff. No. 2 Alliance had placed some of their own personnel in the Thamurrur team to increase their capacity. At the time of writing, they were being offered a production engineer. Thamurrur provided other services besides panel manufacture, e.g. plant machinery hire and general construction labour force.¹⁰⁸
- Julalikari Council
Julalikari Council had been engaged by No. 2 Alliance for contracts for R&M for town camps and outstations in and around in Tennant Creek—but were in need of improved systems and permanent staff. At the time of writing, No. 2 Alliance was making attempts to provide them with capacity-building personnel.¹⁰⁹

¹⁰⁴ E.F. Alliance No. 1, 20/05/2010.

¹⁰⁵ R.N. Alliance No. 1, 29/04/2010.

¹⁰⁶ R.N. Alliance No. 1, 29/04/2010.

¹⁰⁷ G.L. Alliance No. 2, 01/08/2010.

¹⁰⁸ G.L. Alliance No. 2, 27/04/2010.

¹⁰⁹ G.L. Alliance No. 2, 27/04/2010.

→ Trades sub-contractors

The Alliance Partners have engaged some Indigenous tradesmen in one-off businesses as well as encouraging non-Indigenous tradesmen to employ Aboriginal apprentices (e.g. the 50% plus Indigenous employment on Bathurst Island includes sub-contracts).

In general, it was found that a number of the above enterprises made an initial self-assessment that was over-confident of their capacities; it was found in many cases that they had a lack of industry standards (including in some cases safety standards), management systems, and/or professionalism in contracting.¹¹⁰ Once these shortcomings had been identified, the Alliance Partners worked to provide capacity-building services, including embedding their own staff for a period with particular enterprises.

Another category of spin-off asset/enterprise combination from SIHIP which was being negotiated at the time of writing, was the possible provision of the Alliance Partners' construction camps to community-based organisations after SIHIP, to be recycled for alternate uses e.g. for a tourist resort in one case.¹¹¹

The author (P.M.) inquired as to whether an Indigenous enterprise group may generally rise to become a full alliance partner with work on several packages and come to sit on the ALT (Alliance Leadership Team which is the alliance's Board of Directors). The senior architect of Alliance No. 1 commented that the Land Council on Groote Eylandt had been talking about being at least a sub-Alliance partner. This Council had catering and construction arms or enterprises, and was in a short-term agreement to be a sub-contractor. But they did need a capacity-building model that would allow them to scale up gradually.¹¹² At the time of finalising this case study (August 2010), and as noted above, the Aboriginal Land Council had formed a Sub-Alliance to deliver refurbishments,¹¹³ through a business entity named GEBIE¹¹⁴ Civil and Construction (GCC) which was engaged in taking on project risk as well as Federal Safety Commissioner requirements. GEBIE refers to the Groote Eylandt and Bickerton Island Enterprises.

5.7.3 SIHIP health capitals

In the SIHIP Design Guidelines (Wigley 2008, pp.28–29), under Design Objective 4, 'Support Healthy Living Practices', the Design Coordinator outlined environmental health design criteria based on the well-known research of Nganampa et al. (1987) and Pholeros et al. (1993), as well as the National Indigenous Housing Guide (FaHCSIA 2007a). A key intellectual and practice leader in this specialised field of environmental health, architect Paul Pholeros (P.P.), was selected by the program to act as an independent auditor of the Alliance design documents to ensure that the many criteria of supporting healthy living practices were adhered to.

At the time of writing, the SIHIP program was not sufficiently advanced to comment very much on specific human health outcomes. House health hardware components were being carefully reviewed in the design process. Some environmental health features of yard design were being curtailed by new budget restrictions imposed after

¹¹⁰ P.S. 18/04/2010.

¹¹¹ P.S. 20/05/2010.

¹¹² R.N. Alliance No.1, 29/04/2010.

¹¹³ P.S. 05/08/2010.

¹¹⁴ Acronym for 'Groote Eylandt and Bickerton Island Enterprises'.

the SIHIP Review.¹¹⁵ Although many houses were of slab construction on earth platforms, there was little shaping of sites and minimal yard landscaping to provide controlled surface-water run-off from houses in heavy rainfall.¹¹⁶ This was supported by Paul Pholeros who stated that the loss of external features such as verandah space, house edge details and yard furnishings were expected to ultimately have an adverse impact on capacity to reduce overcrowding.¹¹⁷

However, it will only be at the end of the program that an objective evaluation will be possible concerning the overall health outcomes and the associated impacts of any shifts of priority in the program.

5.8 The SIHIP Review

In mid-2009 a review was commissioned by the Australian and NT Governments to assess how to improve the Strategic Indigenous Housing and Infrastructure Program (SIHIP). The review analysed the performance of the program, particularly in response to Australian Government and public concerns that:

The program [had] been slow to deliver housing (timing); the governance of the program [was] overly bureaucratic (governance); and the program [was] too costly (total cost), including that the costs of houses under the program (unit cost) and program administration (administrative cost) [were] too high. (A.G. & NTG 2009, p.5)

In relation to program timing, some of the review's critical findings were:

- There had been a three month delay against original timeframes in commencing work in the first three nominated locations, Groote Eylandt, the Tiwi Islands and Tennant Creek; and that this delay was largely due to underestimates by the Integrated Program Team of the time required to develop the initial packages of works.
- SIHIP lead times for construction were less than those under the most recent large scale Australian Government remote Indigenous housing program, the National Aboriginal Health Strategy 2 (NAHS 2), which commenced in 2001.
- That there would always be a lead time between project initiation and commencement of construction in any given location, but that this period would be minimised now that the program was fully established.
- That from 2010 for each year of the Program, SIHIP would build more than double the number of houses built on average over the last five years. (A.G. & NTG 2009, p.6)

The reviewers determined that the overall program design was sound, and argued that while certain high-level aspects of the program had to be modified, these flaws had been identified early enough to ensure that the program could still meet its objectives within the original timeframe. Specific reference was made to the SIHIP program targets of 750 houses, 230 rebuilds and 2500 refurbishments. (A.G. & NTG 2009, p.5)

The reviewers asserted that an imbalance had emerged between program objectives, whereby design and community engagement were elevated to the detriment of the unit cost required to achieve program targets, thereby skewing program outcomes

¹¹⁵ As no hard measures of base-line housing and health data were being collected, the surrogate health measure ('housing function rate improvement' as used by Healthhabitat was not able to be assessed (P.P. 20/8/10).

¹¹⁶ P.S. 05/08/2010.

¹¹⁷ P.P and P.C. 24/08/2010

(A.G. & NTG 2009, p.5, p.6). Within this review the issue of large houses for extended families emerged. One contract administrator commented that in SIHIP Stage 1, due to the open nature of the brief, community consultation resulted in many requests for large houses for extended families and large households with high costs per unit.¹¹⁸

The review gave a direction to reduce unit costs in future contract packages while still ensuring that all houses complied with the Building Code of Australia and the National Indigenous Housing Guide. A revised average unit cost of \$450 000 per new house was agreed between the Owner and the Alliances. By making all of these modifications it was asserted that program management costs would be reduced from 11.4 per cent to 8 per cent of the program budget over the life of the program. (A.G. & NTG 2009, p.7, p.8) As well as fixing the final average new house cost at \$450 000, an additional sum for yard works (fences, carport, etc.) was allocated. The new targets are set out in Table 12 below.

Table 12: Revised numerical house targets and average unit costs for the SIHIP program, following the SIHIP Review of mid-2009

<i>SIHIP element</i>	<i>Target number</i>	<i>Average unit cost</i>
New houses	750	\$450,000
Rebuild houses	230	\$200,000
Refurbished houses	2,500	\$75,000

Source: P.S. 27/4/10.

The Stage 1 open-ended briefs (but nevertheless, set within economic parameters) with the mix of new houses, rebuilds and refurbishments, as well as the size and design of houses decided on a local needs assessment, were thus replaced by a numerically prescribed brief (Table 12), to be achieved with a limited albeit still adequate portfolio of designs. It was asserted that by meeting these targets and building more houses suited to different family types (albeit a more limited range of family types), crowding reduction would be achieved.

Nevertheless, despite these changes, the original baseline house established in SIHIP Stage 1 stayed much the same. It had been originally prescribed as having an enclosed area of 80 square metres and a combined set of open-roofed and semi-enclosed spaces of 90 square metres (total 170 square metres), with the enclosed space containing a minimum of two multi-functional spaces (e.g. bedrooms of 17.5 square metres), and two bathrooms and a laundry. At the time of SIHIP Stage 1, this house had less floor area than the equivalent costed IHANT (c.2007) design of between 180 to 200 square metres. However the SIHIP Review removed the extent of open-roofed and semi-enclosed spaces, while the enclosed area stayed much the same. The SIHIP Stage 2 portfolio baseline house design became about 100 square metres plus 25 to 30 square metres of verandah space with a minimum of three bedrooms and two bathrooms, living space and laundry. A key positive noted by one Public Servant was that the SIHIP program retained a mix of housing types and was not just confined to a three-bedroom house.¹¹⁹

In the post-review stage of SIHIP, the approved design portfolios of the Alliances thus contained one, two and three-bedroom houses, duplexes (also with a range of number of bedrooms), and single men's flats. At least 50 per cent of houses were to be three-bedroom houses. This shift in briefing was arguably a response to the intense media scrutiny that SIHIP came under, and suggested that media accountability was a dictating determinant, both in terms of the conservativeness and

¹¹⁸ P.S. 27/04/2010.

¹¹⁹ P.S. 05/08/2010.

reasonableness of average house costs and the numbers and size of houses provided under the Program. Negligible recognition was given by the media to SIHIP's broader goals at the time and to the socio-economic capitals that were being generated. The technical interpretation, operationalisation and prioritisation of this shift in briefing policy required considerable revision and re-conceptualisation within the SALT and PAMTs over several months.^{120 121}

The 'cluster housing' concept was an innovative town planning design response that had been developed in SIHIP Stage 1 but continued and was consolidated into SIHIP Stage 2 because it fitted into the new parameters following the review, whereby three or four houses were provided for an extended family (or clan group) in a common precinct with a sense of inter-related communication and visitation, and even a shared central facility for socialisation and domestic work, but with separable tenured lots and service connections enabling a future reversion into single lot separable tenancies if the original social structure deconstructed for whatever reason (e.g. deaths, demographic decline, migration). This social housing concept received Housing Reference Group support across a number of communities,¹²² e.g. Maningrida, Galiwin'ku.

Our original EOI had cluster housing. This survived the Review. Now we have cluster sites in various locations—one three-bedroom house and two two-bedroom houses for total of 14 people. Also we can combine a cluster site with an adjacent three-bedroom house to make a capacity for 20 people in an extended family. This is a big win ... The term 'Green Title' applies. Each dwelling gets its own area of land to get separate services and meters and lot identification number. It is not 'strata title' where the cluster has a body corporate and only one point of servicing. But an Aboriginal governance equivalent of a Body Corporate is possible through a clan head with his clan on such a cluster site.¹²³

Other planning innovations included large lots and lot frontages (30 to 35 metres) in various new estates, as well as internal bush buffer (or green space) zones within such estates to improve residential privacy and facilitate socio-spatial separations (E.F., No. 1, 20 May 2010). At the time of writing, some seven new estates, integrating subdivision design and housing design were in development progress (Gunbalanya: 2, Wadeye: 2, Nguui: 1, Galwin'ku: 1, Milingimbi: 1).¹²⁴

5.8.1 Conclusions on the SIHIP Review

In the current author's view, the KPI of reducing crowding through a range of planning and design mechanisms in SIHIP 1 was narrowed in SIHIP Stage 2. The emphasis shifted to achieving crowding reduction by increasing numerical targets of numbers of housing units to be provided and repaired (see Table 12 below). The more holistic approach to addressing crowding that was being developed in SIHIP Stage 1, addressing crowding through strategies for different spaces (private, social, meeting, yard and neighbourhood spaces) was truncated by the new parameters.

The various impacts of the review on design and planning policies necessitated a revision to the SIHIP Design Guidelines by the Design Coordinator (NT, DHLGRS

¹²⁰ P.S. 27/04/2010.

¹²¹ It is beyond the scope of this report to address all of the impacts of the policy shift in the SIHIP program.

¹²² The current author would recommend post-occupancy evaluation of these housing clusters to assess their relative success and to further refine their design.

¹²³ R.N. Alliance No. 1, 29/04/2010.

¹²⁴ P.S. 20/05/2010.

2010). The shift in policy approach for SIHIP Stage 2, away from the Alliance-led open-ended scoping of SIHIP Stage 1, frustrated the Alliance Partners' senior personnel, given all of the intense work effort that had been conscientiously undertaken. However, one of the Alliance Partner Managers reflected on the success of the alliancing procurement method to accommodate this major shift.

... the staff morale of the highly motivated people in the Alliance [No. 1] dropped. I had led a tight team who got to a solution which all were comfortable with, including the owner, and the community. The Review then resulted in uncertainty, change ... all were demoralised. But once the results of the Review were out and the way forward worked out, everyone bounced back fairly quickly (e.g. R.N. was on the verge of "spitting the dummy"). Now have best result for price. Everyone needs to understand the Owner has a right to change their mind. If everyone thought it was 100 per cent right at the start, you would not need Alliancing. (E.F., No. 1, 20 May 2010)

One of the senior public servants also positively noted that the alliance contracting method was inherently flexible to allow such major policy shifts mid-stream in the program. 'At each of the defining points when the program grew and/or changed, the Alliancing structure allowed us to make such changes without going to court. We are [therefore] very happy still with alliancing'.¹²⁵

5.9 The Alliance Partners' experience of managing risk

A key rationale of adopting the Alliance procurement method was to manage the many risks involved in the remote Aboriginal housing sector. Connell Wagner had originally specified that: 'There will be a culture for Alliance Partners to collectively share risks, and adoption of a 'no blame' culture through a partnering/alliancing relationship' (Connell Wagner 2007b, p.33). One of the Alliance partner managers (from No. 2 Alliance) defined two categories of risk as follows.

"Up risk" is the risk of project destabilisation from above the Alliance Team (by politicians, the media scrutiny, political responses, major economic shifts, changes of government etc.), whereas "down risk" is destabilisation risk from the project site involving local community and weather factors.

He commented that the Risk Register is quite lengthy at the start, as the Alliance commences early contact with the communities, but that the list gradually reduces into these two categories as (1) list of risk for the Alliance Partners; and (2) list of risk for the job. This manager was of the view that his main role was to manage all of the 'Up risk' which was composed of political events impacting on the continuity and stability of the program and involving senior bureaucrats, politicians and the media.¹²⁶

The Manager of the No. 1 Alliance Partner gave an identical response to his counterpart.¹²⁷ He said that the nature of the risks have significantly changed during the procurement process. 'We could put aside the political risks and not take them into account, but political risk is the biggest risk for this project at present.' This manager commented that 99.9 per cent of his time was managing risk up. He said the package teams manage risk down. He then gave four examples of 'down risk'.

When you start the process, especially refurb, you do not know till you pull a house apart about the extent of damage in it. We do not want the Owners to take the cost of this approach—too big a risk—there is a very inflated tender price normally. To de-risk that, the effort involved in managing the cost

¹²⁵ P.S. 27/04/2010.

¹²⁶ P.K. Alliance No. 2, 27/04/2010.

¹²⁷ E.F. Alliance No. 1, 20/05/2010.

recording is quite high—but need to do it to manage that risk; with a fixed price tender, you could waste money at the end, or lose money, or fall short of the target. It's very difficult risk to manage and there is a constant flow of information to cost recorders here—it's the same with underground services ... knowing what's there, another area of risk.

There is a significant risk in not managing community expectations. Some real examples have occurred since the review.

In Alliancing, if you are part-way along the procurement path and a big issue arises, there is no contractual 'argy bargy' e.g. at Maningrida—it does not have a cemetery—a lot of people are buried in back yards. But a tenant will soon tell you where you cannot extend a house. There are a whole lot of infill lots there to build on—but human remains are on some—we have to stay away from those lots. If we had a hard dollar [lump sum] contract, there would be argy bargy—the cost implications of changing building sites would be enormous.

In the Alice Springs Town Camps the infrastructure is poor, and needs to be upgraded e.g. stormwater, sewerage, power; this needs to happen whilst the community is still living in the area; it creates a whole set of environmental changes/transitions. For example, there are a very large number of children in Trucking Yards [Town Camp]—educating children/people to be aware of the risks of construction—is a big issue. No. 1 has produced a 'Construction Safety Induction—Trucking Yards' document (will do this in every Town Camp). We also equip community leaders with site keys to security gates to rescue children if they climb into the construction site.¹²⁸

At the time of writing, an imminent 'Uprisk' factor was the forthcoming federal election with increased attention from federal and state opposition and media.¹²⁹ One of the interviewees confirmed that 'the effect of the media attention is significant' which was something of an understatement. In hindsight, the risk endured by the program could have been managed better if a baseline set of data had been compiled on which to assess program goals, including those relating to the targeted social capitals.

5.10 Positive outcomes emerging from the SIHIP alliancing process

What are the major positive outcomes arising from, or appearing to arise from the SIHIP alliancing procurement process? This analysis has clearly demonstrated that there are sizable, albeit variable capitals being generated within the SIHIP program, particularly (i) economic capitals gained through training, employment and enterprise development, (ii) health capitals gained through adherence to healthy-living environmental and house design practices, and (iii) cultural capitals achieved through town planning, house design and the use of Housing Reference Groups (HRGs). While there is some public controversy about program costs, there are strong arguments that value for money is being gained across these other capitals in addition to the actual houses.

None of those interviewed were negative about the advantages of alliance contracting, with the exception of the NT Parliamentarian who was interviewed (F.J.). Those senior professional members of the alliances who were interviewed, i.e. senior public servants, Alliance Partner managers, architects and engineers, were all generally positive about the advantages being gained in the SIHIP program. Some of the advantages that were identified and uniformly commented upon were as follows:

¹²⁸ E.F. Alliance No. 1, 20/05/2010.

¹²⁹ P.S. 28/04/2010.

1. The socio-economic capitals gained, in addition to the actual houses.
 'A lot of people are over-simplifying SIHIP by saying it's just about new houses. It is not really a housing program—housing is the by-product—development of traction [for a range of community capitals] is what it's about. Without SIHIP you would just have houses on the ground.'¹³⁰
2. The added capacity to match the product and process with community needs.
 Alliancing gives more flexibility to do what's required in the community.¹³¹
3. The capacity to manage the complex 'down risks' in remote Aboriginal housing.
 There are too many unknowns in communities due to the neglect of the housing stock over the last 40 years. If we had used a lump sum tender, it would have failed. For example, at Wadeye, the water/sewerage infrastructure ... 90 per cent of 170 houses are hooked on a daisy chain system—have to turn off the whole lot if you want to work on any one of the houses; there are hidden problems.¹³²
 The 'killer' for any other contract type [other than alliancing] is the 'Employment Workforce Development' (EWD) of Aboriginal people. For the lump sum contract that says 'thou shalt have X hours of Aboriginal labour...', the inevitable result is a large variation because of the unreliable labour outcome and the escalated labour/time blowouts, i.e. a high-risk component.¹³³
4. The advantages of collective and integrated teamwork that the alliancing structure facilitates.
 [A good practice of SIHIP] is the way design and construction personnel have worked together in the alliances, [and] recognition of the combined skill sets necessary to deliver.¹³⁴
 The Alliance strength is the collective of brains—we push for innovation all the time.¹³⁵
 There is a coordinated design perspective [between architect, engineer, builder] in SIHIP.¹³⁶
5. The holistic design of the SIHIP program in addressing a broad range of diverse objectives and capitals.
 The process has coupled the design guidelines and town planning and community engagement in the design process and into the construction through to POE [post-occupancy evaluation]. The program took in all main components initially, e.g. enterprise development, employment and training, design, and was funding them. The Design Management Plan provided a path for design through the whole project—a structure there to say what to do (including full archaeological site check and employment management plans which did not occur under NAHS).¹³⁷

¹³⁰ Manager of Alliance Partner No. 1, 20/05/2010.

¹³¹ Manager of Alliance Partner No. 1, 27/04/2010.

¹³² P.K. Alliance No. 2, 27/04/2010.

¹³³ P.S. 28/04/2010.

¹³⁴ P.S. 20/05/2010.

¹³⁵ G.L. Alliance Partner No. 2, 27/04/2010.

¹³⁶ L.R. Alliance Partner No. 2, 28/04/2010.

¹³⁷ P.S. 20/05/2010.

6. The economies of scale gained.

'[I] thought it was the right way, real economies of scale, at the outset. SIHIP is positive—it provides resources for proper planning—due to its larger scale. Our SIHIP professional costs were much less, half than under NAHS because the SIHIP program is big, can do planning for next 20 years for communities. Big enough scale for this.'¹³⁸

5.11 Possible negatives of the SIHIP procurement process

Are there any major negatives arising, or appearing to arise, from the SIHIP procurement process in relation to achieving social capitals as outputs? A number of negative issues appeared to be arising within SIHIP at the time of the author's case study analysis. However, because SIHIP was likely to continue for some years, it is premature to be definitive about these issues. The alliancing procurement method has the capacity to self-correct and it is possible that a number of these issues will be positively addressed in due course. Nevertheless, they are listed here for consideration in the overall analysis.

1. *The issue of continuity of employment of trained workers and enterprise engagement after SIHIP.* A recurring question that was raised during the author's research was: What is 'life after SIHIP?' What continuities will be handed over and to whom, so that employment, training, and construction continues? It should be noted of course that this is not a problem unique to alliance contracting, but is one relevant to any procurement method. Nevertheless, with the excellent outcomes being achieved within SIHIP for employment and training, it is a pertinent question. The SIHIP Review recommended that: 'Governments direct appropriate resources to transitioning Indigenous employees under SIHIP into ongoing employment' (A.G. & NTG 2009, p.8). However, various interviewees critically challenged the prospects of ongoing work after SIHIP to stabilise the Indigenous workforce and the enterprises generated under SIHIP. Critical comment was made about the governments' capacities to coordinate such work, despite constant parallel building contracts recurring in communities let by all arms of government (local, state, federal). Is it possible for government to coordinate future works to ensure some continuity for Indigenous enterprises and employment? One view was that such contracts could start to be fed into the newly expanded market prior to the completion of SIHIP.¹³⁹ On the other hand, government tendering policies and the market rights of non-Indigenous building firms and suppliers were clearly influential political factors in such considerations. One view was that there has been a contracting industry 'pushback' to prevent additional government work going into the alliance contracts. Associated other issues were the roles of training organisations and of gaining an understanding of the human resources in an Aboriginal region, as well as the limited capacity of the workforce to be mobile in seeking work opportunities.

'A positive result is the 65 Aboriginal people employed on the program at Bathurst Island—but what will they do afterwards; many are not mobile and will not simply move elsewhere to chase work'.¹⁴⁰

2. *The issue of developing Housing Management capacities in/for communities.* A related set of questions revolved around the implementation of housing management in communities both in terms of employing trained workers on the repairs and maintenance of housing stock and of equipping tenants with skills and

¹³⁸ L.R. Alliance Partner No. 2, 28/04/2010.

¹³⁹ P.K. and L.R. Alliance Partner No. 2, 27/04/2010.

¹⁴⁰ E.F. Alliance Partner No. 1, 20/05/2010.

values to look after their new housing. The SIHIP Review recommended that: 'Governments direct appropriate resources to ensuring robust and effective property and tenancy management to underpin the investment and achieve sustainable housing outcomes for Indigenous people' (A.G. & NTG 2009, p.8).

There were clearly big challenges to achieve this goal. One public servant observed that whereas the public housing model operated reasonably effectively in Darwin—facilitated through a high amenity level and a reliable R&M service facilitated through a call centre; the amenity level in remote housing is very low by comparison and it is challenging to bring it up to metropolitan standards.¹⁴¹ One interviewee was of the view that the entire housing management including the R&M should be opened for contract to an R&M Facility Manager using a ten-year contract.

One of the Alliance Partner Managers was of the view that a significant failing could be the lack of a strong focus on life skills training for residents, which in turn could lead to early failure of some houses; a lack of care and understanding to manage properties. He noted that three rotations of tenants occurred through transitional houses constructed at Melville Island while these tenants' houses were being built or upgraded. He suggested that life skills training could be occurring in such transitional accommodation—'it is the ideal classroom for the two or three weeks [while they are there]'.¹⁴²

It would seem then that it would be possible to generate additional housing management capital in this manner, although this opportunity would be available irrespective of what procurement method was used.

3. *The issue of failure to embed Aboriginal governance entities and enterprise more effectively into the alliance structure.* The point was made previously about the lack of progress to date of including any Aboriginal enterprise groups as junior partners in alliance. The one exception at the time of writing was GEBIE Civil and Construction on Groote Eylandt. (By contrast, this was achieved by the Queensland Main Roads Department with its Aboriginal partner Myuma Pty Ltd who rose through a series of alliancing contracts to be a full alliance partner—see Memmott 2010).

It could be argued that the opportunities to do this within SIHIP, up to the time of writing, had been limited due to poor structures and capacity issues in certain Indigenous enterprises, but it was clear that some enterprises were performing reasonably well. It remains to be seen what eventuates in the remainder of the program.

4. *The issue of reduction of landscaping and yard design elements in SIHIP Stage 2.* The reduced budget for yard and landscape elements has had to be applied more rigorously in SIHIP Stage 2, as compared to SIHIP Stage 1, yet remote Aboriginal housing research clearly emphasises the health and cultural importance of well-designed yard environments, particularly for the accommodation of visitor groups and in the reduction of crowding (Long et al. 2007, Section 5.3.5). The potential health capital outcomes could therefore be limited in this way. However, it could be argued that this outcome is not a limitation of the procurement method per se, but of the re-shaping of the budget as a result of the SIHIP Review.

¹⁴¹ P.S. 27/04/2010.

¹⁴² E.F. Alliance Partner No. 1, 20/05/2010.

5.12 Recommendations for the future use of alliancing across jurisdictions

Of those senior professional members of the alliances who were interviewed, all were positive about using alliancing procurement in future, large-scale, Aboriginal housing programs, whether it be in other state jurisdictions or continuing in the Northern Territory, albeit with varying advice about fine-tuning the principles of the application of alliancing procurement, based on the learnings of SIHIP.

If asked again whether I would use Alliance again for Aboriginal housing; most definitely I would use it again, but I have a different mindset now [re the problems and issues involved].¹⁴³

One senior engineer from Alliance Partner No. 2 commented on selecting the contract approach: 'If the government wants to build 100 houses cheaply, get the Army—but there will be many quality problems. If government wants to do everything right [and achieve multiple capitals], use alliancing, but there is an expense.'¹⁴⁴ However this interviewee argued that 'either contract approach [alliancing or lump sum tender] is fine; success is dependent upon using the right people to run it, the best human resources, especially in planning/consultation/design, but not so much contractors'; nevertheless he also conceded that it is problematic to achieve employment workforce development (EWD) goals using procurement methods other than alliancing.¹⁴⁵ One of the Alliance Partner Managers, went so far as to make a plea for a bi-lateral government approach to approving the use of alliancing in Aboriginal housing at the federal level, so as to ensure that alliancing continues as a procurement method in other jurisdictions.¹⁴⁶

Several public servants were of the view, in hindsight, that 'Relationship MC' also known as the 'forced marriages' approach, may have been a preferable procurement variant, to open tender alliancing. This procurement approach involves first seeking EOIs, then negotiating a 'forced fit' between identified preferred partners, either by using existing teams and asking them to merge certain members together; or by making a separate call for proponents, contractors, professionals, etc., then selecting and asking them to join together. The other principles of alliancing would then apply. However, the need was stressed to have a designer from the early stages to develop the concept plan.¹⁴⁷

Choosing the numbers of alliance partners was seen as a critical design aspect of the procurement method. One critic pointed out the high administrative costs of alliances as a limiting factor: 'Do not have too many alliances—they are each expensive—each with an Auditor ... the more Alliances there are, the more costly for government. The number of Alliances must be also proportional to how much capacity the government has—e.g. numbers of professional staff to sit on Alliance Boards.'¹⁴⁸ However, the earlier discussion is also relevant to consider viz needing a minimum of two alliances for competition and possibly a third alliance to allow for one of the three failing, or having limited longevity due to poor performance.

A second critical design aspect of the procurement method was said to be choosing the regions for contract packages in relation to community proximity and scope of works. One interviewee emphasised the need to rationally look at servicing from a

¹⁴³ E.F. Alliance Partner No. 1, 20/05/2010.

¹⁴⁴ L.R. Alliance Partner No. 2, 28/04/2010.

¹⁴⁵ L.R. Alliance Partner No. 2, 28/04/2010.

¹⁴⁶ P.K. Alliance Partner No. 2, 27/04/2010.

¹⁴⁷ P.S. 27/04/2010 and 28/04/2010.

¹⁴⁸ L.R. Alliance Partner No. 2, 28/04/2010.

geographic perspective; and to build packages around natural cultural regions and transport routes.¹⁴⁹ Such a strategy has potential for sharing Aboriginal labour teams throughout a region.

Finding the optimum balance between open-ended scoping and a prescribed approach to formatting project briefs, was another critical aspect of procurement design that required comment. The author questioned various program participants about the optimum balance between the flexibility of SIHIP Stage 1 brief development, as opposed to the prescribed scope of SIHIP Stage 2. The Manager of No. 1 Alliance Partner was of the view that the Alliance should take the briefing process through from start to finish, saying: 'the amount of effort to get the result is incredible—but you do get a quality result. If driven by numbers of houses per year, then go down the conventional tendering path. In other jurisdictions they would use flat packs, but their houses would not be as robust as we're constructing, nor the same level of attention to cultural aspects'.¹⁵⁰

The No. 2 Alliance Manager prescribed a balanced approach to brief development lying between these two extreme approaches. He suggested: 'At the start of the Alliance to first come up with a realistic price—adapted between the community ideal [high cost possibly] and the public housing models, and meet the design needs in the middle; [and thereby] employ real economic science on the delivering of houses in remote areas. Do the scoping during the alliance too ... put all parts of the process in the Alliance—that is what it is for, otherwise you might as well do conventional tendering.'¹⁵¹ When one of the senior public servants was asked this question, he was of the view that the owner should not have withheld packages and withheld numbers [as occurred in SIHIP Stage 1]—but should have given the numbers as a benchmark in advance. Note that he only goes so far as to suggest a 'benchmark', not a constrained target. Another public servant warned that one can limit the potential innovation capacities in the alliancing approach, if the initial brief is too inflexible.¹⁵²

There were thus a variety of views from the senior most expert personnel in the Alliances on what the optimum balance was between an open-ended scoping or a prescribed approach to formatting project briefs. The bottom-line is that this is an issue that needs to be carefully addressed at the commencement of selecting or designing a procurement method.

¹⁴⁹ L.R. Alliance Partner No. 2, 28/04/2010.

¹⁵⁰ E.F. Alliance Partner No. 1, 20/05/2010.

¹⁵¹ P.K. Alliance Partner No. 2, 20/05/2010.

¹⁵² P.S. 27/04/2010.

6 CONCLUSIONS: A MODEL FOR PROCUREMENT?

A recurrent challenge in the Aboriginal housing sector since its development in the mid-20th century, has been the logistics of delivering houses to the many remote parts of the continent where transportation and infrastructure are basic and regularly disrupted by extremes of climate and location, where tradesmen and product suppliers are few and far between, and where maintenance regimes have been poor to non-existent over many decades. The quality of remote housing procurement has been repeatedly undermined by low standards of workmanship and quality control, inferior materials and lack of effective contract administration.

In drawing out some good practice exemplars for housing procurement in remote Indigenous communities, the following discussion seeks to comparatively analyse the major findings from the four case studies, and focuses on how social, economic and the other types of capitals can be generated or enhanced in Indigenous communities. In presenting how each case study fared in relation to the five main 'capitals', (i) social/economic; (ii) cultural/ethical; (iii) governance; (iv) training/employment; and (v) health, the authors lead into an examination of the complexities and barriers of achieving enduring capitals in remote Indigenous housing.

6.1 Issues of case study scale

The spectrum of case study scales rendered varied analysis of capitals. The two smaller-scale case studies, Koonibba and Normanton, appear to be less significant at a program level, they provided opportunity to scrutinise capital outputs with greater depth, generating findings that can inform procurement programs of all scales. In contrast, the two large-scale case studies, TIRP and SIHIP, offered greater social and economic capital outputs due in part to higher economic capital investment and larger program size. Hence, on the basis of these four case studies, increases in program funding produced definitive increases in outcomes across different program packages or stages.

Furthermore, SIHIP's alliance procurement was based on a clear problem statement (Connell Wagner 2007b, p.13, p.14) explaining why conventional procurement approaches in remote areas were inefficient due to high oncosts and insufficient critical mass to yield value for money which in turn resulted in a lack of continued workflow and unsustainable employment and training outcomes. Additional issues were an over emphasis on rapid deployment of housing resulting in minimal consideration for whole-of-life costing; inappropriate designs and failure of housing management regimes. This was compounded by an increasing backlog of houses to address unmet need, with subsequent overcrowding, resulting in further degradation of both existing and new stock. Thus the program was required to be large enough with multiple packages and of long enough duration to provide successive project work for at least three private sector consortia.

6.2 Social and economic capitals

6.2.1 Enhancing social capitals

Social capitals in remote Indigenous contexts were described earlier as networks non-separable from natural capitals that are all-important in everyday life and often outstrip economic capitals. In terms of procurement and its relationship to social capitals, the better a given community's social capitals are understood and respected, the better any potential housing procurement system will be. Manifestation of social capitals across the case studies has varied, partly dependant on the extent of purposeful intention to engage such. It can also be expected that different communities will

exhibit potentially varying extents of social capitals dependent on a multitude of given circumstances including, but not limited to, remoteness, local levels of leadership, social organisation, skill capability, adherence to local custom and cultural traditions among others.

In the two larger-scale case studies (SIHIP, TIRP) there were clearly, strong attempts to engage with local social capital. For example, within the TIRP, good consultation across government agencies, as well as between consultants and resident reference groups generated social capital through knowledge transfer and participation. The resident consultation process was led by ATSIH under a consultation framework using local reference group representatives liaising with future residents and consultants. Residents were also involved in architectural and planning decisions within strict social welfare housing budget parameters. This led to a sense of participatory ownership, as well as perceptions that resident contributions were valued and cultural values respected with high levels of satisfaction reported.

In SIHIP, there was evidence of Alliances attempting to understand how informal Aboriginal networks might contribute to housing procurement. For example, the socio-spatial mapping at Wadeye aimed to generate residential separation of clans and a reduction of gang conflicts, which were exacerbated by neighbourhood crowding. The case study author found the use of Aboriginal social capital underlying the structure of the SIHIP labour force. One Alliance reported that, in communities where large program packages were being undertaken, sizeable Aboriginal labour pools were established under an Alliance Workplace Coordinator who was an Aboriginal person and who therefore had an understanding of Aboriginal life-ways. These pools broke down into work gangs of about four people whose membership was largely decided by themselves, invariably resulting in teams with strong kinship ties, and whose gang leader was, again, nominated by themselves, using Aboriginal cultural values of appropriate status and leadership. In general, the result was relatively cohesive work groups.¹⁵³

At Koonibba, social capital was confined to Aboriginal networks that terminated at Ceduna and although the construction company aspired to work beyond these and gain greater access to building contracts in the APY region, they had not expanded upon them. However, this may possibly occur at some future date, when current building license restrictions are overcome. Yet, there are other limitations in developing greater social capitals such as Indigenous politics, protocols and the inclusive and exclusive nature of identity. An Indigenous building company has to straddle not only the requirements of economic management, but the Aboriginal protocols governing permission to move into other remote centres. If social networks do not extend into these regions they may require some developing in order to lever into economic development. As such, KBPL demonstrated a clear link between social networks and their contribution to economic gain, such that they were not conceived separately from the objectives of economic capital (Onyx 2005, p.3, Hunter 2004, p.3). At Koonibba, limited social capital networks showed an interdependence with confined socio-economic networks that did not have the ability to expand upon any significant available bridging or linking capitals. 'Bridging capital' consists of overlapping networks that may make other networks accessible; and linking capital comprised of social networks that can connect with persons in authority or positions of power (Hunter 2004, p.3). Nevertheless, enterprises based on restricted social capital may generate sufficient activity or be a matter of limited choice in some remote centres, if based upon the objective to operate a small business, supporting only a few locally based construction labourers.

¹⁵³ P.c. Community engagement, 15 October 2010.

In the mainstream market context, social capital has the potential to develop into leveraged economic action, but in many instances social capital networks are not required or expected to develop and expand economically. By contrast, Indigenous social capital investment appears to yield only limited economic gain and does not usually manifest as capitalistic economic development, largely due to the nature of what Moran (2009, np) describes as the unique political economy of discrete remote Indigenous settlements. He argues that 'the political economy of settlement has led to an unusual asset base and resource use, in which internal asset transformations were more important than inputs and outputs'. The driving force of remote Indigenous social capital generates the culturally destined 'economically rational strategy' of 'pooling limited cash' that both sustains and perpetuates high Indigenous mobility, where customary capital outstrips physical capital and other livelihood options (Moran 2009, np).

6.2.2 Generating economic capitals

Turning to the generation of economic capitals, the SIHIP alliance structure provided sufficient contractual size and flexibility to explore the potential for the enhancement of local small-to-medium enterprises (SMEs) that were 'incubated' through the management structure of the alliance members in benefiting from the economic scale of the available budgets for the duration of the program. Emerging examples largely centred on a range of pre-existing Aboriginal enterprises with notably a capacity and specialisation in different economic activities related to the construction industry. For example, in the Tiwi Islands, an employment and labour hire service run by Tiwi Enterprises was engaged and at Bathurst Island, BIHA, gradually levered up to construct houses in the program. On Groote Eylandt, GEBIE Civil and Construction has been formed as a Sub-Alliance which will undertake all housing refurbishments and rebuilds for that package. In Alice Springs, Ingerreke Aboriginal Corporation were initially engaged in clean-up contracts which positioned them to obtain a significant portion of the SIHIP regional allocation for carrying out renovations. Tangentyere Council, who have a long history of running enterprises, provided an employment service in conjunction with Tangentyere Design, an architectural enterprise that has operated inter-culturally over a period of 30 years. Tangentyere Design employs a largely non-Indigenous architectural workforce with profits generated assisting other social welfare activities. At Tennant Creek, Julalikari Council were also engaged on R&M contracts. Perhaps, the most significant positioning of an enterprise was Thamurrur Aboriginal Corporation at Wadeye who developed a tilt-up panel house and were able to successfully lever into a \$30 million turn-over in two years partly through mentoring by Alliance staff.

In general, it was found that a number of the enterprises discussed made an initial self-assessment that was over-confident of their capacities and in many cases they had a lack of industry standards (including in some cases safety standards), management systems, and/or professionalism in contracting. Once these shortcomings were identified, the Alliance Partners worked to provide capacity-building services including embedding their own staff for a period with particular enterprises.

6.2.3 Challenges to generating sustainable economic capitals

Although social capital is generally perceived as creating positive social, and at times, economic opportunities, there are manifestations of Indigenous social capital that may at times have negative influences. A critical question raised by Moran et al. (2007, p.xiv) is whether over-reliance on social capital by Indigenous people is curtailing other capitals such as education, training, income generation and private enterprise, and thereby increasing the vulnerabilities of remote settlement sustainability. For

example, one of the most important findings arising from the Koonibba case study is that the fragile KBPL enterprise seemed to follow pre-existing limited social capital networks and therefore was not able to readily expand on its enterprise aspirations. Although, skill transfer has occurred slowly and gradually over a period of years whereby sufficient confidence had been developed to increase capacity at KBPL, few economic opportunities presented themselves in the procurement framework operating in the region. The lack of availability of reputable contractors willing to work in remote centres affected supply greatly, so much so that small housing allocations had to be pooled together to generate a contract sufficiently sizable to attract a small building company. KBPL was unable to effectively develop bridging capital or increase linking capital, thereby reducing economic opportunities to move beyond the limitations of its own network and engage with overlapping networks in accessing greater resources. This important finding generates a number of key propositions for enhancing economic capital in remote Indigenous communities:

- Small enterprises leveraged off long-term unemployed personnel with limited management experience, education and financial capacity, and lacking mentor support are economically fragile. Some remote Indigenous communities operating a small business enterprise do not have sufficient social capital in the non-Indigenous regional building economy to access mentoring so as to increase skill and capacity to the competitive requirements of regulated mainstream building programs and sectors.
- Indigenous enterprise development based on inconsistent program releases from a single supplier offers only limited stop-start employment opportunities and may not be sustainable in the long term without wage subsidies from the CDEP program. This is the case for intermittent government regional building programs which produce inconsistent supply and are unable to generate a recurrent capital flow, and may be hampered by a workforce with insufficient capacity in financial management, education and licensing accreditation to operate effectively, thereby increasing vulnerability.
- Small building enterprises of like nature to KBPL operate successfully to carry out minor works contracts and would benefit from joint venturing which would offer mentoring to increase capacity. However, small enterprises levered off minor works contracts operate in extremely fragile economic circumstances and have limited long-term viability begging caution in promoting enterprise ventures where there is insufficient capacity to operate effectively. To increase Indigenous engagement in typically remote and very remote regional economic markets, strategies for enterprise creation must develop a business plan involving a diversified enterprise portfolio and a multi-skilled workforce that reflects the nature of such markets.

Similar to KBPL, Bynoe CACS Ltd at Normanton has been fostering a diversity of work activities so as to not rely solely on inconsistent housing contracts and a tenancy management service which generate insufficient capital to enable sustainable enterprise development. Despite the strong social bonds within the community, a limited pool of skilled labour may not be adequately positioned to engage in economic opportunities when they do occur. As with Koonibba, Bynoe CAC Ltd was reliant on the altruism of an individual loaning their building license, but at Normanton this led to the builder's burn-out, subsequently leading to a predictable collapse of the enterprise due to the heavy burden of responsibility. This inter-cultural dependence is all too familiar to those with intimate knowledge of ICHO development, and does not appear to generate long-term socio-economic capitals or sustainable capacity gains within the ICHO. However, tenancy management at Bynoe is one of their inherent strengths and it appears to be run professionally, indicating that it may, if given the opportunity, be in

a position to increase local economic capacity. This could occur through enterprise development that may slowly develop into increased regional capacity.

Organisations that show a willingness and capacity would benefit from procurement systems that are sufficiently flexible to explore joint-venturing and alliance contracting as demonstrated under the emerging outcomes from SIHIP. Although, this increase in enterprise activity across the SIHIP packages is partly attributed to an increase in capital investment in social housing, not previously witnessed under smaller procurement programs. However, it appears for any operation to be viable and sustainable, it must operate regionally and in the broader socio-economic context, not just within the local economy in order to generate sufficient capital with a clear business case for long-term viability. The case study findings on enterprise capitals illustrate an acute relationship between remoteness, scale of housing procurement programs and socio-economic capitals. While each case study demonstrated similar challenging issues in relation to remoteness, it was not possible to see a clear pattern for a 'one size fits all' response. For example, SIHIP alliance packages were spread over a number of regions providing unparalleled socio-economic development in those selected regions. Alliance contracting enabled pre-existing Aboriginal enterprises to increase enterprise activity with a resultant capital flow benefiting from on-site access to professional advice and mentoring.

It appears that due to prioritising inter-cultural socio-economic exchanges as one of its key objectives, the Alliance contracting model has motivated alliance teams to proactively explore these opportunities in an unprecedented manner. The alliance model also allowed for a meteoric shift in government organisational culture, where there was a willingness to change the management structure of procurement programs that may have previously operated within a single financial year; dispensing with a contractual model where risk is borne by individual contractors constrained by timeframes unsuited to the vagaries of the location and cultural complexities of remote discrete communities. It remains to be seen if increases in capacity are sustainable beyond the SIHIP program. As demonstrated in the other case studies, when programs reach practical completion, SMEs scale down to a locally sustainable capacity and may revert to a dependence on CDEP supplementary funds in the long-term. Local economies bereft of a steady supply of capital flow produce small vulnerable enterprises of relative proportions and, predictably, when these economies contract, so do the enterprises.

The case study at Thursday Island demonstrated that there is an intra-regional difference both between Islander and Aboriginal cultural protocols, and between the inner islands where opportunities for skills development are greater and the outer Torres Strait islands where opportunities are sparser, and acutely deficient. In the latter case of the outer islands, resources arrive from even further distances with greater transportation logistics effecting project continuity, costs and delivery timeframes. There was a clear organisational commitment across governments to deliver the TIRP under a traditional contractual system, where there was sufficient contractual volume and program duration to achieve considerable training outcomes, but no reported enterprise outcomes.

6.3 Cultural and ethical capitals

With respect to cultural and ethical capitals in remote Indigenous communities, the authors contend that design professionals cannot successfully design housing and plan settlements for Aboriginal people unless there is an understanding of their everyday social behaviors and climatic/geographic context. The customary use of domiciliary space supports distinct types of household groups and sub-groups, typical diurnal/nocturnal behaviour patterns suited to different seasonal periods as well as

characteristic socio-spatial structures. Culturally distinct behaviour includes set forms of approach and departure, external orientation and sensory communication between domiciles, different concepts of privacy and crowding, sleeping behaviour, and sleeping group composition, cooking and use of fire, and storage of possessions and resources. Furthermore, there are other culturally distinct aspects that have a bearing on housing design and settlement planning, that are the subject of ongoing research, such as frequent residential mobility, avoidance behaviours related to kinship rules, different values and attitudes about the possession and sharing of objects, including shelter, and response to the death of a householder (Memmott 2003). Of further relevance to remote Aboriginal communities is the link between traditional camp behaviour patterns and possible contemporary housing design.

In order to design culturally appropriate housing, design professionals generally rely on consultation (through interviewing techniques) with those people who are typically the final occupants of the house. This 'briefing process' as it is called sets the parameters for the functional and also non-functional¹⁵⁴ areas of the design. It is within the consultative framework that ethical considerations come to the fore. For example, conscientious consultation (with a fiduciary duty of care) assumes a set of ethical premises; namely, that an interaction exists between two parties whereby one party seeks an understanding of another party's wishes and desires; that the first party listens to the second party and is able to incorporate their understanding into the design and planning process; and finally, the first party then proceeds to document same in order to establish the design parameters and brief for the project. The adoption of certain housing procurement methodologies can render an ethical breach resulting in a prevailing status quo of poor or even non-existent consultation at key decision points. However, the imperative to consult is not sufficient enough in itself; effective consultation requires specialist expertise in cross-cultural communication skills (including 3-D communication) and this has been the premise of informed practitioners in remote settlements for decades, where budgets permit (Long et al. 2007, p.13, p.16, p.17, p.50).

Whether negligible consultation in the Koonibba and Bynoe studies is a product of low-cost social housing models in these jurisdictions where limited budgets allow only very minimal consultation visits to remote settlements, or whether it is a consequence of predominant mindsets to impose service delivery with minimal consultation driven by lagging unmet need, it is clear that this serious ethical dilemma has not been systematically addressed in housing procurement. There needs to be a consistent application of primary ethical principles of mutual respect, mutual rights, mutual responsibilities in meeting reasonable culturally specific needs of householders, so that necessity, location, features, cultural fit of building and infrastructure are genuinely considered in current remote housing procurement practice. Consequently, the ethical dimension is clearly at play when the design consultant either chooses to be bound by the original client brief or deliberately moves away for whatever reason from that which has been previously communicated. The current authors contend that in order to design culturally appropriate housing for remote Aboriginal communities, design professionals need to recognise and respect the original design brief given to them by their Aboriginal clients, and if they perceive a necessity to adjust or change this brief for whatever reason, they need to at least enter into a dialogue with their clients as to the reasons underlying the shift (as was the case when SIHIP 1 moved to SIHP 2).

¹⁵⁴ Non-functional refers to those areas which are considered to be more emotive aspects that are typically driven by individual desires and are not necessarily related to the functional aspects of the house design. For example, qualities of light and space, colours etc.

In evaluating which procurement systems have proven more effective in creating positive outcomes for a close cultural fit in house design, the Thursday Island Redevelopment project appears to have had the most success in regard to consultation processes, and final design outcomes of the four case studies under investigation in this report. An analysis of the TIRP procurement process illustrated cultural appropriateness in design through excellent community consultation and cultural mapping which was fed back into the design and delivery process. The fact that there was significant local input into the project, not only at a strategic level but also at the level of delivery and design, resulted in a sense of community ownership over the project. The TIRP consultation process also made use of local media as a community communication tool, which encouraged the dissemination of project details and allowed the airing of local grievances and ideas. It is too early to evaluate the effectiveness of SIHIP with regard to final design outcomes, however, the authors are aware that extensive design consultation has occurred on this project, but are uncertain as to whether this will bear fruit until house construction has been completed. At the time of writing, the Design Guidelines were endorsed by leading professionals within SIHIP as cutting-edge best practice in Aboriginal Australia.

Furthermore, by acknowledging culturally distinct lifestyles and behaviours in the design brief and discussing them in a constructive way with Aboriginal clients (whether they be individual householders or consultative communal housing committees of some sort), a second consequence over and above a good design 'fit', is allowing opportunity in housing procurement for reinforcing of cultural identity, thereby strengthening social and cultural capital. Once this process is deemed successful, Aboriginal clients are even likely to request forms of symbolic architectural references in housing designs to reflect their cultural identity.¹⁵⁵

6.3.1 Culturally appropriate design: to standardise or individualise?

In order to achieve a close cultural fit in remote Aboriginal housing, there must be a common consensus between the initial designer, the builder and the project manager overseeing the procurement process. One of the most contentious debates in Aboriginal housing over recent years relates to whether or not the standardisation of house designs can deliver culturally appropriate housing. The argument once again relates to risk management for both the funder or owner (proprietor) and the building contractor. For example, the standardisation of house designs can result in less community consultation as community members choose from a range of design options that have typically been predetermined and do not necessarily fit their needs, while the individualisation of house designs requires a much greater commitment to community consultation and adds a great deal of complexity to the documentation and eventual building process, in addition to cost; factors which are at times deemed unacceptable in public service jurisdictions, particularly those aligned with mainstreaming policies.

Individualisation also reduces opportunities for achieving economies of scale as building materials cannot be ordered in bulk and architectural detailing and technology may vary. The history of housing procurement systems in Aboriginal communities has shown that the rigid standardisation of house designs is yet to be proven to result in a strong cultural fit, where the individualisation of house design's while seemingly more culturally appropriate, is yet to deliver successful large-scale housing programs. Both methods present problems for the successful delivery of affordable and culturally appropriate housing within the parameters of prevailing government policies and budgets. However, the persistent feature in remote centres of large Indigenous households comprised of extended, kin groups is unlikely to disappear and rather than

¹⁵⁵ For example, see Fantin 2003.

a polarised approach, two of the four case studies indicated that a combined approach may be more effective.

Findings from both the TIRP and SIHIP case studies illustrate that whether to standardise or individualise house design is a question of project scale, complexity and program budget size and/or restriction. Interviewees from both case studies called for a mix of house types ranging between standardised and individualised design as the best option. In regard to administering large scale, complex projects, the SIHIP 2 approach, whereby house designs were limited to a number of standard templates that could then be individualised according to site, climate and social context, was noteworthy as it gave an economy of scale in the construction process but equally enabled occupants to modify various aspects of the dwelling.

The 'cluster housing' concept designed as part of SIHIP 1 was seen by many observers to be an innovative town planning design response, whereby three or four houses were provided for an extended family (or clan group) in a common precinct with a sense of inter-related communication and visitation, and even a shared central facility for socialisation and domestic work. The land tenure system reflected separable lots and service connections enabling a future reversion into single lot separable tenancies if the original social structure deconstructed for whatever reason (e.g. deaths, demographic decline, migration). Additional planning innovations included large lots and lot frontages (30 to 35 metres) in various new estates, as well as internal bush buffer (or green space) zones within estates to improve residential privacy and facilitate socio-spatial separations. Of particular note in this respect was the development, through the SIHIP program, of a set of 'Design Guidelines' that include a complete section on 'Settlement Planning'. This seminal document makes both implicit and explicit reference to the planning of housing layouts to suit socio-spatial clustering of kinship groups, a planning technique that also generates social capital and cultural identity maintenance.

Cultural appropriateness in house design relates to how well the finished product functions to support occupant beliefs, values and their associated domiciliary behaviours and household structures. The contractual system itself is important in this respect, however, it appears that projects with short timeframes and grand expectations in achieving large numbers of houses will automatically severely limit or even preclude time-intensive or householder responsive consultation due to the focus on standardising house design and the dominance of speedy economies of scale. Consequently, it appears that large-scale flexible contractual processes such as managing contractor or alliancing, would lend themselves to this methodology whereas small-scale traditional lump sum contracts would lend themselves to intense pre-design consultation and individualisation in house design, which appears to produce better results in relation to cultural appropriateness in house design.

6.3.2 The design limitation of transportable buildings

The more recent housing procurement practices across various jurisdictions in Australia shows the prevalence of supplying transportable houses for many remote Indigenous communities. This subject was also discussed during the interview process. In contrast to the tailoring of house design to individual needs discussed above, transportable buildings present an alternative approach to housing supply whereby the house arrives in a given community on a semi-trailer and requires a simple installation process before it is fully functional. While not a specific focus of this research analysis, as none of the case studies incorporated such housing solutions, discussion of transportable buildings arose on many occasions through the interview process (refer to Sections 2.7.3 & 3.7.3). The majority of those interviewed saw advantages in the system regarding speed of delivery and subsequent installation;

however, a number of Aboriginal respondents questioned the cultural appropriateness and long-term construction quality in remote contexts.

It appears that while transportable housing delivers a quick fix, short-term solution that may suit the policy frameworks of certain jurisdictions for the rapid supply of large numbers of houses to Aboriginal communities, they also present a possible long-term exacerbation of the unmet demand they are meant to alleviate. While it can be argued that there are pros and cons of using transportable housing—with them being quicker to assemble, but involving less labour at a local level (thus reducing the employment spin-off benefit for Indigenous communities)—there is evidence to suggest that the transportation of this form of housing had sustained damage due to the harsh road conditions into some communities that had resulted in additional costs to repair the houses at the assembly site.

For example, B.D., a long-term foreman on remote projects for QBuild has seen this occurring in the recent housing delivered in places such as Doomadgee in northwest Queensland. He stated that not only were these houses obviously wrong for their cultural settings, it was also difficult for construction workers in a given community to maintain commitment to the project when the house they installed two months before was already severely damaged and in need of repair. B.D. saw this as a problem for both Indigenous and non-Indigenous people for different reasons, and confirmed that transportable buildings typically lacked the level of construction quality achieved in the one-off houses procured under traditional delivery systems.¹⁵⁶ This view was echoed by the chairman of the Bynoe CACS housing cooperative in Normanton (Section 3.7.3).

6.4 Governance capitals

In terms of governance as a social capital and its relationship to procurement processes, improved housing procurement in remote Aboriginal communities will not produce quality governance structures within communities; however, improved self-governance systems within remote communities will result in greater information dissemination and accountability, and thus better housing procurement. It is therefore difficult to choose any one particular contractual strategy over another in relation to strengthening and working with governance as a social capital. In saying this, after reviewing the governance literature and case study analyses, the current authors believe that an improvement in self-governance mechanisms, whereby Indigenous people administer infrastructure and housing programs themselves will result in the positive development of Aboriginal housing procurement throughout Australia. While this seems an obvious statement, history has shown this pursuit to be a difficult achievement. For example, an historical overview¹⁵⁷ of Aboriginal housing has shown self-governance of housing procurement was attempted in the recent decades through ICHOs administering community consultation in addition to design and construction contracts; however, those housing organisations not only had to balance a three-tiered system of government, i.e. local, state and federal, in order to continue receiving support but also the social and cultural expectations of their respective communities, which at times sat in opposition to government political agendas.

For some, the heavy burden that this situation placed on these small organisations resulted in their eventual failure and the abolition of their responsibilities regarding housing and infrastructure management. The Normanton and Koonibba case studies have shown that unless ICHOs and other community organisations are equipped with

¹⁵⁶ B.D. 2010; B.D. had recently left QBuild and at the time of writing was working as the operational works manager for one of Queensland's most successful Aboriginal enterprises.

¹⁵⁷ As presented in Positioning Paper (AHURI No.129)

the relevant skills and personnel to carry out such an undertaking, they are bound for failure in the medium to long-term. Even if they succeed under one policy regime, as in the case of Bynoe CACs, they can suffer when policies are abolished and abruptly change direction or are reformed (Altman 2010, p.262). Bynoe was thus considerably defunded during the sweeping ICHO changes such as the removal of CHIP, NAHS funding and the reallocation of CDEP funding, with a significant portion of the competencies lost that had been gained in former decades.¹⁵⁸ Nevertheless, there are some operational ICHOs that continue to have a relatively successful track record of maintaining a quality governance structure. In such a case, it would be possible for that ICHO to use any one of the different contractual strategies described previously to procure housing for that community as to which contractual system worked best for a given scenario.

6.4.1 Capacity building and mentoring

Another important element of governance realisation in procurement processes relates to the advantages of meaningful mentoring and capacity building of ICHOs in remote communities. The importance of developing and, at the same time, using local expertise cannot be understated. For example, both Normanton and Koonibba have shown that building and maintaining an ICHO and community organisation in a remote setting is a difficult undertaking, where people are required to deliver outcomes outside their immediate knowledge and skill base, yet strive to do so in the face of political pressure and apparent failure. As reported earlier, the Chairman of Bynoe CACS in Normanton stated that the success of the NAHS housing in Normanton had a lot to do with the ICHO itself controlling the project budget, the untied financial profit of which assisted in enabling strategic innovations for other community needs, and thereby facilitating further skill-building processes on the part of individuals within the organisation itself.

6.4.2 Building licences

Better governance mentorship would also lead to an improvement in the uptake and retention of open building licences on the part of ICHOs and community enterprises in remote communities. As seen in both the Koonibba and Normanton case studies, without an open building licence, Indigenous organisations are left with simple carpentry projects that typically involve small-scale social housing repairs and maintenance regimes. Also, not having an open licence results in the Indigenous organisation having to partner with a mainstream builder for larger scale projects, with evidence suggesting that a recurring challenge is having different expectations, as well as the stresses of living and working in remote communities for those who are typically not from those regions. This form of procurement is not conducive to a long-term and relatively stress-free working relationship. The Koonibba case study bore out that this reliance upon an external building license contributed greatly to inconsistencies in delivery and performance, straining their relationship with their main funder, Housing SA. The Normanton case study provided evidence that not having an open building licence had led to a focus on refurbishment projects, rather than new-build projects over the last five to ten years. While this situation may have had a negative impact on skill building within the organisation, it also resulted in the Bynoe organisation not having to participate in building culturally inappropriate, new build, social housing in the community.

¹⁵⁸ See further Pascoe (2008:51–52), 'Community Capacity Building: the Case of Bynoe, Normanton, Queensland'.

6.4.3 *The division of governance roles: strategists and actionists*

The case study analyses also show the importance of closely aligning and engaging those who the current authors are calling 'strategists', typically strong committed Aboriginal leaders, with a number of other people who have skills in managing and administering projects, the 'actionists' typically professionally-qualified non-Aboriginal or non-local Aboriginal workers.¹⁵⁹ The strategists have an important role in managing the social and political milieu surrounding a given activity, while the actionists, are those who make sure the vision of the strategist comes to fruition. For example, a number of case interviewees were aware of the governance frameworks developed by the Myuma group at Camooweal in northwest Queensland, whereby one of the local traditional owners as the visionary for the group's activities is supported by a highly educated manager whose role it is to ensure that the vision is carried forward. This highly skilled manager not only respects Aboriginal methods and beliefs, but also understands mainstream 'white fella' processes, being able to bind the two systems together to achieve positive outcomes for the group. This pairing of complementary skill sets appears to have underpinned the Myuma organisation's successes over the past five to ten years. (Memmott 2010)

Furthermore, a number of interview respondents discussed the importance of leadership in the overall governance framework in remote Indigenous settings. At Normanton, the ICHO Chairman took on the role as strategist in supporting the procurement system, which not only saw the realisation of new housing and refurbishments but also meaningful employment and training outcomes for local Aboriginal community members.

6.5 Employment and training capitals

One of the principal framework objectives of the Australian Government's Productivity Commission's, *Overcoming Indigenous disadvantage, key indicators report* is to obtain, 'improved wealth creation and economic sustainability for individuals, families and communities'.¹⁶⁰ Achieving economic outcomes to improve livelihoods in remote regions of Australia, where there are considerable economic vulnerabilities of professional and trade shortages, which simultaneously exist alongside poor educational outcomes and high unemployment in Aboriginal settlements has proven elusive. The economic context in remote settlements bears greatly upon sustainable livelihood factors, such as the cultural and human capitals of employment, training and education, albeit in a context where limited economic opportunities are stifled due to geographic location, small populations and mobility.¹⁶¹ In many instances, the largest capital investment by governments in remote communities is settlement housing and infrastructure projects, yet variable project delivery often leads to varied opportunities for employment and training. As the Normanton and Koonibba case studies have shown, when Indigenous labour was involved in housing procurement, there was a mismatch of time-pressured delivery, which limited a given community's capacity to participate. Subsequently, the dominance of time-pressured delivery frameworks has reduced the capacity to develop human capitals impacting on management in housing procurement and resulting in a preference for limited unskilled Aboriginal labour involvement.

¹⁵⁹ Moran (2006a, p.256, p.399) in his discussion on governance in Indigenous communities has referred to these two categories of people as 'focal drivers' and 'permanent resident outside employees' (PROEs), the latter being more effective in stabilising relationships with government and industry in the inter-ethnic field than short-term consultants.

¹⁶⁰ SCRGSP 2009, Section 2.2, np.

¹⁶¹ Moran 2009, np.

6.5.1 *Contractual fit*

In terms of incorporating local labour and implementing training programs within the range of different procurement strategies, the case studies illustrate that the issue becomes one of risk mitigation for both the proprietor and the building contractor. The risk relates to timeframe and budget overruns given the workplace reality of a more transient, possibly truant, and low-skilled semi-literate labour force in many remote communities. Of the contractual procurement options discussed previously, both the traditional lump sum and D&C approaches would see the contractor taking on the risks associated with labour force truancy, whereas the alliance form of contracting would see all parties sharing those risks. Therefore, our case studies have shown that flexible partnering forms of contract are more likely to successfully accommodate local training and employment strategies in remote Aboriginal communities. Furthermore, as reported in the TIRP case study, the mechanism by which successful training and employment outcomes were generated through procurement was the result of excellent internal government coordination at a local, state and Australian government level, illustrating a positive connection between top-down (strategic) meeting bottom-up (grass-roots) processes.

6.5.2 *Aboriginal identity in labour organisation*

Larger scales of labour organisation and training need to be explored. High level skills uptake by Indigenous staff can occur under key government contract agencies like QBuild, because they offer the required perpetual employment to achieve this, yet there is a considerable lack of interface and minimal local labour input within the local settlements where construction projects are rolled out. A good practice example is the Myuma group in northwest Queensland which runs a pre-vocational training source. Here there is a unique symbiotic relationship between the practice of Aboriginal law and the practice of commerce whereby the two are mutually supportive of one another, generating a strong Aboriginality in day-to-day *business*. The overall positive benefit to economic capital is thus supported and underpinned by cultural and social capital resulting in a potential for greater livelihood sustainability.

If the constraints of urgent construction timeframes were not prioritised, synergies could occur, contributing significantly to livelihood sustainability. However the use of small-sized building teams prevents apprenticeship uptake, and typically there are often no qualified Indigenous tradespersons involved in construction projects. Small-scaled building projects thus appear to only have minor impact on achieving significant improvements in livelihood strategies. On the other hand, the promotion of housing technology systems that can radically reduce the extent to which conventional certifications of on-site skilled labour are required, needs to be considered. The example of Bawinanga Aboriginal Corporation in Arnhem Land demonstrates that sustained employment opportunities can emerge when infrastructure is carefully and selectively introduced to match local management capacity and skills levels for repairs and maintenance, even if there is a lack of ability to uptake recognised trades certification.

6.5.3 *Aboriginal people: the most highly trained, unemployed people*

In reviewing both the KBPL and Bynoe CACS experiences, it was reported that the current 'drip feed' nature of small intermittent government housing contracts interspersed between three-year political cycles is inefficient in providing meaningful integration of T&E capitals. Another issue that was raised through the Bynoe case study at Normanton, and one which is related to the drip-feed scenario, was the lack of long-term employment outcomes from training programs in remote communities. It was said on a number of occasions during the interview process that 'Australian Aboriginal people are the most highly trained unemployed people in the world'—a

direct result of intermittent short-term building activities where people were unable to develop certifiable skills. Even if certifiable skills are obtained, the hybrid economy prevalent in remote communities often cannot economically sustain individuals through continued employment post housing delivery. Also, many with social bonds to the community often prefer to remain intermittently employed within the community than seek opportunities away and interrupt these bonds.

Furthermore, results from the Bynoe case study show that short contractual timeframes are counter-productive to training; meaningful accredited training needs to be undertaken over longer timeframes where Aboriginal labourers are paid at commensurate levels with mainstream labour rates and not less due to CDEP. Also, if and when housing procurement does occur, there needs to be a realistic assessment of contractual terms to ensure that building contractors are provided with an opportunity to negotiate timeframes in order to incorporate measurable training outcomes, as well as participating in skills assessments and the supervision of trainees for the duration of the contract. Additionally, starting traineeships on refurbishment projects was reported as a difficult undertaking given the unknown factors involved in renovating existing houses; whereas on new build projects, the construction system is simpler to understand and trainees are able to experience the building process from the ground up.

6.5.4 The employment gains of flat-packing

Flat-packing is where the material elements of a building arrive to site, typically on the back of a truck in a ready to assemble format. This delivery system was seen by the majority of interviewees as advantageous to T&E capitals given that it includes a significant installation process that could be easily tailored to suit remote applications. The Myuma group at Camooweal in Northwest Queensland are currently underway with a process of flat-packing a number of new accommodation and administration buildings for the upgrade of their current facilities.¹⁶² The reason flat-packing was chosen as an option was due to the efficient use of road transport to deliver the materials and also the high labour component involved in the construction process, which suits Myuma's training aims for the pre-vocational construction training program it runs on the site. Interestingly, there are a number of prefabricated building systems being developed and tested as part of the current SIHIP program. These kit systems also aim for simplicity in installation and have been evaluated and promoted as an SIHIP asset to community enterprise development through potential long-term knowledge building and implementation.

6.5.5 T&E best practice in SIHIP?

From the SIHIP case study we learn that the overarching Program Goals called for the provision of training and employment of Indigenous people in achieving a sustainable workforce in each community for ongoing construction, maintenance and housing management. It is hypothesised that SIHIP will generate more Aboriginal employment than any previous Indigenous housing program, and will provide a benchmark in this regard for future Aboriginal employment and training program evaluation metrics. An element of the SIHIP program that the authors consider best practice is the system developed to support the training and employment targets. For instance, developing a work ethic in communities where there has been a long-term CDEP welfare program is a difficult undertaking. One cannot expect to achieve T&E targets of 30 per cent Indigenous employment in a short timeframe without establishing a supportive system to work within the specific social and cultural context of a given community. For example, in various communities, Alliance teams have established a support network

¹⁶² One of the current authors (Davidson) is the architect for this particular project.

whereby workers are picked up from home, daily meals are also provided in an attempt to create a critical mass that want to come to work and then more want to join. In addition, community mentors are engaged to support capacity building in local Indigenous employment brokers. Worker's families are also consulted to uncover any recurring Aboriginal employee absenteeism issues such as cultural avoidance, peer group pressure (shame), and having other priorities (e.g. court, community service hours), whereby they typically have not told anyone. A published discussion paper on the metrics used in SIHIP for this purpose would make a significant contribution to the current National Partnership Agreement on Remote Indigenous Housing with an aim to introduce a long-term cross-jurisdictional metrics for this purpose.

6.6 Health capitals

Unfortunately the case studies appear to have yielded the least data on health capitals compared to the other capitals under consideration. Nevertheless, in looking at the relationships between housing procurement processes and reducing livelihood vulnerabilities, two main health aspects can be considered here—reducing crowding and improving health hardware performance.

While the formula to simply provide more houses to alleviate overcrowding is one that may be commonly adopted in certain jurisdictions, a social science analysis of Indigenous crowding with a stress-related definition of crowding (e.g. see Long et al. 2007, pp.13–16, pp.39–44; Birdsall-Jones et al. 2010) demonstrates that architectural brief development needs to be informed by a range of data to effectively alleviate crowding in Aboriginal houses, including household structures, as well as rules and values concerning what constitutes crowding, and what spatial design steps are needed to alleviate it. SIHIP research was able to identify a variety of design techniques to alleviate crowding, including assessments of private space, social spaces, wet areas and neighbourhood spaces. Examples in SIHIP include dual toilet and shower facilities, cluster housing layout and new estate layouts. The majority of work required to improve reduction of overcrowding outcomes in remote Aboriginal housing needs to therefore be undertaken at a strategic design level with a heavy focus on household surveys and socio-spatial mapping as well as grass-roots consultation with key stakeholders, preferably those who are living in the household settings in which the house and related infrastructure is to be constructed.

The appropriate design of health hardware to suit local lifestyles is another prerequisite of the early strategic design stage in housing procurement. One of the case studies (SIHIP) adopted the nine 'Healthy Living Practices', precepts based on the well-known research of Nganampa et al. (1987) and Pholeros et al. (1993), as well as the 'National Indigenous Housing Guide' (FaHCSIA 2007) to maximise environmental health performance of the procured housing, mainly through careful health hardware selection and specification, including plumbing, water heating and supply technology, sewerage removal, food preparation and storage facilities and electrical installation.

To improve health and reduce crowding in remote Aboriginal housing therefore requires both technical and social design considerations. As discussed previously in this paper, while good technical design may improve access to health hardware within a house, and thus have a positive effect on some of the health indices of its occupants, it may not necessarily reduce crowding nor improve health if day-to-day cleaning and repair regimes are not maintained, or are undermined by large-sized households that are in excess of the design capacity of the house. However, we do know that a lack of quality technical design does exacerbate house hardware functions, and can have a flow-on effect on overcrowding. The aim in Aboriginal housing should be the construction of quality houses that function to meet social, cultural and healthy living

practice requirements and in which the occupants themselves have greater capacity to support sustainable livelihoods.

6.7 Challenges to building socio-economic capitals through housing procurement

One of the major findings of this study has been that numerous best practice housing procurement examples exist in the Australian Indigenous housing context. Given this situation, the authors are led to question the reasons underlying the continual generation of variable, and often poor, housing results. The answer appears to relate to a number of fundamental challenges that need to be improved in order for best practice housing procurement to become a widespread achievement in Indigenous housing delivery. Consequently, the main obstacles or project disruptions identified during the case study analyses are detailed below.

6.7.1 Government funding cycles, remoteness and the challenges in achieving employment and training capitals

In analysing the case studies, one of the main areas identified as a challenge to the incorporation of social and economic capitals in remote housing procurement was the need for greater understanding within government of the conditions of geographic remoteness and seasonal (climatic) variations in such isolated environments. It was discussed on a number of occasions that tying remote regions into the same funding cycles as mainstream procurement systems in less remote areas, results in undue stress on those not only procuring the housing product, but also undermines the final quality of the built product when the delivery has been rushed to meet funding obligations. Pressures prevail upon government agencies to maximise outputs within a given financial year, resulting in contractual systems that prioritise guaranteed delivery in specific timeframes that may not meet the struggling capacity of small Indigenous enterprises. Also discussed was the value of longer-term governance arrangements immune to the shorter cycles seen in the current political climate of various jurisdictions, as such short contractual timeframes provide no incentive for mainstream contractors to include training and employment objectives in their overall work agendas.

6.7.2 Problems with multiple objectives

Discussion also arose regarding whether or not it was possible to achieve positive outcomes in Australian and state government housing delivery systems given the multiple objectives of time, cost and quality. Due to their project experience in remote communities, a number of interviewees stated that there was always a disparity between certain objectives, such as value for money (cost), and others such as training and employment aspirations (time & quality) for Aboriginal people. Furthermore, tight project timeframes typically result in less opportunity for training and employment in certain situations, while greater pressure to achieve 'value for money' has the potential to result in poor quality construction as stress is placed on the project budget. Also, placing too much emphasis on training and employment outcomes, which require a greater timeframe, may result in less housing being constructed in an area that is already under housing availability stress. Therefore, it appears that the best practice solution is that each community is assessed on its own merits in achieving a balance of the Time-Cost-Quality paradigm. This would involve community consultation regarding skills audits, tenancy management services and administration services, project management options and longer-term repairs and maintenance organisation.

Once targets can be formed regarding the scale of the program and whether additional social economics and other capitals are to be sought, and to what extent, appropriate housing procurement methods can be reviewed and one chosen.

6.7.3 Risks: up and down

During the course of this research project, a number of risks were identified as important to consider for future procurement processes in remote communities. The authors believe it important to outline these risks for consideration in future housing procurement processes. It must be stated that this is not an attempt to denigrate the work being completed under any current project, it is simply an attempt to understand how to improve on a program that is already achieving best practice standards when compared to past large-scale housing procurement programs. In the case of SIHIP achieving the program's social and other capitals, which are clearly embedded in its goals, constitutes a major component of what is referred to as a 'risk map'. Interviews identified two categories of risk. 'Up risk' is the risk of project destabilisation from above the Alliance Team (by politicians, the media scrutiny, political responses, major economic shifts, large-scale industrial disputes, changes of government etc.), whereas 'down risk' is destabilisation risk from the project site involving managing local community expectations, unforeseen community behavioural patterns and political responses, weather factors and latent site conditions, such as faulty components and service provision hidden underground or within existing structures. The infrastructure planning and design process was reported to have been a hidden risk factor in SIHIP as the failure by successive governments to maintain and document technical servicing resulted in substandard infrastructure conditions in many communities.

6.7.4 Continuity of employment

With respect to the issue of continuity of employment of trained workers and enterprise engagement after SIHIP, recurring questions that were raised during the research was: What is there after SIHIP? What continuities will be handed over and to whom, so that employment, training, and construction continue in the long-term? It should be noted of course that this is not a problem unique to this particular program. On the other hand, government tendering policies and the market rights of non-Indigenous building firms and suppliers were clearly influential political factors. Associated other issues were the roles of training organisations and of gaining an understanding of the human resources in an Aboriginal region, as well as the limited capacity of certain Indigenous workforces to be mobile in seeking future work opportunities. This does highlight the importance of developing and maintaining an exit strategy from the very beginning of such a large-scale endeavour.

The authors of this study are not criticising any one particular government in this report; however, we are questioning the system of government in dealing with the provision of housing in remote settings. The barriers outlined above have arisen due to a number of different reasons from a lack of foresight in government administration services to challenges of working in remote environments that are subject to many different human and natural environmental situations.

Table 13: Contract types and potential sustainability livelihoods based on case study analysis

		CASE STUDIES & CONTRACT TYPES			
		Thursday Island Traditional Lump Sum	Normanton Traditional Lump Sum	Koonibba Traditional Lump Sum	SIHIP Alliance Contracting
SUSTAINABILITY LIVELIHOODS	Procurement scales & types				
	New Build construction	✓	✓		✓
	Housing renovations	✓	✓	✓	✓
	Repairs and maintenance/ upgrades	✓	✓	✓	✓
	Social capitals				
	Social networks (bonding)	✓	✓		✓
	Overlapping social networks (bridging)	✓	✓		✓
	Authority networks (linking)	✓	✓		✓
	Cultural & ethical capitals				
	Culturally appropriate design (incorporating traditional beliefs & behaviours)	✓			✓
	Community consultation	✓			✓
	Constructive/ participatory stakeholder relationships	✓	✓		✓
	Environmentally appropriate design	✓			✓
	Health capitals				
	Addressing health hardware in design	✓	✓	✓	✓
	Health through maintenance programs	INA	INA	INA	✓
	Reducing crowding	✓	INA		✓
	Sustainable services (water, power, sewerage)	✓	✓		✓
	Employment & training capitals				
	Training	✓	✓		✓
	Ongoing employment	✓	✓		✓
	Using local enterprise operations	✓	✓	✓	✓
	Governance capitals				
	Aboriginal project management	✓	✓	✓	✓
	Aboriginal building contractors		✓	✓	✓
	Aboriginal foremen & labourers	✓	✓	✓	✓

(INA = information not available.)

6.8 A model for housing procurement in remote Indigenous communities

Mainstream housing procurement contracts and methods that are driven by the economic imperatives of minimising financial risk and maximising financial gains, all with expected delivery in set timeframes, do not readily lend themselves to integration with the largely unskilled, highly mobile labour markets of remote Indigenous settlements. Case study evidence suggests that a somewhat different procurement system needs to be implemented, one that borrows from local Aboriginal social capitals, and that is fostered at communal or regional levels. Consequently, particular aspects of Aboriginal social, cultural and economic capitals seem to have been in conflict, mismatched or not recognisable under the rigid parameters of conventional mainstream housing procurement delivery. If Indigenous people are to derive improved livelihood outcomes from housing and infrastructure programs, there needs to be recognition at both state and federal government levels that rushed program agendas often strip long-term benefits, and may contribute to the burden of livelihood vulnerabilities due to increased house maintenance costs and reduced social benefits.

Thus, the authors have argued that an intercultural and hybridised approach to sustainability is needed, based on the procurement realities faced by remote settlements. The authors contend that this is possible through an engagement with multiple Aboriginal 'capitals' consisting of social, health, employment, training and governance capitals within a sustainability livelihoods approach. Consequently, the case study analyses presented above investigate the relationship between Indigenous social and economic capitals and procurement systems in an attempt to draw conclusions as to which direction procurement scenarios should head in the future in order to benefit all stakeholders more equitably in a given project.

With this in mind, the question is what would a best-practice procurement model look like and how can appropriate construction systems be developed in remote settings given a high likelihood of interrupted employment and circular mobility behaviour where Aboriginal social priorities often outweigh economic priorities with individuals choosing family obligations and responsibilities over their own personal material desires? This situation affects procurement strategies given that housing procurement takes on a typically linear program until practical completion. Given the transient behaviour in remote communities with more adherence to local traditions, life-ways and 'law', it may be unrealistic to expect Aboriginal people to compromise their long-held social responsibilities to receive construction training that may not eventuate into long-term employment.

As the case studies have shown, incorporating the entire repertoire of the social and economic capitals into a specific procurement agenda may not necessarily occur in all circumstances. In a particular project case, the specific human and environmental context of a community would also assist in pinpointing which procurement system, and thus, contractual strategy to employ in order to gain as much advantage for a project from the existing Indigenous capitals present in that community. For example, there may be a general shortage of skilled labour in a community, which might lead procurement designers down a mainstream, traditional lump sum path that relied on an external contractor; whereas, in those communities that have numbers of skilled and semi-skilled labour, a mentoring methodology may suit, whereby a community organisation enters into a partnership-form of contract with a mainstream builder to carry out work in order to lever up to undertake subsequent construction projects on their own. Moreover, flexible contractual arrangements can cater for changing circumstances as programs evolve and local enterprise corporations gain confidence and capacity to take on more challenging contractual roles.

The contractual methodology is a tool in the procurement process that can be effectively used to gain social and economic capital incorporation into contemporary housing provision, but if applied non-strategically, may have inadvertent negative impacts on such local capitals. Procurement is only a small part in the larger picture of quality of life in remote Indigenous communities, however, it does offer an opportunity to improve human livelihoods if designed and administered correctly. The case studies have shown that when the designers of a specific procurement system engage in a meaningful way with Indigenous people in working towards a shared understanding through participation (and not just consultation for its own sake), the outcome is likely to be better than not having done so. Another area of importance is the relationship between quality social capital outcomes and community engagement time. Projects need adequate time in the design stage in order to not only establish how to approach a particular problem, but also how to design a constructive exit strategy for when a specific project comes to an end, so that gained capitals are not lost. There should be no basis for trying something unless one can not only achieve or sustain capacity building, but also establish a longer-term legacy from projects. Additionally, there needs to be a concerted effort to evaluate and measure project outcomes.

Lessons learned from the case study analyses illustrate that the contractual frameworks chosen for a particular project did indeed have a consequential relationship in the incorporation and enhancement of Indigenous social and economic capitals in housing provision. It is therefore possible to create more innovative, cost-effective housing delivery methods in remote communities. However, the analyses illustrate that, rather than attempting to design a 'one-size-fits-all' contractual process for the remote Indigenous housing sector, it appears preferable to start with a strategic flexible delivery framework to support social and economic capital objectives—an approach that tends towards a 'horses-for-courses' ideology rather than a blanket approach tending toward a single definitive answer. If we take the case studies above, such a procurement strategy would be comprised of as many as possible of the elements in the following table.

Table 14: Design elements of an integrated project delivery framework for Aboriginal housing

1.	Be adaptable to both large-scale and small-scale project contexts.
2.	Be able to incorporate a joint venture or partnership structure into its contractual framework whereby an Indigenous community, organisation or enterprise could align contractually with a mainstream building contractor and/or government.
3.	Have the ability to be flexible to allow for major shifts as the program progresses.
4.	Directly encourage and foster collective teamwork and administration mentoring in order to build capacity within the Indigenous participants in the system so as to achieve open building licences for future work.
5.	Offer incentives for mainstream building contractors to participate through risk mitigation.
6.	Offer incentives to proprietors in having an open-book scenario to all project costs.
7.	Adopt culturally-appropriate design standards (as opposed to mainstream social housing 'minimum design standards/guidelines') with the SIHIP Design Guidelines being the best practice benchmark at the time of writing. (Wigley 2008)
8.	Be responsive to shifts in timeframes in the delivery system, so as to facilitate flexibility in response to remote community politics and social and climatic contexts.
9.	Give time for appropriate community-based consultation during both the design and delivery processes.
10	Incorporate meaningful training and employment outcomes in the local communities where the program is based in an attempt to create as much economic stimulus through labour

	programs as possible.
11.	Have a longevity of at least five years so as to result in meaningful training outcomes whereby local labourers have an opportunity to carry their training through to full certification.
12.	Have a long-term exit strategy that not only incorporates training outcomes, but establishes a tenancy and asset management program, in addition to a repairs and maintenance program within given communities.
13.	Be immune to government political cycles.
14.	Adhere to healthy-living environmental and house design practices.
15.	Achieve cultural capitals through town planning and house design and community consultation through Housing Reference Groups (HRGs).
16.	Achieve balance between open-ended scoping and a prescribed approach to formatting project briefs.
17.	Be open to innovation and change as the program proceeds.
18.	Encourage the integration and cooperation of government departments in the contractual framework.

The list above was not intended to be an exhaustive representation of what makes a good procurement system, but does represent the key elements drawn from our case study findings, of a best practice procurement framework for future government and non-government housing projects in remote Indigenous communities. As outlined earlier, in gaining relevance in remote Indigenous communities, the procurement system will be confronted with many challenges, most notably in relation to governance structures and frameworks at both a local and government level.

While functional for one-off projects, the conventional lump sum contract gave less opportunity in regard to incorporating many of the social capitals discussed. This is in contrast to the 'strategically administered lump sum' as exemplified in TIRP, as well as other procurement methods, such as alliancing. Furthermore, large-scale contract packages offered greater flexibility and capacity to incorporate holistic planning and design that encompassed everything from settlement infrastructure on the one hand to targeted socio-economic capitals on the other.

From the case study analyses it can be seen that the 'strategically administered lump sum', alliance, and relationship MC methods of procurement all have the potential to deliver many of the above outcomes listed in Table 14. The design of a procurement system that maximises the above outcomes of the strategic framework can be termed an 'integrated project delivery framework'. Such a framework maximises opportunities for the incorporation of the broad range of capitals described above into housing delivery systems and procurement.

6.9 Final statement

Partly due to the paucity of research in this field, the current research project is an invaluable addition to the body of knowledge regarding housing procurement processes in remote Aboriginal communities in Australia. It has the potential to create greater awareness of good practice administrative processes leading to more positive outcomes of culturally responsive housing by using the social and economic capitals that Aboriginal people can bring to procurement. In order to appropriately procure Aboriginal housing in remote communities in Australia, an envelope of 'ethical fairness' needs to cover all participants in the process; be they building contractors, Aboriginal occupants, government officials or others in procuring quality housing outcomes that attest to a shared future built environment that will last the test of time and are representative and responsive to cultural settings with different social and economic values.

This research project has shown that irrespective of the differences in program scale, contract type, funding, duration and outcomes, significant challenges inevitably arose for each of the case study projects in generating socio-economic capitals, but also insights were gained from working with the idiosyncrasies of different discrete remote centres. Varied infrastructure and resource constraints contributed to an expansion and/or contraction of capacity relative to the scale of regional and local economies operable for the duration of the program. However, a clear finding was that procurement limitation or inertia was not simply due to resource limitations and remoteness, but inherent complexities of organisational practice within governments, communities and industry, and that a significant shift in organisational culture can facilitate system improvement through redesign in order to improve service delivery outcomes and meet the challenges and complexities of program execution achieving 'capital' outcomes under unforeseen remote conditions that delivery teams cannot fully control.

Additionally, our research has shown that good grass-roots approaches are valuable for small scale projects; however, the key is how to effectively upscale them for relevance to larger programs. This is where government support is needed as grass-roots organisations are typically limited in their abilities to take on larger projects. Our analysis has shown that good communication between the upper administrative tiers of government departments themselves and those undertaking grass-roots activities is the key to successful outcomes on the ground—where top-down processes meet bottom-up ones.

If there has been one clear outcome from this research project, it is that the procurement process is arguably just as important as the final housing product itself. Focus needs to be placed on a meaningful process and the product that eventuates must conform to statutory and regulatory standards. Procurement driven by *the scenario of maximum numbers of houses on the ground as fast as possible* ignores the potential to value add multiple Aboriginal social and economic capitals. These housing numbers tick the political box in regard to meeting unmet need, but at the long-term expense to Aboriginal communities.

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APPENDIX: WCBT INITIATIVE—CEDUNA AND KOONIBBA

The regional proposal of the West Coast Building Training (WCBT) Initiative was developed between 1998 and 2000, with the objective of involving Indigenous participants from remote discrete centres within and outside homelands, including Ceduna and Koonibba (SAAHA 2000a, p.3). A number of benefits of the program stated were:

1. The ability of the program to address the high unemployment rates and increase the opportunities for employment.
2. The potential to retain capital within community.
3. The potential for future economic enterprise.
4. The potential to increase positive youth role models and reduce vandalism within communities.
5. The potential to increase community pride through their own endeavours.

The role of key agencies is outlined in table A1 below:

Table A1: Role of Agencies in West Coast Building Training Initiative

<i>Agency</i>	<i>Role</i>
Former South Australian Aboriginal Housing Authority (SAAHA)	Provide funds as identified by SA Housing Board for Capital Infrastructure (new houses, upgrades, repairs and maintenance).
Department of Employment Workplace Relations and Small Business (DEWRSB)	Provide trainee wages (50%), mentoring, ancillary costs. Provide funding for a Coordinator's position to coordinate all trainees and vocational training provided by TAFE.
Department of Education, Training and Employment—Office of Employment & Youth (DETE-OEY)	Provide funding for workplace assessor. Provide funding for Builder/Trainer to work with training provider.
ATSIC (now defunct)	Provision of funds via CDEP program (two days wages).
TAFE	Skills analysis, development of training programs and training provider.
Communities and Homelands	Support initiative, make available local coordinator as community contact. Meet and work with parties on program delivery.
Tjutjunaku Worka Tjuta (TWT) Ceduna CDEP	Work with parties to allow CDEP participants to work on the WCBT Initiative.

Source: SAAHA (2000a:4)

The first stage of the project was to identify within the region, competencies relevant to the building and construction industry with tenders called for training providers. The project had a number of key aims:

1. To develop a pool of skilled people who are able to provide quality housing repairs and maintenance on communities and homelands.
2. Identify Aboriginal people with the potential to become supervisors on building sites.

3. Enhance the potential of Aboriginal people to successfully tender and undertake housing construction and major housing upgrade projects on their own communities and homelands.
4. Improve the employment potential for Aboriginal people on the West Coast by providing them with an opportunity to develop skills and gain industry recognised qualifications.
5. Create an impetus for Aboriginal people to establish an Indigenous Building Company able to compete for projects in the competitive market (SAAHA 2000a, pp.1–2).

The process for implementing a community build project, incorporating accredited building training was established and outlined in Table A2 below.

Table A2: West Coast Building Training Initiative: Process for implementing a Community build project incorporating accredited building training in an Aboriginal community

<i>Action</i>	<i>By whom</i>	<i>Purpose</i>	<i>Details</i>
Initiate discussions with key funding and support agencies (see Details column)	Career Employment Group	To identify the potential sources of funding for accredited vocational training linked to Community build and the relevant funding criteria for each	Commonwealth → DEWRSB → Group Employer Organisation State → OEY → Former SAAHA → Training Providers (TAFE or private)
Initiate discussions with suitably qualified community builder	Career Employment Group		
Develop initiate capital project costs and scope of works	Career Employment Group	To secure fee-for-service based assistance by developing Project Scope and costs for submission to former SA Aboriginal Housing Authority.	Scope to identify work for: Community labour (trainees)/specialised trades/contractors using local labour (trainees) Costs to include: → Project materials/ site works/ documentation / professional fees (including architectural and council fees) → On costs including site supervisor Wage and CDEP wage top-up
Develop total project costs	Career Employment Group		→ budget → CDEP budget → DEWRSB contribution → Training Provider Contribution

			→ Community Contribution
Convene Project Planning Meeting of key stakeholders	Former SAAHA	<ul style="list-style-type: none"> → To identify all stakeholders in the project and to confirm and document committee role and responsibilities → To develop some preliminary timeframes for the project's development 	<p>Role, responsibility, critical responses and reporting requirements of all stakeholders including:</p> <ul style="list-style-type: none"> → Employer Management including financial/CDEP → Project Building Supervisor → Preferred Training Provider → AHA Training Committee → Funding Body Representatives
Prepare project proposal	Career Employment Group	<ul style="list-style-type: none"> → To demonstrate the community's preparedness to undertake project → To apply to former SAAHA for approval of capital funds allocation for the project 	<p>Outline of the construction work including:</p> <ul style="list-style-type: none"> → plans and specification → specialised trades → outline of how work will occur including → CDEP labour → on-job supervision → specialised trades labour → project coordination
Prepare project proposal	Former SAAHA Career Employment Group		<p>Aspects of training including:</p> <ul style="list-style-type: none"> → on-job supervisor, identification, qualifications and relevant experience. → off-job training provider, identification and details of formal training arrangements for community workers <p>Full project costs including:</p> <ul style="list-style-type: none"> → professionals services → planning approvals → materials → specialised trades <p>Detail of other contributions (economic, in-kind) committed to project including:</p> <ul style="list-style-type: none"> → costs absorbed by community → DEWRSB → Group Employer → training provider
Assess proposal and advise the community and the outcome	Former SAAHA Career Employment	For identifying any deficiencies in the proposal and addressing any concerns before	Letter of outcome to give reasons for non-approval or specify the conditions under which approval has been granted including:

	ent Group	approving it or not approving the capital works project as a community build.	<ul style="list-style-type: none"> → required outcomes for construction and training → critical timeframes and criteria for funds release → critical reporting requirements
Finalise selection & appointment of Building Supervisor	Career Employment Group		
Finalise negotiations with preferred training provider	Career Employment Group		
Undertake selection of trainees	All stakeholders	To ensure that people signed up on a traineeship are the best suited people eligible for funding and are fully informed about the requirements of the project regarding their commitments, their rights, responsibilities and avenues for support	<ul style="list-style-type: none"> → Seek interest through information → Undertake interviews → Check names of successful applicants for traineeship eligibility → Sign up trainees → Provide project briefing and induction session
Develop training plan	Management (CDEP)/ Building Supervisor/ preferred training provider	To ensure that trainees are receiving formalised training relevant to on-job skills requirement	Review project scope of works, project schedule and formal training curriculum
Implement project	Building Supervisor/ SAAHA / training provider		
Undertake required monitoring and reporting activities	All stakeholders		As defined and documented during Project Planning Meeting of key stakeholders
Convene periodic project review meetings	All stakeholders		As defined and documented during Project Planning Meeting of key stakeholders

Source: SAAHA (2000a)

Eligible participants for the program were any person of Aboriginal descent who was either (i) currently or previously employed in the building construction industry, (ii) involved in community housing repairs and maintenance, or (iii) with an interest in employment in the building construction industry. A high degree of interest was expressed by people attending a briefing session held in mid-2000 and an assessment of 28 people from 10 communities were identified as potential for traineeships.

In the latter half of 2000, it became apparent that the Department of Workplace Relations and Small Business (DWRSB) were not able to meet its commitments to the WCBT Initiative. In particular, there were difficulties in developing collaborative arrangements with Tjutjunaku Worka Tjuta (TWT) Ceduna CDEP to formulate the 'Major Employment Strategy'. The Strategy was a key document and underpinned the basis of the formal application for funding to support workers on 'Contracts of Training' (SAAHA 2000a, p.3).

According to the SAAHA (2000a, p.3) report, due to a breakdown in communication there were also other issues identified in the early stages of establishing the WCBT Initiative. Along with the challenges of inter-agency collaborations, some homelands and community leaders who had previously expressed in principle support were growing ambivalent about the Initiative due to time lags and lack of outcomes. Koonibba representatives in particular, were becoming frustrated at the perceived long lead time for implementation and were considering a standalone training scheme. Tjutjunaku Worka Tjuta (TWT) was having difficulties gaining information about its project responsibilities and issues were also encountered with participants travel arrangements to Adelaide from remote communities (SAAHA 2000b, p.2).

By the end of 2000, the SAAHA were expressing concerns that their capital new works projects would not be reasonably time managed if incorporated as part of a training initiative. The funding cycles of the SAAHA were also at odds with setting up such a program. The funding requirements for training needed at least a three-year funding cycle (the period specified to gain apprenticeship) however, the Authority was funded annually and not able to make financial commitments beyond a single year. At the same time, it was identified that some communities did not have capital works projects which could be easily incorporated into a training program (SAAHA 2000a, p.3).

There were also a number of other funding issues. As part of the South Australian Government's audit, the SAAHA were required to demonstrate adherence to a competitive tendering process and therefore, despite the groundwork, the SAAHA was unable to prioritise training outcomes over other management obligations to the state and Commonwealth governments. This issue was resolved later through negotiations with the Commonwealth funding body and the South Australian Housing Authority and permission was granted to give priority to training outcomes (SAAHA 2000a).

Despite the issues encountered, funding was received through the Commonwealth Major Indigenous Strategies Program and a Building Supervisor Trainer was engaged. Three apprentices were trained at Koonibba as part of the WCBT Initiative by the beginning of 2001, with a work schedule consisting of community housing maintenance, the renovation and refit of a three-bedroom house, and the erection of steel frame dwellings at the Ceduna Transitional Accommodation Centre (later completed under Koonibba Constructions).¹⁶³

During the process of undertaking projects, it emerged that trainees were not committed to participating in projects outside their own community as required by the regional training program. The mentors and supervisors provided feedback on the apprentices and it was noted that the Koonibba apprentices worked well as a team, and had mutual respect. It was also noted that cultural obligations affected the attendance of trainees during certain periods (SAAHA 2000b, p.2).

Key learning outcomes from the WCBT Initiative demonstrate that there are continual barriers to Indigenous involvement in social housing programs, some of which are

¹⁶³ TS, 30/07/10

systemic, and others which need to include greater long-term assessments based on achievable goals. These needs are described as follows:

1. Delivery of training programs to residents in dispersed remote, very remote and discrete Indigenous centres are complex and require multi-agency commitments across government agencies.
2. Inflexibility of government funding cycles limited to 12 months prohibit and further disadvantage Indigenous involvement in state-funded social housing programs and need to extend to a three-year time frame to guarantee continued supply.
3. Inflexibility of government and contractual time frames to accommodate reasonable extensions of contractual time periods to make allowance for Indigenous training requires revision of contractual clauses or contract types.
4. Guaranteeing continuity of work through selective tendering of contractors employing Indigenous participants contravenes current *Trade Practices Act 1974* (C'th) and constitutes anti-competitive behaviour and needs to be addressed if training outcomes are to be viable.
5. Training and building schedules may need to allow flexibility to accommodate cultural obligations.
6. Long-term Indigenous unemployment presents challenges to maintaining commitment to accredited training outcomes.
7. The need for vocational accredited building skills training Certificate I, II, III needs to occur in a remote regional centre only if a significant cohort of Indigenous trainees are identified with clear paths to employment opportunities.
8. Consideration must be given to the lack of transport and/or funds available in remote and very remote centres to access training in major or regional centres.
9. Inclusion of local building teams on capital works projects on local community lands must be embedded in an identified economic flow of sufficient building contracts.
10. Community building teams and enterprises have limited opportunity to increase building skill and management capacity due to a limited exposure to a diverse skill base and will be unable to competitively operate in a broader regional context.
11. Kin-based obligations may limit individual incentive to participate in training schemes that extend beyond a regional cultural bloc.

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Australian Housing and Urban Research Institute

Level 1, 114 Flinders Street, Melbourne Victoria 3000

Phone +61 3 9660 2300 Fax +61 3 9663 5488

Email information@ahuri.edu.au Web www.ahuri.edu.au