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Executive summary

SGS Economics and Planning Pty Ltd (SGS) and Tallegalla Consultants Pty Ltd (Dan Gillespie) were commissioned in January 2005 to complete an evaluation of the Fixing Houses for Better Health (FHBH) Projects 2, 3 and 4 for the then Australian Government Department of Family and Community Services (FaCS). In January 2006 the Office of Indigenous Policy Coordination (OIPC) and the Australian Government of Family and Community Services merged to form the Australian Government Department of Families, Community Services and Indigenous Affairs.

The purpose and scope of the evaluation

The purpose of the evaluation was to evaluate the performance of the FHBH Projects in achieving their objectives and to make recommendations for future FHBH Project rounds.

The scope of the evaluation was to:

- understand the social, economic and political context in which the FHBH Projects operate
- evaluate the effectiveness of the development and design of the FHBH Projects
- understand the interrelationship between FHBH Projects and state and territory housing policy
- assess the implementation of the FHBH Projects with an emphasis on community involvement and the development of on-community housing maintenance capacity
- assess FHBH Projects against their objectives
- assess the cost-effectiveness of FHBH Projects.

Approach and method

The evaluation was guided by an evaluation framework, which was developed in conjunction with the steering group for the evaluation at the outset of the commission. The evaluation framework contained the following elements:

- a distillation of key program objectives for the FHBH Projects
- a list of key evaluation research questions
- nomination of potential data sources
- nomination of suggested performance measures.

As part of developing the evaluation framework, Stage 1 consultation was undertaken with key stakeholders such as government officers and other individuals directly involved in the design, development and implementation of FHBH Projects and 'housing for health' policy in general. Stage 1 consultations helped to clarify perspectives on the purpose and objectives of the FHBH Projects, and provided information for further analysis in the development of findings.

Having settled the evaluation framework, Stage 2 consultations involved visits to five case study communities, with cases selected to achieve variability in physical and social context. The consultants participated in the Survey Fix 2 stage of a FHBH Project in one case. Discussions were held with community-level representatives, and observations were made regarding FHBH Project outcomes.

Further research involved the collection and analysis of parts of the FHBH Projects database, to explore whole-of-program and case-study-level data. This necessitated cooperation with Healthabitat Pty Ltd, the developer of the database, to understand how to use the database.

On the basis of the above research, findings were developed against each of the key evaluation research questions. Based on the findings, a set of recommendations was produced. Some of the recommendations refer to program change and improvements, while others reflect on the potential broader learning from the FHBH Projects.

Limitations

The evaluation has openly acknowledged certain limitations, which included:

- The evaluation was not expected to explore quantitative connections between FHBH Projects and improved health outcomes for Indigenous people as a direct result of FHBH implementation.
- Although an assessment of the design and operation of the 'housing for health' methodology was an important part of the evaluation, there was no intention to evaluate the core philosophy and principles behind the FHBH Projects.

Other limitations as they apply to specific aspects of analysis undertaken during the evaluation are explained within the report.

The contents of the report

Apart from the first two sections, which introduce the evaluation and the method employed, the report contains:

- a section describing the context for and design of the FHBH Projects
- a section describing the evaluation's detailed findings
- a section setting out overall conclusions and recommendations for program change.

Three appendixes are also provided: Appendix A, which sets out in some detail observations made for each of the case study communities; Appendix B, which provides some examples of key documents used during the FHBH Projects and for the evaluation; and Appendix C, the evaluation framework.

Findings

The key findings of the evaluation are set out in summary form below. They are grouped according to the evaluation framework's Key Program Objectives (KPOs) and the Key Evaluation Research Questions relevant to each KPO.

KPO 1 To improve the safety and functioning of housing within the Indigenous communities where FHBH has been implemented, and in a cost-effective way

KPO 1 Summary of findings

- There were very significant problems with Indigenous housing conditions in all FHBH communities prior to the commencement of FHBH Projects.
- Given the spread/range/number of communities receiving a FHBH Project, and that no community 'failed' the feasibility assessments, it is likely that the state of Indigenous housing conditions in FHBH Project communities is reasonably representative of other rural, remote and very remote Indigenous communities.
- Key problems with Indigenous housing condition prior to FHBH Projects were found in relation to most critical Healthy Living Practice (HLP) areas, and particularly Fire, Structure and access, and Drains.
- FHBH Projects fixed a significant number of problems over the average six-month period between Survey Fix 1 and Survey Fix 2. In fact, in most cases, the least functional housing at Survey Fix 2 was more functional than the average level of functionality prior to Survey Fix 1.
- The Survey Fix method moved a considerable number of communities towards having a large proportion of their housing 100 per cent OK, particularly with regard to Power, water and waste, Flush toilet working, Shower working, Electricity, and Laundry. In addition, improvements in average scores were also recorded for Electricity, Gas, Structure and access, and Drains.
- Despite these significant improvements, there are still a significant number of problems remaining with Indigenous housing conditions after FHBH Projects. After Survey Fix 2, there was still no community that had between 80 to 100 per cent of its housing 100 per cent OK against all critical HLPs. Problems remain with structural elements of houses (for example, egress associated with escaping from fires), bathing children, and storing and preparing food.
- Limited financial information was available, but it would seem that the majority of FHBH Project budgets have been spent on capital upgrades/fix and repair work—over 60 per cent on average and up to 80 per cent in some communities. Expenditure shares align reasonably well with critical HLPs requiring the most attention. On average, about 6 to 7 per cent of FHBH Project budgets were spent on project establishment and design specification and tender. This does not seem excessive and indeed seems necessary to ensure tasks required can be managed and completed.
- Given the improvements, and the analysis of the types of jobs completed, it would seem that, in general, the most critical problems are being fixed. Although the number of low-priority and high-priority tasks finalised are almost equal among the case study communities, tradespeople are being

used appropriately and efficiently to fix critical (high-priority) problems in the majority of cases, whereas local Survey Fix Teams are fixing many of the low-priority jobs.

- Based on the fact that no community achieved between 80 and 100 per cent of their housing 100 per cent OK against all critical HLPs at Survey Fix 2, it would seem that the average of $5,000 per house was not sufficient to achieve the FHBH Project standard in any community. This was confirmed by a limited financial analysis for Case Study A, which indicated that, all other things being equal, to complete the remaining jobs required to bring all housing to 100 per cent OK against the FHBH Project standard after Survey Fix 2, an indicative total budget of around $12,000 per house would be required.

KPO 2 To transfer housing maintenance systems, skills and employment to the Indigenous communities (and Indigenous Community Housing Organisations) in which FHBH has operated

KPO 2 Summary of findings

- There were generally good levels of community involvement/Indigenous Community Housing Organisations (ICHO) involvement during FHBH Projects.
- Those community members who did participate were formally employed during the FHBH Project survey assessments, receiving a market wage for their time.
- Methods for training community members were 'excellent'. Training was provided in simple fix techniques, data entry and the survey check process.
- However, only a very basic level of training and skill was provided. The vast majority of the necessary higher-level skills (such as housing repair work) are 'imported' with FHBH Projects.
- Sustained skills transfer was very limited, but there are some examples of communities using skills learned during FHBH projects and continuing with rigorous housing maintenance systems after a FHBH Project had been implemented. It was hard to attribute any ongoing new employment to FHBH Projects alone but anecdotal accounts suggested this has happened on occasion.
- Direct evidence of the consistent reuse of skills learned during a FHBH Project across the whole program was hard to find. However, the general view suggested that, in communities where there is a certain level of pre-existing housing maintenance and general governance capacity, there has been a lot of success in the ongoing take-up of some aspects of the FHBH Project method. Many stakeholders agree there is a great need for systemised approaches to service delivery—similar to the FHBH Project—in other areas of community management.
- The 'silo' model for service delivery is a threat to the true potential of a FHBH Project to achieve community-wide, ongoing benefits.
- Expectations were that further capacity development and training would be needed to achieve ongoing application of FHBH Project systems and skills in most cases.
- Resource limitations are often the main determinant of the housing maintenance method employed or preferred at the community level.

KPO 3 To encourage states and territories to adopt housing assessment and maintenance programs in their asset management systems

KPO 3 Summary of findings

- Other states and territories, and regions and communities, are aware of and in some cases are using or have used the FHBH Project method independently.
- There is a degree of mild resistance to adopting the FHBH Project method independently among some states and territories, perhaps due to perceptions about the sufficiency of pre-existing historical responsibilities/approaches and differing perspectives on the healthy housing debate.
- Licensing arrangements for the FHBH Project were said to be an impediment to wider adoption of the method at the state and territory level.
- States and territories recognise that the FHBH Projects should rightly be recognised as one approach to understanding and developing Indigenous housing maintenance requirements, but that there are merits in other approaches/philosophies.
- There is a growing push among states and territories for better-resourced and documented maintenance programs, but it was not clear the extent to which FHBH Projects had been responsible for raising the standard.
- Some states and territories expressed a view that whole-of-government coordination and cooperation around Indigenous housing, including the adoption of specific systems of maintenance such as FHBH, should not be imposed but negotiated.
- Many examples were found of where FHBH Project funds were used in conjunction with other resources and funding sources to leverage better housing maintenance outcomes, including in most of the case study communities.
- It was often found that FHBH Project funds could 'take care of the basic essentials' in maintenance needs, thereby freeing up other funding sources to focus on 'big ticket' improvements such as minor and major upgrades. This aspect was widely recognised as a very successful aspect of the FHBH Projects and demonstrated the power of coordinated efforts between different levels of government.

KPO 4 To provide a point-in-time analysis of the quality of housing stock in Indigenous communities (to determine progress toward Building a Better Future outcomes)

KPO 4 Summary of findings

- The FHBH Projects database is an excellent framework for understanding housing conditions in Indigenous communities. It provides a very 'necessary', 'detailed', 'contextualised', 'comparable' and 'objective' baseline statement of Indigenous housing conditions.
- It was also recognised that there are very significant (and misleading) limitations in other data sets that are often used to understand and predict housing need in Indigenous communities, increasing the importance of the FHBH Projects database.

- The FHBH database is not a census of the entire Indigenous population. The FHBH Projects are focused upon rural and remote Indigenous communities. Thus, while the outcomes of this study are very important indicators of the condition of Indigenous housing in many areas, generalisations of the data across all Indigenous communities should not be made.
- Nonetheless, the database is a sound and strengthening indication of the likely condition of Indigenous housing in rural, remote and very remote areas of Australia. The database does provide an effective point-in-time analysis of housing condition in FHBH Project recipient communities.
- The FHBH Projects' data collection and handling frameworks have consistently evolved based on field experiences and learnings as the various generations of projects have occurred.
- The ongoing usefulness of the FHBH Project database as a measure of housing condition in Indigenous communities was very widely embraced.
- The FHBH Projects database has taken great strides in developing a much deeper understanding of housing asset maintenance needs among Indigenous communities in a very broad range of contexts with differing capacities. For this outcome, it is a model to be roundly applauded.
- No matter how successful or effective a program might be—and FHBH Projects have been—it will still be necessary to find ways and means of better coordination between the various efforts of different agencies if program outcomes are to be maximised and sustained. That is, a good understanding of the problem as developed via a high-quality database is a necessary but not sufficient tool in its own right.

Conclusions and recommendations

In making conclusions and recommendations, the evaluation recalled the scope of and terms of reference for the study which required investigation of the following aspects of the FHBH Program:

- program context and development
- program design
- program implementation
- program outcomes
- program costs
- program cost-effectiveness
- program change.

With these areas of interest in mind, and reflecting on the evaluation's findings, the conclusions and recommendations were categorised and discussed under the following headings:

- Achievement of program objectives
- Potential for improvements
- Sustainability of outcomes and relationship to other programs.

A total of 16 recommendations have been made. A brief discussion providing a rationale for each set of recommendations under each of the above headings was provided. The recommendations are set out below.

Achievement of program objectives

Recommendation 1

That the success of the FHBH Projects in achieving the primary objectives of fixing the most critical health hardware deficiencies of dwellings located in participating communities and compiling a comprehensive database which records the 'point-in-time' condition of Indigenous housing be acknowledged and the FHBH Projects' primary objectives be strongly endorsed as a means of improving Indigenous housing outcomes.

Recommendation 2

That the FHBH Project delivery method be acknowledged and endorsed as a successful means of program delivery, particularly with regard to good resource planning and achieving practical outcomes in relation to 'on-the-spot' fixing of health hardware deficiencies. It is a conceptually straightforward methodology which accords with best practice asset management principles, and which can be successfully applied by FHBH Project managers and participating communities. It has been shown to be appropriate and adaptable to its circumstances and to provide an objective 'evidence-based' means of assessing the status of Indigenous housing.

Recommendation 3

That the demonstration role of the FHBH Projects in capacity and partnership building be built upon, but with explicit regard for the limits to what this role can achieve, and with a recognition of the pressures inter-program coordination can place upon local project managers. High-level whole-of-government policy and program coordination (such as the Building a Better Future framework) should continue to be promoted as the primary means of improving the context in which the FHBH Projects operate, and should seek to leverage the demonstrated benefits that the projects provide.

Potential for improvements

Recommendation 4

That the FHBH Projects be acknowledged for widely applauded success in providing critically required practical improvements for housing, collecting useful information about housing conditions, actively engaging communities in project delivery, and winning the support and enthusiasm of community members in particular.

Recommendation 5

That, once there is sufficient information available, a program-wide evaluation of financial data be undertaken to investigate the relationship between 'average' critical health hardware function at Survey Fix 1 and the resources required to achieve 100 per cent OK for health hardware, as a means of establishing an effective average budget per house for the FHBH Projects.

Recommendation 6

That the principle of introducing flexibility in budget setting post-Survey Fix 1 be adopted, and that research be undertaken into developing a budget-setting formula based on scores achieved in the initial survey. This could produce two stages for setting budgets for FHBH Projects:

- Stage 1—a standard minimum average allocation per house to allow for preparation and implementation of Survey Fix 1
- Stage 2—a budget allocation based on the results of Survey Fix 1 for further fix work/capital upgrades and Survey Fix 2.

Recommendation 7

That the funding for FHBH Projects in each state and territory be based on a multi-year budgetary cycle of three to five years.

Recommendation 8

That the HLP ratings of health hardware function are validated by an independent verification of the assessment method and the relationship between HLP assessments and health risks. This verification would, as a minimum, have regard for mainstream benchmarks for housing standards that demonstrate a connection to health outcomes.

Recommendation 9

That the housing condition assessments undertaken by FHBH Projects should continue to collect information about elements of critical health hardware that would require major structural changes to dwellings to achieve better outcomes (so as to inform other responses such as improvements in housing design). However, the success of a FHBH Project in improving HLPs in this category should be assessed with resource limitations understood.

Recommendation 10

That changes to the FHBH information system be implemented so as to enable project-by-project financial information to be incorporated, and that all available financial information previously gathered be integrated into this system.

Recommendation 11

That, for the benefit of advancing the national understanding of the condition of Indigenous housing, nationally aggregated FHBH Project data be held by and accessible via a suitable public or non-profit body, which would regulate the use of the data under a suitable public licence and monitor access.

Sustainability of outcomes and relationship to other housing and environmental health programs

Recommendation 12

That regionally-based delivery of FHBH Projects and subsequent routine maintenance programs be investigated as an option for servicing smaller remote communities with limited capacities; and that the feasibility of using Shared Responsibility Agreements as a means of supporting the sustainability of FHBH Project outcomes be investigated further. When investigating these options,

regard should be given to the risks associated with the potential collapse of regional delivery systems and agreement-based approaches, which could leave individual communities stranded without the skills and support necessary to manage housing.

Recommendation 13

All housing-related programs should be preceded by a standardised and comprehensive 'planning assessment' of community conditions. This planning assessment would identify and assess opportunities for the implementation of housing programs and threats to the sustainability of housing program outcomes. The planning assessment would assess areas such as governance, human resources, asset management capability and the influence of remoteness. The planning assessment would also identify or prescribe the need for other non-housing programs, such as community capacity-building programs, to operate ahead of or alongside housing programs.

The planning assessment would inform all subsequent strategic planning for a coordinated program response at the community level.

Recommendation 14

To maximise the FHBH Project's value as a resource planning and outcomes evaluation tool:

That consideration is given to adopting Survey Fix 1 as a standard, comprehensive baseline assessment of individual dwelling condition in all communities. This baseline assessment of dwelling condition would then inform the allocation of resources from all housing and infrastructure programs towards the repair and provision of housing and housing related infrastructure

and

That Survey Fix 2 is conducted on a periodic basis as a tool for evaluating progress and the sustainability of outcomes for all housing and infrastructure programs.

Recommendation 15

That the data collected via standardised Survey Fix 1 and Survey Fix 2 assessments be used to maintain the national FHBH Project database as the definitive measure of Indigenous housing condition, so as to facilitate nationally consistent longitudinal monitoring and assessment of housing standards, and to coordinate program responses over the long term.

Recommendation 16

That consideration be given to, where required, supporting FHBH Projects with a complementary household environmental health and capacity-building program which could be mobilised during or subsequent to a FHBH project, with the aim of contributing to and sustaining better healthy housing outcomes.

1 Introduction

SGS Economics and Planning Pty Ltd (SGS) and Tallegalla Consultants Pty Ltd (Dan Gillespie) were commissioned in January 2005 to complete an evaluation of the Fixing Houses for Better Health Projects 2, 3 and 4 for the Australian Government Department of Family and Community Services (FaCS). In January 2006 the Office of Indigenous Policy Coordination (OIPC) and the Australian Government of Family and Community Services merged to form the Australian Government Department of Families, Community Services and Indigenous Affairs.

What are the Fixing Houses for Better Health Projects?

The Fixing Houses for Better Health (FHBH) Projects target the improvement of houses and household living conditions in remote and rural Indigenous communities. To achieve this, the FHBH Projects employ a method known widely as 'housing for health'. 'Housing for health' recognises the connection between a series of healthy living practices and the quality and condition of housing. The 'housing for health' approach supports the idea that a householder's ability to practise specific healthy living practices is dependent upon the functionality of their house, particularly of what is called 'health hardware', that is, items such as safe electricity and water supply, toilets, showers, washing areas and food preparation areas. The 'housing for health' method surveys a house to determine how well the health hardware and other features of that house are functioning, and arranges for non-functioning elements to be fixed, either on the spot or shortly after the survey is completed.

In 1999–2000, the former Aboriginal and Torres Strait Islander Commission (ATSIC) funded a program of large-scale application of the 'housing for health' method to Indigenous housing in rural and remote areas. This program was called 'Fixing Houses for Better Health' and represented the first generation of FHBH Projects (FHBH 1). In 2001, the then Department of Family and Community Services (FaCS) assumed responsibility for and funded the second, third and fourth generations of FHBH Projects (FHBH 2, 3 and 4). A private organisation, Healthabitat Pty Ltd (Healthabitat), was responsible for designing and administering the FHBH Projects. This evaluation assesses the performance of FHBH 2, 3 and 4.

1.1 The purpose and scope of the evaluation

Purpose

According to the tender brief, the evaluation was expected to:

- provide explanatory insights into the social, economic and political contexts in which FHBH Projects operate
- assess the appropriateness of FHBH Projects in the context in which they operate
- measure and account for the results of FHBH Projects against short and long-term objectives
- determine the efficiency of FHBH Projects and their component processes (that is, compare benefits with costs)

- understand how capacity is built within communities to transform FHBH benefits into enduring ones for target communities
- determine what changes or alternatives exist which would more cost-effectively secure the short and long-term aims of the initiative while maintaining appropriateness to the context.

Scope

According to the brief, the evaluation was to investigate seven areas of interest regarding the FHBH Projects:

1. Program context and development
2. Program design
3. Program implementation
4. Program outcomes
5. Program costs
6. Program cost-effectiveness
7. Program change.

For each of these areas, the brief set out an extensive list of suggested questions as a means of defining the scope.

Terms of reference

Upon the commencement of the evaluation, an evaluation steering group was convened. The steering group discussed and defined a set of terms of reference to further guide the evaluation's scope.

The agreed terms of reference were:

The [evaluation is] *expected to produce the following outcomes:*

- an assessment of the historical, socioeconomic and political environment in which the FHBH Projects were introduced and in which FHBH Projects continue to operate, with a focus on how these conditions have advantaged and/or disadvantaged FHBH Projects
- an assessment of the development and design processes for FHBH Projects, including how these processes have been influenced by governance factors, the behaviour of participants and the circumstances of client communities
- an assessment of the interrelationships between the FHBH Projects and state and territory Indigenous housing policy and program settings, including a description of how these interactions have impacted on the implementation of FHBH Projects
- a comprehensive analysis of the implementation and management phase of FHBH Projects, with particular emphasis on client community involvement, sustainability and the development of housing maintenance management capacity within target communities
- an evaluation of the FHBH project outcomes against short and long-term objectives as defined by the FHBH Evaluation Steering Group

- a thorough cost/benefit and/or cost-effectiveness analysis of the FHBH Projects
- advice on changes to FHBH Projects and/or alternatives to maximise efficiency and achievement of objectives in the client community context.

The views of key stakeholders

During Stage 1 of the evaluation, consultations were held with a number of key stakeholders in Australian, state and territory governments, at the regional and community levels, and other agencies as directed by FaCS. The purpose of this consultation was to gather insights about the FHBH Projects from key stakeholders, with particular regard to the strengths and weaknesses of the Projects and what they have achieved.

The development of the evaluation's methodology and in particular the evaluation framework has taken into account many considerations raised during these consultations. The evaluation methodology and the evaluation framework are explained in greater detail in the following section of this report.

Limitations to the scope of the evaluation

There were two agreed limits upon the scope of the evaluation.

- First, the evaluation was not expected to explore quantitative connections between FHBH Projects and improved health outcomes for Indigenous people as a direct result of FHBH implementation. This decision reflected the methodological difficulties in achieving this aim and the level of resources that would have been necessary to overcome those difficulties. Such resources were not available to this evaluation.
- Secondly, although an assessment of the design and operation of the 'housing for health' methodology is an important part of the evaluation, there was no intention to evaluate the philosophy and principles of the FHBH Projects. Essentially the FHBH Projects accept the long-established association between poor housing conditions and disease, which has underpinned mainstream housing policy since the slum clearance era of the nineteenth century. As such, there are numerous laws and regulations relevant to housing which effectively outlaw the living conditions experienced by some Indigenous communities. Hence, the fact that poor housing conditions are detrimental to the health and safety of Indigenous people is axiomatic.

1.2 Report structure

This report has the following structure.

This section, **Section 1**, has provided an introduction to the evaluation.

Section 2 explains the method for this evaluation and how the evaluation framework was developed.

Section 3 discusses the context and design of the FHBH Projects.

Section 4 sets out the evaluation's analysis and findings.

Section 5 sets out the evaluation's overall conclusions and recommendations for program change.

A series of **appendixes** is then attached. These appendixes include:

- case study community reports
- other key documents of relevance to the FHBH Projects and/or the evaluation.

2 The study method and the evaluation framework

2.1 The study method

The method used for the evaluation of the FHBH Projects included the following central components:

- development of an evaluation framework
- identification of data and information sources
- data and information collection
- compilation and analysis of the information collected during consultation
- preparation of a draft evaluation report
- workshop of key recommendations with the evaluation's steering group
- finalisation of the evaluation report.

These components are explained in detail below.

2.2 The evaluation framework

To guide the evaluation, a framework was developed by the consultants and further refined in conjunction with the steering group. The framework was developed by noting the documented objectives for the FHBH Projects and the intended scope of the evaluation. The consultants distilled these inputs into several key research areas, ensuring that all aspects of the terms of reference were addressed. Specific evaluation questions were posed for each research area; potential data sources were noted and a range of outcomes (performance measures) were developed. The evaluation framework was refined and signed off by the steering group.

The structure of the evaluation framework

The evaluation framework has the following components:

- Key Program Objectives—a distillation of objectives that best encapsulate what the FHBH Projects have set out to achieve
- Key Evaluation Questions—the research questions to be explored to determine progress towards the achievement of Key Program Objectives
- Data Sources—nomination of sources of information and research to help to answer the Key Evaluation Questions
- Performance Measures—the measures against which progress towards Key Program Objectives was to be assessed, based on the outcomes of research.

While the entire evaluation framework is included in **Appendix C**, the Key Program Objectives (numbered 1 to 4) and associated Key Evaluation Questions were as follows.

1. **To improve the safety and functioning of housing within the Indigenous communities where FHBH has been implemented, and in a cost-effective way:**
   - 1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?
   - 1.2 What was the state of housing after FHBH occurred? What problems were fixed?
   - 1.3 What has been the effect of the passage of time on the outcomes of FHBH? Have improvements been sustained? Why or why not?
   - 1.4 Do the residents feel that their houses are safer and healthier since FHBH?
   - 1.5 What are the remaining problems within housing in Indigenous communities?
   - 1.6 What have been the budgets for the FHBH Projects?
   - 1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?
   - 1.8 Approximately what proportion of problems (routine, damage, faulty) (essential, urgent, routine) within communities is being fixed through the budgets?
   - 1.9 Are the most serious problems being fixed? Does this differ between communities?
   - 1.10 What is the sensitivity of the level of money spent? That is, if we allocated 50 to 100 per cent more or 50 per cent less, what is the likely increase/decrease in the number of problems that will be fixed?
2. **To transfer housing maintenance systems, skills and employment to the Indigenous communities (and Indigenous Community Housing Organisations) in which FHBH has operated:**
   - 2.1 What level of community/Indigenous Community Housing Organisation involvement in employment, training and project management opportunities occurred through FHBH? Has this been an appropriate level? Did communities want to be involved?
   - 2.2 What housing maintenance systems and skills are communities/Indigenous Community Housing Organisations and individual participants left with after FHBH? What did they have before? Is there new employment as a result of FHBH?
   - 2.3 Have the systems and skills that have been learnt through FHBH been used by communities/Indigenous Community Housing Organisations towards housing maintenance? If so, where and under what circumstances? Have these systems and skills been used in other ways in the community?
   - 2.4 Do the communities/Indigenous Community Housing Organisations and community members who were involved in FHBH feel confident that they could maintain housing better now that they have obtained systems and skills through FHBH (or would they require further support applying these)? Do they use/prefer other systems and skills and if so why?

3. **To encourage states and territories to adopt housing assessment and maintenance programs in their asset management systems:**

   3.1 Has any state or territory adopted the FHBH assessment (or something similar)? Why/why not?

   3.2 Do the states and territories have a clearer understanding of maintenance requirements of Indigenous housing as a result of FHBH? Has this understanding translated into improvements to documented (and budgeted) maintenance programs?

   3.3 Has FHBH influenced the allocation of state and territories funds with regards to maintaining Indigenous housing? Have FHBH funds been used to leverage better outcomes?

4. **To provide a point-in-time analysis of the quality of housing stock in Indigenous communities (to determine progress towards Building a Better Future outcomes):**

   4.1 Has a baseline understanding and framework for that understanding been developed that assesses the quality of housing stock in Indigenous communities before and after FHBH? How does this relate to National Reporting Framework/Community Housing and Infrastructure Needs Survey (CHINS)/census analysis?

   4.2 Has this framework allowed an 'any-point-in-time' analysis of the quality of the housing stock?

   4.3 What proportion of Indigenous housing stock is analysed/assessed as part of FHBH? Is this adequate and effective?

   4.4 How (and why) has this framework changed over time?

   4.5 Is the current framework still considered to be a useful measure of quality of housing in Indigenous communities?

   4.6 Has the framework assisted the government and Indigenous communities to understand/scope the capacity and context of Indigenous communities, and to undertake and systemise the maintenance requirements for Indigenous housing with regard to capacity and context?

2.3 Data and information sources

The following data and information sources were explored to answer the evaluation framework:

- consultation with key stakeholders
- five FHBH Project case studies
- FHBH Project data as supplied by Healthabitat.

Consultation

During Stage 1 of the evaluation, consultations were held with a number of key stakeholders in Australian, state and territory governments, at the regional and community levels, and other agencies as directed by FaCS. A list of all agencies consulted during Stage 1 is provided in **Appendix B**.

As discussed in the Introduction, the purpose of this consultation was to gather insights about the FHBH Projects from key stakeholders, with particular regard to the strengths and weaknesses of the Projects and what they have achieved. These insights are relevant to the analysis of overall outcomes. However, the consultations also provided views about numerous issues it was hoped the evaluation would investigate.

Such issues included:

- whether the objectives of improved data collection and testing the FHBH methodology as a means of improving circumstances for Indigenous people have been successfully achieved
- differences in levels of success between jurisdictions—what has worked/has not worked, where and why
- where does the true value of FHBH lie—in data collection or housing repair, or both?
- the degree of support for FHBH among communities
- how onerous is the FHBH methodology and are there ways in which it can be made more streamlined?
- to what extent is FHBH targeted at monitoring state, territory and ICHO use of resources? How successful is it at doing this? Is FHBH 'intimidating' other jurisdictions?
- what is the rate of achievement in the short term versus the long term and how sustainable are the short-term gains? Is there evidence of post-FHBH efforts that are leading to longer-term improvements?
- how do other state and territory approaches now compare to FHBH?
- what is the effect of low community capacity and poor governance on FHBH? Has FHBH managed to operate around these difficulties?
- what is the extent of tension between FHBH and state programs? Is this tension preventing higher achievement?
- the impact of stop–start and short-term program funding cycles—is a longer cycle possible?
- the level of resources consumed by FHBH—is this justified against outcomes?
- the use of FHBH in conjunction with National Aboriginal Health Strategy (NAHS) projects
- skills transfer/sustainability is reported as sporadic—is this true?
- what is the role of states and territories in delivering sustainable outcomes post-FHBH and to what extent is that responsibility embraced?
- do small remote communities have a significant problem keeping maintenance systems going?
- how does community selection proceed? Is it based on basic planning information, pressing need and other more elusive criteria? Is capacity fully tested before FHBH Projects commence?

The vast majority of these issues coincided with the scope for the evaluation as defined by the tender brief, and the terms of reference. The issues listed above were taken into account as the evaluation framework was being developed.

FHBH Project case studies

Selection criteria

The consultant team and FaCS selected five communities as FHBH Project case studies for the evaluation. These communities have been kept anonymous. The communities were selected on the basis of the following general criteria.

Geographical location and jurisdictional differences

The location of the case study communities was considered to be important given the influence of factors such as the degree of remoteness, the context and characteristics of a community and its housing outcomes. A critical factor related to location was the mix of national, state, and local jurisdictional influences affecting a community. For example, the identification of differences between state government approaches to housing maintenance in general, and to FHBH in particular, was considered to be an important area for comparison.

FHBH project generation

The case study selection was designed to include visits to communities that participated in different generations of the FHBH Projects. This criterion was motivated by a need to assess whether there were any significant differences in FHBH outcomes between generations.

Level of community capacity

The evaluation aimed to select communities of varying housing management capacity, expressed very generally in terms of the scale and intensity of housing problems. This criterion was chosen to try and assess the effects of pre-existing community capacity upon FHBH outcomes. Selection against this criteria relied heavily upon advice from FaCS.

Appendix A contains a full report for each of the communities visited. This report explains why each community was selected against the above criteria. A comparative analysis of the five case studies enabled conclusions to be drawn about the influence of each of the above criteria, among other factors, on FHBH Project outcomes.

Case study approach

Once the five case study communities had been selected, the consultant team visited each of the communities to investigate FHBH Project outcomes.

The approach taken for the case studies was primarily qualitative, although quantitative data from Healthabitat's FHBH Project database were also analysed for each community. The visits variously included meetings with members of the community council, housing administrators, individual community members, and other local stakeholders where available (such as school principals and healthcare workers). Given the difficulty and in some circumstances the

inappropriateness of over-formalising community consultations, an important aspect of the approach was simply to observe the community and talk with as many, and as broad a range, of local stakeholders as possible.

To ensure consistency, all research conducted during the case studies were guided by the evaluation framework and a set of master field notes. These notes outlined the intended structure of the visits and the specific research questions to be asked and explored (based on the Key Evaluation Questions in the evaluation framework). Guided by these notes, each visit consisted of a:

- familiarity day
- housing audit
- workshop/community meeting/series of discussions with individuals.

More detail concerning the case study approach is set out in Section 4.

FHBH data analysis: Healthabitat data

SGS analysed all FHBH Project data provided by Healthabitat.

The analysis undertaken for information provided from the consolidated database (otherwise called 'whole-of-program' data) included determining:

- the percentage of housing within the communities that are 100 per cent functional by critical Healthy Living Practice (HLP) at Survey 1 and Survey 2
- the percentage of housing within communities that were less than 50 per cent functional by critical HLP at Survey 1 and Survey 2
- the absolute percentage change and proportional percentage change of communities 100 per cent and less than 50 per cent functional by critical HLP between Survey 1 and Survey 2
- the average score for communities by critical HLP at Survey 1 and Survey 2
- the distribution of average scores across the communities for Survey 1 and Survey 2
- the improvement in functionality (or otherwise) by plotting the movement between the 'average' and 'standard deviation' of average score for communities in Survey 1 and Survey 2. This analysis assumed data were normally distributed, which, upon inspection, generally held true. The sample size was also sufficient to support a normal distribution (n=50).

Analysis for the individual case study communities extended the above analysis by noting the outcomes for all HLPs (not just critical HLPs). As n=5 for the case study communities, the improvement in functionality of housing could not be analysed in the same way as the whole-of-program data (for example, noting averages and standard deviations). As such, for this component of the analysis, the consultants plotted where in the whole-of-program data case study communities were placed at Survey 1 and Survey 2. By doing this, the consultants could explore whether there were any common characteristics with communities that had more functional housing as per the HLP scoring method. In addition, analysis on the count of jobs and budgets utilised at Survey 1 and Survey 2 was undertaken at the case study level only (as this information was not available for the program-wide data).

Outcomes regarding the data analysis are presented in Section 4.

There are some important definitions and notes regarding the data analysis and its outcomes:

- It is important to note that while the FHBH whole-of-program data do extend across many Indigenous communities and jurisdictions, it is not a census of the entire Indigenous population. Thus, while the outcomes of this study are very important indicators of the state of Indigenous housing in many areas, generalisations across all Indigenous communities cannot strictly be made. The feasibility component of selecting communities will have an impact on those communities that are selected for FHBH. Nonetheless, all housing within communities involved in the FHBH program was assessed. As such, the information included in the Healthabitat databases is a census for those communities.
- The measure '100 per cent of housing OK' indicates the proportion of houses within a community that meet all requirements of the particular HLP under investigation. Thus, the higher the percentage for this measure, the more functional the housing.
- The measure '50 per cent of housing OK' indicates the proportion of houses within a community that meet less than 50 per cent of the requirements for the HLP to be regarded as 100 per cent OK. As such, the higher the percentage in this measure, the less functional the housing in the community.
- The average measures associated with the HLPs can be misleading in some instances. For example, although a house might score 0.7 out of 1 for the Power, water and waste connected HLP (HLP 1.1), it might be that the 0.3 lost was for elements that are critical to the safe and healthy functioning of the household (for example, perhaps waste water is not connected but other aspects are okay). As such, although a component of SGS's analysis has focused on the averages associated with HLPs, it should be noted that a house is only considered 100 per cent functional when it is scoring 100 per cent OK against **all** critical HLPs.
- There are numerous variables in Healthabitat's database. However, these have been grouped according to 36 'factors' that assist in better assessing an individual's ability to complete healthy living practices (HLP) in their house. The factors are not statistically derived (as would be the case if 'factor analysis' was used), but are theoretically derived based on expert opinions on what makes a safe and functional house. SGS supports this approach.
- Factors are either described as critical HLPs or non-critical HLPs. SGS's analysis relating to the whole-of-program data comments on critical HLPs only. These include:
  - 1.1 Power, water and waste connected
  - 1.2 Safety: electrical system is safe
  - 1.3 Safety: gas supply is safe
  - 1.4 Safety: structure of and access to the house is safe
  - 1.6 Safety: fire egress is available and safe
  - 2.1 Shower working
  - 2.2 Washing children: basin/bath/tub working

- 3.1 Laundry services OK
- 4.1 Flush toilet working
- 4.2 Waste removal from all other (that is, non-toilet) areas working
- 5.1 Ability to store and prepare and cook food.

2.4 Preparation of the evaluation report

The preparation of the evaluation report involved the compilation and analysis of the consultation findings, followed by the development of conclusions and draft recommendations. A draft report was prepared and presented to the evaluation steering group. This was followed by a workshop about the draft recommendations. All stakeholders were encouraged to provide written comments on the draft report. Final recommendations were also drafted and discussed with the steering group. Once agreement on all aspects of the report was reached, the evaluation report was finalised.

3 Context and design of the FHBH Projects

The purpose of this context and design discussion is to document the Indigenous housing policy context out of which the FHBH Projects have emerged and how the FHBH Projects operate.

This section specifically addresses the following elements of the evaluation:

- a brief description of the historic and current Indigenous housing policy context generally
- a description of the 'housing for health' policy approach, which has given rise to the FHBH Projects
- a description of the FHBH Projects and how an individual FHBH project operates.

The discussion in this section has been informed by research undertaken during Stages 1 and 2 of the evaluation.

Stage 1 research involved the following steps:

- a review of documentation about the Indigenous housing policy context, the background and history of the 'housing for health' policy approach and the development of FHBH Projects
- consultation with key stakeholders about 'housing for health' policy design and the operation of the FHBH Projects
- based on the context provided by the first two steps, a consideration of the evaluation's key research tasks
- the development of an evaluation framework that will guide the remainder of the evaluation.

Stage 2 research involved the following steps:

- participation in the Survey Fix 2 stage of a FHBH project, to develop a sound understanding of how a FHBH project is designed and how it operates, including the physical context in which it operates
- consultation visits to five rural and remote Indigenous communities where FHBH Projects have operated
- based on the first two steps of this stage, further analysis of the geographic, economic, social and cultural context in which FHBH Projects operate.

3.1 The Indigenous housing policy context

Indigenous disadvantage in housing

Australia's Indigenous population continues to face significant disadvantage in housing and health outcomes when compared to Australia's non-Indigenous population. The following discussion serves to highlight the breadth and scale of Indigenous disadvantage, in particular in housing outcomes, which programs such as the FHBH Projects are attempting to address.

Table 1 summarises a comparison between the socioeconomic status of Indigenous and non-Indigenous Australians.

Table 1: The socioeconomic status of Indigenous and non-Indigenous Australians compared (2001)[1]

Social Indicator	Indigenous(1)	Non-Indigenous(2)	Ratio (1/2)
Employment (2002)[1]			
Unemployment rate (%)	13.0	4.6	2.83
Employment rate (%)	51.3	74.4	0.69
Labour-force participation (%)	64.3	78.9	0.81
Occupation (2001)[1]			
Occupation unskilled (labourers)(%)	23.5	8.4	2.80
Managers, Administrators, Professionals (%)	14.9	27.7	0.54
Income (2001)**			
Median income per week, adults ($)[2]	226	380	0.59
Range median income per week, families ($)[3]	600–699	800–999	0.75 (0.69)
Income less than $200 per week (%)[3]	41.7	27.7	1.51
Income more than $700 per week (%)[3]	8.7	23.3	0.37
Housing (2002)[1]			
Currently renting (%)	69.6	24.3	2.86
Home owner or purchasing home (%)	26.5	73.1	0.36
Average household size (no. of people)	3.5	2.6	1.35
Education (2001)			
Did not go to school (%)[1]	3.15	1.00	3.14
Do not attend school, aged <15(%)[2]	32.72	26.99	1.21
Currently attending tertiary institution, aged 15–24(%)[2]	10.50	30.01	0.35
Post-school qualification (%)[3]	14.8	36.3	0.41
Health (2001)[1]			
Male life expectancy at birth (years)*	59.4	76.6	0.78
Female life expectancy at birth (years)*	64.8	82.0	0.79
Population aged >55 years (%)	6.8	22.3	0.30

Sources: 1 Australian Bureau of Statistics (2005c)
2 Australian Bureau of Statistics (2005b)
3 Australian Bureau of Statistics (2005a), table 20
* Period 1996–2001 for Indigenous; 1998–2000 for non-Indigenous
** In 2001 dollars

The above comparison shows that for all major indicators of socioeconomic status Indigenous people are worse off, often significantly so, compared to non-Indigenous people in Australia. With regard to health, life expectancies for Indigenous males and females are much lower than for their non-Indigenous counterparts. With regard to housing, many more Indigenous people are renters rather than owners of housing. The converse situation is true for non-Indigenous people. Indigenous households are significantly larger than those of non-Indigenous people, noting that the 3.5 persons per household figure in the above table merely hints at the overcrowded housing conditions known to be common to many remote and rural Indigenous communities.

Other information sources[2] highlight the following facts with regard to overcrowding:

- Indigenous households are five times more likely to be overcrowded than non-Indigenous dwellings.

- More than one in 20 (5 per cent) of Indigenous households experiences overcrowded conditions compared with less than 1 per cent of non-Indigenous households.
- The highest rate of overcrowding for Indigenous households is among those renting from Indigenous community organisations, and 55 per cent of households renting from Indigenous community organisations live in dwellings with structural problems, compared with 22 per cent of home owners.

Other available assessments provide further detail regarding the scale of Indigenous housing need in Australia. A multi-measure approach to Indigenous housing need shows that the Northern Territory, Queensland, New South Wales and Western Australia consistently feature as the states showing either a high proportion or high quantum of need. The proportion and quantum of need for all states and territories against four dimensions of need is summarised in Table 2.

Table 2: Proportion and quantum of Indigenous housing need against multi-measures of need by state, 2003

State	Homeless persons	Overcrowded households	Affordability stressed households	Indigenous Housing Organisation dwelling requiring major repair or replacement
NSW	652 (0.5%)	2,053 (5.6%)	5,443 (47.1%)	832 (20.4%)
VIC	173 (0.7%)	329 (4.1%)	1,140 (53.3%)	80 (19.2%)
QLD	898 (0.8%)	3,175 (10.5%)	4,527 (47.7%)	1,916 (32.0%)
SA	286 (1.2%)	588 (9.0%)	938 (40.1%)	296 (29.5%)
WA	595 (1.0%)	1,972 (14.2%)	1,678 (36.6%)	1,063 (32.5%)
TAS	55 (0.3%)	163 (2.8%)	579 (39.1%)	34 (28.8%)
NT	1,195 (2.4%)	3,082 (34.7%)	561 (19.4%)	1,692 (25.2%)
ACT	22 (0.6%)	52 (4.4%)	144 (58.3%)	1 (11.1%)
Totals	**3,876 (0.9%)**	**11,414 (10.2%)**	**15,010 (43.2%)**	**5,814 (27.3%)**

Source: Housing Ministers Advisory Committee, 2003.

In summary, the Indigenous housing sector is a sector in crisis. As adequate housing is fundamental to wellbeing, severe housing disadvantage for large numbers of Indigenous people severely limits the wellbeing of those Indigenous people who face such disadvantage.

A brief historical overview of Indigenous housing policy in Australia[3]

Indigenous housing policy in Australia has a history that reflects the evolving political approaches to Indigenous affairs in general of both Australian and state/territory governments. The historical overview provided below is simply intended to provide a background understanding of how the present Indigenous housing policy context has emerged.

Prior to 1967

Prior to 1967, the history of policy concerning the wellbeing of Australia's Indigenous population since colonisation is one of disparate and often misguided attempts by various agencies to address the issue. Since European settlement there has been continuous displacement of Indigenous people from traditional lands, exposure of Indigenous people to an 'imported' and very different culture, and discrimination in various forms. This has occurred sometimes because of and sometimes despite official government policies directed at Indigenous people.

Repeated policy failure at all levels of government during the period prior to 1967 has been a significant contributing factor in causing the conditions that have led to entrenched Indigenous disadvantage.

Indigenous housing policy during this period was no exception. Although non-Indigenous cultures had developed an appreciation of the fundamental value of adequate housing for wellbeing, the housing needs of the majority of Indigenous Australians—particularly those Indigenous people who were displaced from their traditional nomadic living environment and permanently settled in rural and remote communities, on pastoral properties, missions and government settlements—were, in the main, met in only the most basic of ways, if at all. Any physical housing that was provided during this period was often in the form of basic, transitional shelter with minimal amenity and poor servicing.

1967–90

The constitutional referendum of 1967 to acknowledge, include and expand the rights of Indigenous Australians in Australia's federal political system signalled the beginning of the intensified involvement of the Commonwealth Government in Indigenous affairs. The resulting shift in policy responses around the country meant the abandonment of policies such as assimilation and institutionalisation, the rise of self-determination and, to some extent, land rights-based empowerment. During this period there was a growing awareness of the need to address the fundamental needs of the Indigenous population to improve their wellbeing. Adequate housing was recognised as one of the primary fundamental needs.

During the 1970s and 1980s, increased resources were applied by all levels of government to the provision of Indigenous housing and the establishment of Indigenous Community Housing Organisations in urban, rural and remote communities. Much of the housing that was delivered during this period was of a higher quality than anything provided previously. The best of this housing was intended to be similar in standard and design to housing developed for non-Indigenous Australians.

However, the provision of higher-quality housing did not necessarily account for or accommodate Indigenous cultural and lifestyle considerations. Also, the amenities, infrastructure and services required to support higher-quality housing—particularly in rural and remote contexts—were often lacking. Furthermore, there was limited capacity among Indigenous individuals, communities and Indigenous Community Housing Organisations to maintain and manage housing and associated infrastructure (SGS 1998).

Finally, primarily because of funding constraints, governments were not able to provide higher quality housing in quantities sufficient enough to overcome the severe overcrowding affecting many Indigenous households. These limitations meant that more and higher-quality housing had limited success in contributing to the improvement of Indigenous wellbeing during this period. In particular, improved health outcomes for Indigenous people were not being achieved, and there was a growing awareness of the link between poor Indigenous housing conditions and poor Indigenous health.

In the main, policy responses during this period remained fragmented and uncoordinated, further frustrating an effective and efficient use of resources to address the issue.

1990 to the mid-1990s

The establishment of the Aboriginal and Torres Strait Islander Commission (ATSIC) in 1990 aimed to increase the empowerment and self-determination of Indigenous Australians and this signalled a renewed and determined focus upon improving Indigenous wellbeing.

In pursuit of greater wellbeing, the critical need for more and improved housing and support infrastructure in Indigenous communities—particularly rural and remote communities—was established by the Aboriginal and Torres Strait Islander Housing and Accommodation Needs Survey in 1987 and the Housing and Community Infrastructure Needs Survey in 1992. At this time, ATSIC and the Commonwealth government acknowledged that the response to the issue of Indigenous housing needed to increase in scale and quality. ATSIC's resource-focused Community Housing and Infrastructure Program (CHIP) was established as the flagship national initiative for improved Indigenous housing and infrastructure provision.

In 1992, the Council of Australian Governments (COAG) endorsed the National Commitment to Improved Outcomes in the Delivery of Programs and Services to Aboriginal People and Torres Strait Islanders. The National Commitment recognised the need to address the underlying and fundamental causes of Aboriginal and Torres Strait Islander inequality and disadvantage. In further recognition of the strong link between housing and health outcomes, the National Commitment specifically identified housing and infrastructure as a target area in the national objective of improving the health and social wellbeing of Australia's Indigenous population.

Mid-1990s to the present

In 1996, the Commonwealth, State and Territory Housing Ministers Conference began a series of meetings that have set the framework for a more coordinated approach to Indigenous housing policy across the country.

In 1996, the Housing Ministers met in Darwin and identified the following major impediments to improving Indigenous housing:

- the duplication between existing Indigenous housing programs
- the lack of coordination between housing programs and infrastructure programs
- the need for training and capacity development for Indigenous Community Housing Organisations
- insufficient funds to address housing need.

The Commonwealth–State Working Group on Indigenous Housing was also established, consisting of senior officials from FaCS, ATSIC, and state and territory housing agencies. The Working Group's charter was to develop practical strategies to overcome the impediments identified by ministers.

The Ministers Conference met again in 1997 to consider recommendations generated by the Working Group. At this meeting, the Housing Ministers directly endorsed a policy direction based on the relationship between improved housing and improved health outcomes for Indigenous people. For example, they agreed to allocate increased program resources to the development and maintenance of health-related aspects of housing provision.

National Framework of Principles for Government Service Delivery to Indigenous Australians

The Council of Australian Governments (COAG) agreed to a National Framework of Principles for Government Service Delivery to Indigenous Australians on 25 June 2004. The principles address sharing responsibility, harnessing the mainstream, streamlining service delivery, establishing transparency and accountability, developing a learning framework and focusing on priority areas. They committed to Indigenous participation at all levels and a willingness to engage with representatives, adopting flexible approaches and providing adequate resources to support capacity at the local and regional levels.

These principles provide a common framework between governments that promotes maximum flexibility to ensure tailored responses and help to build stronger partnerships with Indigenous communities. They also provide a framework to guide bilateral discussions between the Australian Government and each state and territory government on the Australian Government's new arrangements for Indigenous affairs and on the best means of engaging with Indigenous people at the local and regional levels. Governments will consult with Aboriginal and Torres Strait Islander people in their efforts to achieve this.

Current national Indigenous housing policy

While there are numerous Indigenous housing policies and programs at all levels of government, addressing a very broad range of specific issues, the primary statement of current Indigenous housing policy in Australia is *Building a Better Future—Indigenous housing to 2010 (BBF)*, and the associated *National Reporting Framework for Indigenous Housing*.

Another major policy that is important in the context of the BBF policy and the FHBH Projects is the *National Framework for the Design, Construction and Maintenance of Indigenous Housing*.

These major policies are described briefly below.

Building a Better Future—Indigenous Housing to 2010

In 2001, the Housing Ministers Conference developed a framework for improving Indigenous housing to 2010. The policy *Building a Better Future—Indigenous Housing to 2010* (BBF) seeks to adopt a practical, collaborative and accountable focus on Indigenous housing program delivery and to unify and coordinate efforts to achieve better Indigenous housing outcomes. The BBF policy guides resource allocation, Indigenous housing practices and service delivery at the Australian Government and state/territory levels.

The BBF policy explicitly recognises the contribution that housing makes to Indigenous health and wellbeing and recognises the critical health and safety role of housing design, construction and maintenance. This recognition can be understood from the objectives and desired outcomes of the BBF policy.

The four objectives of the BBF are to:

1. identify and address the unmet housing needs of Indigenous people
2. improve the capacity of Indigenous community housing organisations and involve Indigenous people in planning and service delivery
3. achieve safe, healthy and sustainable housing
4. coordinate program administration.

The desired outcomes of the BBF policy can be summarised as:

- better housing, provided to agreed standards, that contributes to health and wellbeing
- better housing services that are well managed and sustainable
- more housing to meet identified need
- improved partnerships with Indigenous people and their housing organisations
- greater effectiveness and efficiency in resource targeting and use
- improved performance linked to accountability based on national data collection and good information management
- coordination of services based on a coordinated whole-of-government approach that links housing and housing services to health and wellbeing.

BBF and the 'housing for health' approach to improving Indigenous housing

The 'housing for health' approach to improving Indigenous housing is linked to the BBF desired outcome concerning the provision of better housing so as to contribute to the health and wellbeing of Indigenous people.

The 'housing for health' approach is described in more detail in Section 3.2. However, it is important for present purposes to note that this approach has developed a practical appreciation and application of a series of healthy living practices related to housing functionality. The achievement of these practices is considered critical to improved health and wellbeing outcomes for Indigenous people. The essence of the approach is that housing should be constructed and maintained to a standard sufficient to enable a household's achievement of all of the critical healthy living practices. This series of healthy living practices has been incorporated into other major policies such as the BBF, and the *National Reporting Framework for Indigenous Housing* and the *National Framework for the Design, Construction and Maintenance of Indigenous Housing*.

The National Reporting Framework for Indigenous Housing

The *National Reporting Framework for Indigenous Housing*, to which all jurisdictions contribute, collects data against indicators that are designed to monitor progress towards the BBF desired outcomes. The National Reporting Framework includes 38 indicators for reporting on Indigenous housing outcomes across Australia. Of particular interest, Indicator 9 specifically reports on progress towards the *National Framework for the Design, Construction and Maintenance of Indigenous Housing* (see below for a description of this), which states that

Indigenous housing should be designed, constructed and maintained to support the nine healthy living practices that are essential for good health, as determined by the 'housing for health' methodology.

The Australian Institute of Health and Welfare (AIHW) has recently released a paper titled *Indigenous Housing Indicators 2003–2004*, which aims to provide the first consolidated statement of progress made towards the BBF desired outcomes indicators. Some commentary about this paper and its findings in regard to performance against housing indicators is provided in Section 4.

The National Framework for the Design, Construction and Maintenance of Indigenous Housing

A critical response in the context of improved Indigenous housing is the *National Framework for the Design, Construction and Maintenance of Indigenous Housing*. The Federal Minister for Family and Community Services released the National Framework in 1999. It has four components:

- an overview document that sets out national principles for the design, construction and maintenance of Indigenous housing
- the state and territory remote area building standards with which Indigenous housing construction was henceforth to comply
- the National Indigenous Housing Guide
- a biennial review process.

The National Framework makes an explicit connection between housing design, construction and maintenance, and the nine healthy living practices that are the basis of the 'housing for health' methodology (discussed in detail below).

Of particular interest to the evaluation is the *National Indigenous Housing Guide*, which is described as a tool to assist in the design, construction and maintenance of housing for Aboriginal and Torres Strait Islander people. It is informed by four national principles for design and maintenance and it provides practical advice on design, installation and maintenance of health hardware and environmental and safety issues. The guide is based on long-term data gathered through the application of the 'housing for health' methodology and was scheduled for review in 2005; a third edition will be published in 2006.

Consistent with the *Guidelines for Indigenous Housing Organisation Asset Management* (Flood & SGS 2000), the guide promotes the benefits of the 'housing for health' methodology as follows:

- assessment of the function rates of health hardware in all houses in a community
- immediate fixing of urgent or minor health hardware items in houses
- data that can be used by communities to assist in management and maintenance as well as by governments for policy development and evaluation and program planning
- community involvement in the projects including paid employment
- provision of training in health hardware assessment and basic repairs
- raised community awareness of the relationship between functioning health hardware in houses and good health.

Current Australian Government Indigenous housing funding programs

Table 3 provides an overview of Australian Government funding programs for Indigenous housing.[4] This overview gives an indication of Australian Government resources targeted at achieving the BBF policy for improved Indigenous housing.

Table 3: Overview of Australian Government funding for Indigenous housing programs, 2003–04

Program	Total
Aboriginal Rental Housing Program (ARHP)	$91,000,000
ARHP New Funds	$10,000,000
Community Housing and Infrastructure Program (CHIP) (Housing)	$80,748,537
National Aboriginal Health Strategy (NAHS)	$97,681,306
Total	**$279,429,843**

Sources: FACS (2005a), FACS (2005c) and DHA (2005).

Table 3 demonstrates that the Aboriginal Rental Housing Program (ARHP) (administered by FaCS under the Commonwealth–State Housing Agreement [CSHA]) is currently the major source of Australian Government funding for Indigenous housing, at $101 million in 2003–04. The National Aboriginal Health Strategy (NAHS), at $97.7 million, and the Community Housing and Infrastructure Program (CHIP), at $81 million, are the two other significant Indigenous housing funding streams. Total Australian Government funding for these programs was approximately $279.4 million in 2003–04. This funding is allocated to the states and territories to administer, under a series of bilateral agreements for the funding of Indigenous housing that have been developed since 1995.[5] Around this period, there were other funding allocations for Indigenous housing, from ATSIS allocations to CHIP and NAHS (totalling approximately $202 million in 2002–03) and from a 2001 ARHP Budget initiative (totalling $29 million over 2002–04) administered by FaCS and added to the ARHP budget.[6]

Table 4 shows state and territory funding for the Indigenous housing sector in 2003.

Table 4: State and territory Indigenous housing sector funding, 2003

State/territory	Total funds $m
Northern Territory	4.000
South Australia	21.113
Queensland	35.968
Western Australia	33.840
New South Wales	40.240
Victoria	8.717
Tasmania	-
ACT	0.579
Total $m	**$144.457**

Source: SGS Economics and Planning calculations.

For comparison, to implement the FHBH Projects, FaCS allocated $9 million for the four-year period 2001–05. This comparison provides some perspective on where the FHBH Projects fit within the overall scale of year-on-year funding for Indigenous housing.

Each of these major funding programs is briefly described below.

Aboriginal Rental Housing Program (ARHP)

The Aboriginal Rental Housing Program (ARHP) is funded through the CSHA. It was introduced in 1979 to help with Indigenous housing needs. The ARHP recognises that Indigenous people have a significantly greater need for housing assistance than non-Indigenous people. ARHP funds target rural and remote areas where there are no public or private housing markets, where there are high levels of overcrowding and the need for more and better-quality housing. Australian Government funding ($91 million in 2003–04) is provided annually through the ARHP to state and territory governments to provide safe, healthy and sustainable housing for Indigenous people. In the 2001 Federal Budget, extra funding ($29 million) was provided for three years, and directed to the Northern Territory, Queensland, Western Australia and South Australia, which have the highest level of Indigenous housing need in rural and remote locations. This funding was to be mainly used for major upgrades of existing houses to make them 'healthy and habitable' and to improve the capacity of Indigenous community housing organisations to manage and maintain housing stock.

A number of mechanisms assist with the administration of ARHP funds. These are:

- Indigenous Housing Agreements
- annual Indigenous housing plans
- annual performance reports.

Indigenous Housing Agreements outline how all parties (state/territory governments and the Australian Government) will work together to improve and simplify the planning, coordination and delivery of housing programs. These agreements are intended to lead to the development of annual indigenous housing plans and annual performance reports.

Community Housing and Infrastructure Program (CHIP)

The CHIP was established by ATSIC as the primary source of funding for community housing and infrastructure for Indigenous people throughout the 1990s. CHIP seeks to improve circumstances for Indigenous Australians by providing people in need with housing and associated infrastructure. Following the abolition of ATSIC, the administration of CHIP transferred to FaCS on 1 July 2004.

The CHIP budget is spread across a number of elements:

Housing: capital construction, purchase and upgrade of adequate and appropriate rental housing with an emphasis on quality health hardware; supplementary recurrent funding for general administration costs of Indigenous housing organisations; and recurrent funding for repairs and maintenance of existing housing stock where rental income and service charges are not sufficient to meet the costs involved.

Infrastructure: capital funding for essential services such as water, roads, sewerage, power, and so on to rural and remote communities to accelerate the provision of essential and municipal services to severely disadvantaged rural and remote communities.

National Aboriginal Health Strategy (NAHS): capital funding for housing and related infrastructure (power, water, sewerage, drainage and dust control) to improve environmental living conditions, generally to rural and remote Aboriginal and Torres Strait Islander communities. This is a significant strategy in its own right and is discussed in more detail below.

Program support: funds to support surveys, organisational reforms, planning and delivery of programs, needs analysis, technology research and design.

CHIP funding is delivered mainly by grants to:

- Indigenous community organisations for housing, infrastructure and municipal services
- state and territory government agencies in accordance with housing and infrastructure agreements with state and territory governments
- Indigenous community organisations via trust accounts administered by Contracted Program Managers.

Grants or consultancy contracts are also provided to specialist bodies to provide services to support the program. There is a set of CHIP Program Guidelines to support the administration of funds.

National Aboriginal Health Strategy (NAHS)

The NAHS focuses upon improved environmental health outcomes for Indigenous people, which target the provision of housing and related infrastructure to improve living conditions and health outcomes.

During its first five years, NAHS funding was allocated primarily on the basis of ATSIC's Regional Council recommendations, in the same manner as all CHIP funding and funding from other ATSIC programs. ATSIC commissioned a review of CHIP in 1994 and identified a number of program shortcomings including examples of ineffective and/or inefficient use of the large resources made available through the NAHS program. In response, ATSIC established the Health Infrastructure Priority Projects (HIPP) initiative to deliver NAHS outcomes separately within the CHIP program. HIPP aimed to deliver health-related and housing infrastructure projects that were too large in scope and cost for Regional Council budgets. The management of HIPP projects was outsourced to the private sector.

To demonstrate the scale of resources made available through the NAHS component of CHIP, allocations to the NAHS/HIPP program have been as follows:

- $60 million to NAHS/HIPP Round 1 for 1995–96 to 1998–99
- $218 million to NAHS for 1996–97 to 1999–2000
- $80 million to NAHS/HIPP Round 2 for 1996–97 to 1999–2000
- $196 million to NAHS for 2000–01 to 2002–03.

With the abolition of ATSIC and ATSIS, along with the CHIP the administration of NAHS was transferred to FaCS in 2004.

FHBH Projects

As stated above, the FHBH Projects received funding from FaCS of $9 million for 2001–05. This funding supports the application of the 'housing for health' methodology to rural and remote communities throughout Australia.

3.2 'Housing for health' and the FHBH Projects

This section of the report describes the history, philosophy and development of the 'housing for health' methodology, and the design, development and objectives of the FHBH Projects.

'Housing for health' history and philosophy

The 'housing for health' methodology began with an environmental and public health review conducted by Nganampa Health Council on the Anangu Pitjantjatjara lands in northwestern South Australia in the mid-1980s. This review established some principles for activities that, if undertaken, could reduce the incidence of death, injury and infectious diseases among Indigenous people—with a particular emphasis on children under five years of age (Torzillo & Pholeros 2002). These activities became known as healthy living practices or HLPs.

In order of priority, these HLPs are:

- safety issues that may threaten life (electrical, gas and structural safety)
- the ability to wash, particularly children
- the washing of clothes and bedding
- removing waste water safely
- improving nutrition
- reducing crowding
- reducing negative contact between animals, insects, vermin and people
- reducing dust
- improving temperature control of the living environment
- reducing minor injuries.

As attempts were made to encourage the adoption of the HLPs among Indigenous people, it became apparent that there was a need for functioning 'health hardware' in the houses of Indigenous people, if residents were to be able to adopt the HLPs. Health hardware includes those features of a house that support the health of its residents, such as safe electrical/structural elements, access to clean hot and cold water, functioning toilets, showers and washing areas, and food preparation and storage areas.

Healthabitat Pty Ltd (Healthabitat), a company established by three professionals working in the fields of Indigenous health and housing, championed the HLP approach and the associated need for functioning health hardware. The company documented and published a report on a project carried out at Pipalyatjara in South Australia in 1991. This project aimed to define a set of standard, repeatable tests to assess the health and safety functions of an Indigenous house and its surrounding yard area. The project also aimed to define the resources required to keep community houses fully functional for one year and to objectively document why housing functionality fails, detailing the costs involved in all maintenance (Torzillo & Pholeros 2002). The project assessed to what extent the local community could be involved as participants in housing assessment and 'fix' work, and, most importantly, showed a clear link between improvements in housing functionality and key health indicators. The methodology is focused upon a 'survey and fix' approach to improving housing functionality in communities.

In subsequent years, pilot projects using the same methodology were carried out in Indigenous communities in Queensland and New South Wales, and improvements were made to the system of documentation and data collection. Apart from the basic 'survey and fix' elements of the approach, two other key elements that have become critical to the success of the 'housing for health' methodology are:

- the need for the 'hands on' participation of the community
- a policy of ensuring that no survey work is carried out in houses unless it is accompanied with simultaneous repair action—'no survey without service'.[7]

As discussed previously, in 1999 the *National Framework for the Design, Construction and Maintenance of Indigenous Housing* adopted the 'housing for health' philosophy and the associated HLPs. The second edition of the *National Indigenous Housing Guide* published in 2003 was informed by data from all 'housing for health' projects up to that date.

As its developer, Healthabitat owns the intellectual property within the 'housing for health' methodology. The company issues licences for the use of the methodology, and trains and accredits project managers to manage the delivery of the methodology in communities. Regular workshops are conducted with licence holders and project managers to provide training, feedback and discussion on improvements to the methodology, including data collection and analysis techniques. Healthabitat upgrades data collection (survey) sheets, and the software for data collection, analysis and reporting, on the basis of fieldworker and user feedback. The company recently developed an improved financial management system for the project to assist users to meet accountability requirements, and to facilitate and simplify financial record keeping.

The FHBH Projects

History and objectives

'Fixing Houses for Better Health' began in 1999 when ATSIC accepted a proposal by Healthabitat to assess and fix 1,000 houses nationally using the 'housing for health' methodology. This was the first generation of FHBH Projects and commenced during 2000–01. The first generation of FHBH Projects was designed and managed by Healthabitat. 'Area managers' were trained and engaged to carry out the day-to-day running of individual FHBH Projects. Individual projects were also sometimes assisted and managed by state and territory offices of ATSIC and Indigenous housing agencies. In Queensland, the work was carried out through regional housing organisations.

FaCS took responsibility for subsequent generations of the FHBH Projects in 2001. As discussed previously, the 2001 Budget allocated $9 million over four years to 2005. FaCS has administered three generations of FHBH Projects:

FHBH 2: a total of 434 houses in 12 communities in one state, one territory and one region for $3 million across 2001–02 and 2002–03.

FHBH 3: a total of 446 houses in 12 communities in three states and one territory for $3 million in 2003–04.

FHBH 4: a total of 539 houses in 18 communities in three states and one territory for $3 million in 2004–05.

Funding is allocated to an individual FHBH Project on the basis of an average of $5,000 per house.

There is a cyclical maintenance element to the program—Maintaining Houses for Better Health (MHBH)—that is intended to follow on from a FHBH Project and enable the newly trained local community members to undertake basic checks, tests and repairs in ongoing cyclical maintenance of health hardware items.

FHBH objectives

The objectives of the FHBH Projects have continued to evolve with each generation of the FHBH Projects, based on experiences and perspectives gained.

In 2003, the FHBH Projects were described by FaCS[8] as:

> ... not a funding program ... not intended to supplement the resources of states and territories. FHBH is a practical research activity that delivers practical results. Through FHBH, people get their houses fixed and FaCS obtains information about the condition of Indigenous houses and whether housing assessment and maintenance approaches such as the 'housing for health' methodology improve the functionality of houses.

FaCS has positioned its objectives for the FHBH Projects in the context of the BBF policy framework. FaCS has in the past[9] stated the intended role of the FHBH Projects in achieving BBF policy, in particular, for BBF objectives 2 and 3.

With regard to achieving *BBF Objective 2—Improve the capacity of Indigenous community housing organisations and involve Aboriginal people in planning and service delivery*, FaCS indicated the following objectives applied to the FHBH Projects:

1. Establish whether the 'housing for health' method of housing assessment and maintenance or an alternative method readily transfer skills to Indigenous community members, and if so, detail what is needed to make sure this happens.
2. Encourage states and territories to adopt and promote an asset management system that includes a housing assessment and maintenance component to Indigenous Community Housing Organisations and Indigenous communities.
3. Encourage states and territories to direct maintenance funding to Indigenous communities that use an asset management system that includes a housing assessment and maintenance component.

With regard to achieving *BBF Objective 3—Achieve safe, healthy and sustainable housing*, FaCS indicated the following objectives for the FHBH Projects:

1. Establish whether there have been gains in the supply of safe, healthy Indigenous housing by assessing and fixing 1,500 houses nationally over three years.
2. Test the 'housing for health' methodology in the field and facilitate the adaptation of this approach by the states and territories. This can include a comparison between this method of housing assessment and maintenance and other methods that exist.
3. Encourage the adoption of better design and construction methods for new and upgraded Indigenous housing.

As the FHBH Projects have evolved, FaCS has also outlined a longer-term objective of encouraging the adoption of better design and construction methods for new and upgraded Indigenous housing (FaCS 2005c).

FaCS also seeks to emphasise the need for all jurisdictions to develop asset management systems that include a housing assessment and maintenance component that has at least the following features:

- high-quality assessment tools
- immediate repairs to health and safety issues
- optimum involvement of local residents
- skills transfer to local maintenance workers
- links between assessment tools and cyclical maintenance programs.

FHBH implementation

FaCS licenses state and territory agencies to deliver FHBH Projects in their jurisdictions. The licence contracts are varied to suit particular administrative arrangements but generally require the agency to accept responsibility for:

- the conduct of the projects
- adhering to licensing arrangements
- allocation of staff to be trained as accredited area managers, and coverage of area manager travel costs
- appropriate management of funds
- cooperation with Healthabitat
- participation in FHBH workshops
- integration with other funds to maximise benefits
- sustaining the outcomes of FHBH Projects and incorporation of the FHBH communities into the jurisdiction's cyclical maintenance funding program.

Healthabitat is contracted by FaCS to issue licences and ensure licensing conditions are upheld, to provide advice on and oversight of individual FHBH Projects, to provide software and data management services to project licence holders and to provide training and advice about reporting requirements to licence holders and area managers.

It should be noted that FaCS has taken other steps—'outside' the FHBH Projects—towards promoting and encouraging the implementation of 'housing for health' principles. In 2003, the department offered jurisdictions the option of comparing an alternative housing assessment and maintenance methodology to the 'housing for health' methodology, provided that the alternative approach included the key features present in the 'housing for health' methodology. A comparative study was conducted in Western Australia between the 'housing for health' methodology and an alternative system developed by the Western Australian Department of Housing and Works. This system is known as the Indigenous Housing Management System Maintenance Project (IHMSMP). The Executive Summary for that study concluded that both methods have been

designed to assist communities to sustain Healthy Living Practices but that neither method had effectively integrated into whole-of-government planning processes for Indigenous housing.[10]

FaCS has also funded projects in New South Wales that use the 'housing for health' methodology but which are delivered under the Aboriginal Community Development Program by NSW Health. Individual communities are also supported to independently adopt the 'housing for health' methodology. The Murdi Paki community in New South Wales is an example.

Individual FHBH Projects

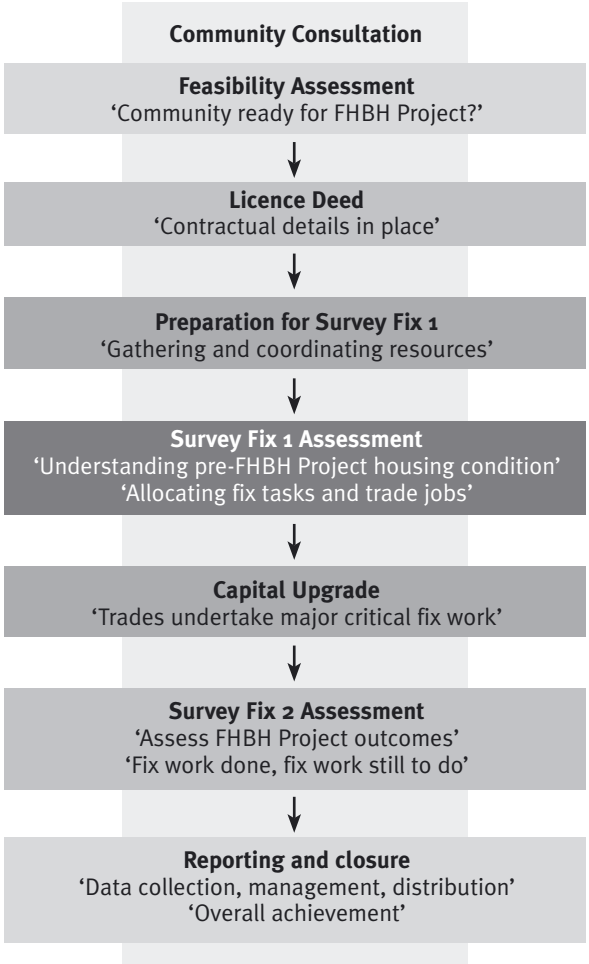
Individual FHBH Projects are the practical vehicle for implementing each generation of FHBH at the community level. The primary aim of an individual FHBH project is to deliver practical and accountable improvements in the health hardware functionality of the houses that the project surveys and fixes.

The following is a description of a typical FHBH Project. Detailed analysis of the project design is contained in later sections of the evaluation report.

FHBH Project design

An individual FHBH Project is run in accordance with the current 'housing for health' methodology. In its current form, the methodology consists of the following steps (Figure 1):

Figure 1: The FHBH Project process



Community consultation

The methodology requires inspection and repair of basic health hardware (for example, taps, toilets, drains, showers) and intrudes upon private homes. For this reason, community consultation is undertaken from the outset of any individual project to ensure that the community understands the FHBH process, is willing to participate, and is able to supply community members as staff to assist the project. Community consultation also clarifies for the community exactly what the program will and will not deliver. It is at this stage that the community decides whether it agrees to accept a FHBH project.

Feasibility assessment

The Area Manager responsible for the individual project undertakes a 'feasibility assessment' of the community, in conjunction with the community's housing manager. The feasibility assessment is best thought of as a 'general readiness' assessment.

The feasibility assessment considers the logistics of how to resource the project and makes a general assessment of the community's housing characteristics. Details of community involvement, access to local tradespeople and the number of houses that are in the community and whether they are suitable for inclusion in the survey and fix process are also assessed.

At the conclusion of a feasibility assessment a 'Feasibility Report' is produced, which usually contains the following information.

- Under the heading 'Project Details' information is sought on potential community support and resources, including availability of office space, current maintenance systems, availability of workers, Community Development Employment Projects (CDEP) scheme and information systems.
- Under the heading 'Project Staff' information is sought on availability of labour and skills—including the various trades.
- Under the heading 'General Support Staff' information is sought on the Housing Organisation, Regional Organisation, Local Government, Health and Environment Officer participation and involvement.
- Under the heading 'Community Meeting Information' information is sought on other projects, the population, housing conditions, health situation and other housing issues.
- Under the heading 'Mains Services Information' information is sought on water, power, gas and waste management systems.

This information is drawn together and a commentary is made about relative need, community commitment and likelihood of 'success' as to whether the project should proceed. Provision is made to seek further information if necessary.

There was no direct participation by the consultants in a feasibility assessment. However, it is clear from the pro forma used for these assessments that the focus is very much on improving the safety and functioning of houses. There are no criteria relating to skills transfer, influencing others to adopt the approach, or data collection (that is, the 'Program Objectives'). This reflects the focus of Healthabitat on specifically requiring improvements to housing 'on the ground'. The other program objectives become secondary to this aim.

In the vast majority of cases, the feasibility assessment results in a project being offered to the community. Dates are negotiated and set for the project's commencement. In those cases where a community is assessed as not ready for a FHBH Project, further negotiation can continue towards achieving readiness. In these cases, the Area Manager identifies specific items that are required before a project can commence, and this list is forwarded to Healthabitat, FaCS and the potential project community for consideration and action.

Licence Deed

Upon the conclusion of a successful feasibility assessment, a licence deed is entered into between Healthabitat and the Project Licence Holder. The deed covers:

- intellectual property rights
- Healthabitat deliverables (forms, software, tools, support, data management and reports)
- project details
- project staff to be made available
- rights and obligations.

The licence deed appears to reflect all relevant considerations and is balanced in dealing with all parties.

Preparation for Survey Fix 1

After dates have been set for a project, preparations are made for the Survey Fix 1 visit. Preparatory steps include:

- purchasing materials and other consumables
- contacting trade professionals and making arrangements for their availability during the project visits
- a final visit to the community as a final check that the community has necessary arrangements in place such as the provision of community members to participate as project staff.

Survey Fix 1

Survey Fix 1 involves a comprehensive survey of approximately 250 items in all houses. Examples of the survey form are provided in **Appendix B**.

Survey Fix sheets are the key documents in the methodology. The sheets run to 15 pages and one is filled out for every house. The same sheet is used for Survey Fix 1 and Survey Fix 2. A checklist is provided for the team leaders dealing with aspects of safety, equipment and completeness of the form. The elements of the form are:

- house summary—information on the occupants and their use of the dwelling and its surrounds. The features and attributes of the house are documented including all possible utility services and amenities inside the house.
- house fabric—covers interior surfaces, power, openings and fire safety
- house heating and cooling—covers climatic conditions and heating/cooling systems

- shower—covers in detail the operation of ablution facilities and fittings
- hand basin—covers in detail the operation of same
- bath tub—covers in detail the operation of same
- flush toilet—covers in detail the operation of same
- laundry—covers in detail the operation of same
- hot water system—covers in detail the operation of same
- kitchen—covers benches, sinks, cooking facilities, refrigerators/freezers and ventilation
- drainage—covers grease traps and sewerage systems. (These assessments are carried out by qualified plumbers.)

The survey forms are very detailed and few of the assessments are subjective. Those that might require some judgement include:

- the presence of dogs, cats and pests, which can vary from time to time
- the condition of walls
- provision for escape from fire.

The vast majority of assessments are effectively 'yes/no' answers and a high level of objectivity can therefore be expected. Any significant inaccuracies could only occur as a result of 'mischief' and this is unlikely given the checking procedures applied by team leaders.

One point of view might be that the scope of the survey is 'overkill' in that a simple inspection by an experienced person could tease out the items requiring attention. However, this approach is more applicable to situations where malfunction is the exception rather than the rule. In the case of Indigenous housing, the number of items malfunctioning is usually a large proportion of all possible items. Therefore a full survey represents little wasted effort and it has the major advantage of compiling a useful database. It also has the advantage of taking the decision about what is important to check and what is not away from the survey team. This enables relatively inexperienced personnel to carry out the survey.

The consultants either participated directly in the surveys in the case studies or observed the process first-hand, and can attest to the rigour of the process and the accuracy of the assessment.

The first day of Survey Fix 1 is dedicated to training survey teams in testing, recording and repairing. The Area Manager uses training tools such as an electrical, water and joinery 'testing board' to demonstrate how standard tests and simple fixes are carried out. Survey teams vary in number depending on the number of houses to be surveyed and fixed. The composition of each team depends on available numbers of community members, but they can consist of up to six community members (working in pairs) and a support person/team leader familiar with the projects.

When the survey commences, each house is allocated a unique FHBH number, and standard tests and checks for each item on the survey list are carried out. The survey teams immediately repair faults that do not require the expertise of licensed tradespeople. Each survey team carries a tool kit. The tool kit assists the 'survey

and fix' process. The kit contains all tools necessary to test health hardware and to undertake immediate fix work. For example, included in the kit are a power point tester, toilet paper to test flushing and a thermometer. The Testing Equipment pro forma is a checklist of equipment required by the survey teams. The equipment includes:

- power point tester
- digital thermometer
- plastic tubing for checking floor waste outlets
- basic hand tools
- plunger
- silicon.

Items required to 'fix' include:

- light bulbs and tubes
- tape to mark unsafe items
- clothes hooks
- towel rails
- shower roses
- sink, trough and bath plugs
- cistern parts
- toilet roll holders
- toilet seats.

The intention of the initial fix component is aimed at 'keeping faith' with the householder (no survey without fix) rather than addressing the most critical health and safety issues. These are normally issues requiring qualified tradespeople (plumbing, electrical and carpentry). The approach appears to be effective in gaining access to dwellings.

Tradespeople can commence work from as early as half a day after the survey commences. Tradespeople are required to use standard forms to report back to the Area Manager about the jobs they have been allocated. These reports provide a reason for the problem (that is, routine maintenance, faulty or damaged) and whether it has been fixed or requires further resources in order to be fixed. This information is incorporated into the database. The database is the management tool for the project and feeds into the national database for all 'housing for health' projects. Data quality is checked 'live' by validity checks that can be run on-site during the survey visit by the data manager for the project. Complex cases of data anomaly can be referred to Healthabitat's data analyst to ensure that any anomalies are investigated and resolved while the survey team is in the field. Healthabitat provides general data entry troubleshooting support on call.

Test results are entered into data sheets that are returned to a central point where they are entered into a database. A list of prioritised jobs for each house requiring trade expertise is printed out for immediate distribution to each trade. Job priorities are set by HLP priorities. For example, urgent electrical repairs required to ensure the electrical safety of a house are carried out first. A 'Survey Progress

Report' requires signing off on the completeness of the survey and that licence conditions have been met. It records the details of the project, work done and by whom. A 'quality assessment' is done on the survey sheets, the process and data entry. This appears to be a systematic and comprehensive approach to achieving 'closure' on a project covering all relevant items.

Capital upgrade

Health hardware issues that are too complex to fix on the spot or which require replacement of major items may be put to tender. A scope of works is prepared for the capital upgrade components of each FHBH project. These works are also prioritised according to HLP priorities. Capital upgrade works continue after the survey team has left. It can take up to nine months for this work to be carried out.

Survey Fix 2

Survey Fix 2 is carried out following the capital upgrade and uses the same approach of surveying each house as Survey Fix 1. Survey teams are re-established, ideally using the same community members as previous. Survey Fix 2 identifies any issues or works that may have been missed or which have arisen since Survey Fix 1. The second survey fix data provide a very important comparison with the functionality of the house's health hardware at Survey Fix 1. It also provides an opportunity to check whether the capital upgrade work listed as being undertaken has actually been carried out to a sufficient standard during the capital upgrade.

Closure and reporting

At the completion of the FHBH Project, a report on all work done at each house is provided for the community housing provider and community members. A list of works that could not be completed within budget is also provided with recommendations for additional works based on the 'housing for health' priorities.

The data collected through individual projects are consolidated in a central database managed by Healthabitat. From the central database, reports can be generated to analyse trends in project performance and to investigate reasons for failure in health hardware and housing functionality. This information is used to inform discussions about housing improvements with area managers, FaCS, housing design and construction professionals, and industries that produce critical elements of health hardware, for example, the manufacturers of plumbing hardware and hot water systems. The information has also been used to review and improve the *National Indigenous Housing Guide*.

3.3 The influence of context

It is useful to briefly list some of the contextual factors that exist at the community level and which an individual FHBH project might have to contend with from time to time. This provides some practical insights to the factors that can affect project delivery. Such factors include:

- cultural activity that may occupy a community's attention at any time
- remoteness and isolation from ready supplies of health hardware materials and skilled personnel

- intense climate
- social issues
- the capacity of governance and administration structures and personnel in communities
- technical difficulties such as power cuts, low water pressure, poor water quality, and non-functioning sewerage systems.

The effects of varying contextual factors such as these are examined and considered throughout the evaluation. The discussion below regarding asset management practice demonstrates the challenges of context common to the vast majority of rural and remote Indigenous housing.

Asset management practice

As the preceding description indicates, the FHBH Project method is essentially a 'partial asset management' tool. It seeks to assess the condition of dwellings and infrastructure (with an emphasis on 'health hardware' items) and to direct a limited amount of funds into critical maintenance areas in a cost-effective way. As with all such systems it has the secondary role of monitoring the condition of the housing portfolio. It is useful to compare the FHBH Project method with conventional asset management approaches. This highlights the different and challenging context, which the FHBH Project method is designed to address.

Private owner-occupied housing

Private owner-occupied housing in Australia is generally of a very high standard. The majority of owners have the capacity to maintain their houses and upgrade them on a regular basis. Many engage professional help in doing this. Owners are motivated by considerations of comfort and amenity but also by aspects such as the capital value of their investment. Households fortunate enough to live in this tenure are normally in the higher income groups and are able to use their equity in their asset to raise funds for upgrades.

While not as relevant in the past couple of decades due to relatively high housing standards, all states and territories administer some form of 'minimum standard regulations'. These have the effect of empowering authorities to issue rectification orders and even demolition orders for dwellings falling below basic health standards. Local governments rigidly apply various by-laws to ensure minimum standards of health safety and amenity in housing.

Private rental housing

Private rental housing in Australia is of a similar standard to owner-occupied housing with some exceptions in isolated cases. Such housing is subject to the same kind of regulation mentioned above and to tenancy legislation that requires housing to meet and be maintained to minimum standards. Various remedies are available to protect tenants' rights in this regard.

In the private rental sector, agents manage relationships between landlords and tenants and, in the majority of cases, tenancies, for a fee. Managing agents have detailed systems for monitoring the condition of properties and for organising required repairs. Normally inspections are done every six months utilising a checklist. Landlords are notified of items requiring attention and any statutory

obligations are notified. Most agents offer maintenance services via contractors. Poorer standard dwellings tend to be in the non-agent sector, but even these are subject to tenancy legislation.

Public rental housing

Public rental housing in Australia is generally of a good standard despite some estates existing as concentrations of entrenched social disadvantage. Relationships between tenants and the public landlord are similar to private rental, and so similar asset management systems are applied. Tenants have rights under tenancy legislation ensuring that basic standards are met.

Community housing (mainstream)

A distinction is made between mainstream community housing which is generally located in urban areas and Indigenous-specific community housing which tends to be located in rural and/or remote areas. Community housing in urban Australia is generally of a good standard and, in similar fashion to public rental housing, relationships between tenants and the landlord are clear and similar asset management systems are applied. Tenants have rights under tenancy legislation ensuring that basic standards are met. Community housing organisations tend to offer a more holistic approach to tenancy management with various forms of tenant support programs. Asset management systems vary but generally there are regular property inspections.

Community housing (Indigenous-specific)

Indigenous-specific community housing, such as that targeted by the FHBH Projects, differs in a number of significant areas compared to the previous categories of housing tenure:

- Much of the housing is below standards that would not be tolerated in urban areas, and in fact would be unlawful.
- There is no clear distinction between landlord and tenant responsibilities, which renders application of basic asset management systems (for example, property inspections) ineffective in many cases.
- Basic laws and regulations on housing and health standards and tenant rights do not apply or are not applied.
- The custodians of the housing do not have the economic resources to maintain the stock due to one or more of:
  - the very low incomes of tenants
  - the high cost of other (non-housing) basic life necessities in remote areas
  - high costs due to remoteness, climate, overcrowding and living practices
  - lack of access to the level of subsidies which are routinely provided to mainstream social housing
  - confusion between different levels of government as to where the responsibility for the situation lies
  - deficiencies in the governance of many communities with a lack of coordination between service delivery areas (for example, municipal services, employment programs, education and health).

These deficiencies in the Indigenous housing system are not universally accepted and indeed this is the fundamental reason why the deficiencies listed above have not been addressed. While new approaches and programs are being designed and implemented at a growing rate, it is clear that it will take many years before noticeable gains are made. In the interim, a program such as FHBH is essential to attempt to address the most critical symptoms of a system in crisis. It offers the advantages of:

- providing immediate rectification of the most critical threats to health and safety affecting Indigenous people
- by-passing ineffective and/or under-resourced asset management systems
- compiling a reliable database for comparative analysis and to provide an objective basis for policy development.

The next section, Section 4—Analysis and findings, looks further into the influences of context and closely examines the practice and achievement of the FHBH Project method.

4 Analysis and findings

This section presents the analysis and findings of the evaluation. There have been three aspects to the evaluation's research upon which the analysis and findings are based:

- interviews with key stakeholders at various levels of government, FHBH Project and community involvement
- five case study community visits, observations and analysis
- whole-of-program FHBH data.

The process of how each of these aspects of research has been carried out is briefly summarised below. Following the overview, the analysis and findings are set out in accordance with the structure of the evaluation framework.

Interviews with key stakeholders

Interviews were held with a number of key stakeholders. The stakeholders to be consulted were nominated by FaCS. Appendix B contains a list of the agencies consulted.[11] As many of the stakeholders were consulted during the first stage of the evaluation, when the evaluation framework and specific research questions were being developed, each of the stakeholders was asked the same series of general questions. Answers to these general questions served two purposes:

- to help with the formulation of the evaluation framework
- to gain stakeholder perspectives about the performance of the FHBH Projects in general.

The questions were:

Role/exposure to FHBH

- Please outline your current/historic role and experience with FHBH programs.

FHBH history

- What is your understanding of the history and development of FHBH?
- What do you believe FHBH Projects aim to achieve?
- Is FHBH generally regarded as successful in your area of experience?
- How does FHBH fit into the history of Indigenous housing policy? How did FHBH establish its place in current policy?
- Has the purpose/rationale of FHBH changed over its life?

The FHBH policy context and funding

- How is FHBH influenced by current Australian government and state/territory government policy on Indigenous housing and Indigenous affairs generally?
- What is the level of influence of FHBH in setting Australian and state/territory government policy on Indigenous housing?
- Is FHBH funded adequately? What account is taken of FHBH in current state/territory Indigenous housing resource allocation?

- Have FHBH Projects encouraged states and territories to develop, promote and/or fund assessment and maintenance methods that improve the safety, health and sustainability of Indigenous housing?

Project selection and outcomes

- How are communities in your state/territory selected for FHBH Projects—what criteria, what process?
- Are there key socioeconomic and institutional factors in the communities where FHBH Projects succeed, struggle or fail—are there predictors for success and failure?
- Are the community conditions in which FHBH Projects work well either common or rare?
- Have FHBH Projects resulted in skills transfer to Indigenous communities? Is this sustainable?
- How is client community response to FHBH Projects measured in your jurisdiction?
- How do bureaucratic and other delivery systems help or hinder the success of FHBH Projects?
- Is wider application of the FHBH program desirable? How could this be achieved?
- Do you have any general observations about the sustainability of FHBH outcomes in particular projects?
- Do you have any additional data on the measurement of success of FHBH Projects?
- Are you aware of FHBH data and feedback influencing housing design and construction methods?

Project design

- Are FHBH Projects appropriate to the communities they target?
- How has the design process for FHBH Projects changed over time? Has it remained focused on 'housing for health' aims?
- Is the level of involvement in the design process by target communities adequate and influential? How could it be improved?
- Have government agencies, managers and providers influenced the design of FHBH Projects? How and with what outcomes?
- What are the strengths and weaknesses of project design processes?

General

- Is FHBH contributing to the achievement/measurement of BBF desired outcomes—safe, healthy and sustainable housing?
- Is FHBH a cost-effective means of delivering better housing outcomes for Indigenous communities? Why or why not?

- Any general observations on the FHBH initiative including shortcomings and strengths, comments on particular projects or design processes?
- Any suggestions for other data sources/lines of inquiry for the evaluation project?

Responses received during each of the interviews were noted and the views and perspectives gained from the interviews were used to formulate the evaluation framework and provide anecdotal accounts of FHBH Project outcomes.

Overview of case studies

The consultant team, FaCS, Healthabitat and area managers selected five communities as case studies for the FHBH evaluation. It was decided to withhold the names of the case study communities to protect the confidentiality of information provided, but also to ensure that the analysis and findings of this evaluation were not to be taken out of context and used inappropriately. The generic names for each of the case studies are as follows:

- Case Study A
- Case Study B
- Case Study C (which includes two communities)
- Case Study D.

As discussed previously, three criteria were used to identify a range of case studies across a number of different contexts. The criteria were:[12]

- geographical and jurisdictional spread
- FHBH Project generation
- level of community capacity.

A series of very general, subjective assessments were made when applying these criteria, particularly regarding the level of community capacity. In making these assessments, guidance was taken from the range of experiences and opinions of those agencies involved in case study selection. The purpose of applying these selection criteria was to capture a variety of contexts in which FHBH Projects have been implemented, so as to examine the influence of different contexts on FHBH outcomes. The following provides an outline of the context for each of the case study communities.

Case Study A

Geography and jurisdiction:
Western Australia—Remote but proximate to a significant regional centre—Small population

FHBH Project generation:
FHBH 2

Level of community capacity:
'Moderate'

Case Study B

Geography and jurisdiction:
Northern Territory—Remote—Includes outstations/homelands—Large population

FHBH Project generation:
FHBH 3

Level of community capacity:
'Variable'—'Transitioning from low to moderate'

Case Study C

Geography and jurisdiction:
South Australia—Remote—Small population

FHBH Project generation:
FHBH 4

Level of community capacity:
'Low'

Case Study D

Geography and jurisdiction:
New South Wales—Rural and very proximate to a significant regional centre—Moderate population

FHBH Project generation:
FHBH 4

Level of community capacity:
'Moderate to high'

Overview of whole-of-program FHBH project data analysis

In addition to obtaining the full databases associated with the case study communities, Healthabitat provided a consolidated database for all FHBH Projects that contained information on critical HLPs. As noted in Section 2, several types of analyses were performed on these data, including:

- determining the proportion of houses that were fully functional within communities according to critical HLPs before and after the FHBH method was applied
- determining the average score that houses were achieving before and after the FHBH method.

The outcomes of this analysis were particularly important in assessing the outcomes associated with Key Performance Objective (KPO) 1—that is, the extent to which the safety and functioning of housing have been improved within the Indigenous communities where FHBH has been implemented.

In addition, and again as stated earlier, limited financial data were also obtained and analysed. This information assisted in assessing the latter part of KPO 1—the cost-effectiveness of the implementation of FHBH.

KPO 1 To improve the safety and functioning of housing within the Indigenous communities where FHBH has been implemented, and in a cost-effective way

The research for Key Program Objective 1 was guided by 10 key evaluation questions. The following discussion is structured according to each of those questions.

1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?

Whole-of-program analysis and findings

Prior to FHBH, the state of Indigenous housing was very poor in that **no** community had 100 per cent of its housing 100 per cent OK with reference to all of the critical HLPs—the standard to which, by definition and method, the FHBH Projects aspire. Averaging results for all critical HLPs[13] for each community shows that even the communities with the most functional housing at Survey Fix 1 had on average just 44 per cent of housing 100 per cent OK. The median score against the 100 per cent OK test for all communities was just 24 per cent. Therefore, on average, over 76 per cent of housing within FHBH Project communities was less than 100 per cent OK at Survey Fix 1. In some individual cases, this increased to as high as 88 per cent of housing being less than 100 per cent OK against critical HLPs.

Based on these scores, it can be concluded that, prior to the operation of the FHBH Projects, there were serious deficiencies in general in the functioning of health hardware for the majority of housing in Indigenous communities where the FHBH Projects have been implemented.

The critical HLPs for which a significant proportion of communities scored **less than 20 per cent** of houses achieving 100 per cent OK at Survey Fix 1 included:

- Fire (Critical HLP 1.6) and the ability to store, prepare and cook food (Critical HLP 5.1). Ninety-eight per cent of communities had less than 20 per cent of housing 100 per cent OK with regard to both of these HLPs.
- Eighty-five per cent of communities had less than 20 per cent of their housing 100 per cent OK with regard to electricity (Critical HLP 1.2). Detailed analysis of the performance of this critical HLP again indicated that there were various dysfunctional component parts, but that, overall, houses were achieving quite high average scores—a 0.90 average score across all communities (a score of 1.00 equals 100 per cent OK). Most housing had power points located in appropriate areas, and most power points exposed to wet areas (it is critical that these are safe) tested OK for most communities.
- Structure and Access (Critical HLP 1.4)—78 per cent of all communities had less than 20 per cent of their housing 100 per cent OK. The 'Structure and access' critical HLP often 'failed' the 100 per cent OK test because of faults in components such as disabled access, floors, handrails and external walls—although it is noted that the types and combination of faults varied among communities for this critical HLP (and thus, general trends in fault are difficult to establish).

- All Drains Working (Critical HLP 4.2)—65 per cent of communities had less than 20 per cent of their housing 100 per cent OK. Many component parts of this critical HLP were dysfunctional (with no one component part being a 'stand out' problem).

It should be noted that the Fire critical HLP is a difficult HLP for housing to score well against because structural impediments to fire access are tested during a FHBH Project survey (for example, egress in case of fire is made difficult if there are bars on the windows). Older houses designed and built without fire access issues in mind are plentiful. Houses can also score low for this HLP because of missing or dysfunctional smoke detectors. Poorly located smoke detectors are sensitive to dust, smoke from cooking, and fire heaters in some areas, which, according to qualitative accounts, often leads the home occupier to disconnect them, and/or not repair them once faulty.

The following graphs, in Figure 2, show two whole-of-program analyses for each individual critical HLP:

- The **distribution** of results regarding the proportion of housing in each community achieving 100 per cent OK for each HLP at Survey Fix 1. For example, looking at the distribution plot for critical HLP 1.1 'Power & Water & Waste Connected', the lowest result achieved by any one community was 31 per cent of housing achieving 100 per cent OK for this HLP, and the highest score achieved by any one community was 100 per cent of housing achieving 100 per cent OK for this HLP.
- The **average** proportion of housing across all communities achieving 100 per cent OK for each HLP at Survey Fix 1. For example, again looking at critical HLP 1.1 'Power & Water & Waste Connected', the average proportion of housing across all communities achieving 100 per cent OK for this HLP was 67 per cent.

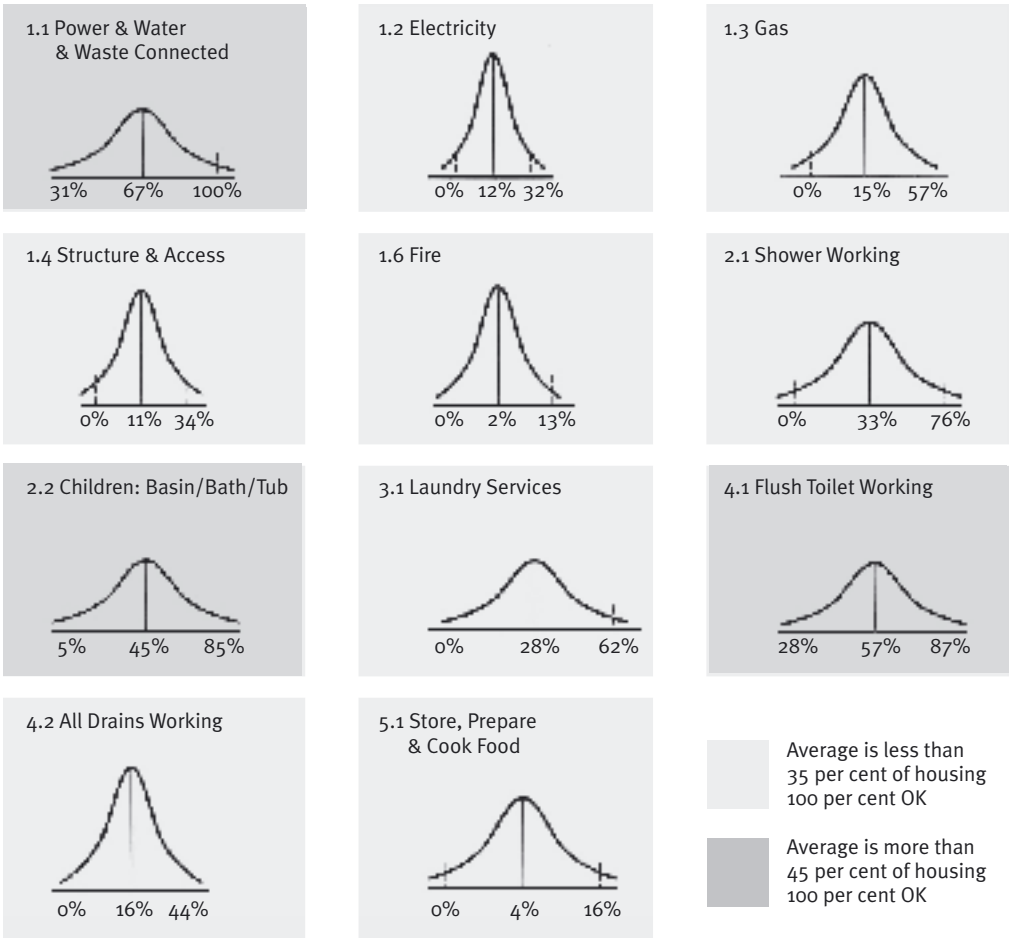
These plots lend further support to the earlier analysis of the most poorly functioning critical HLPs at Survey Fix 1—'Fire', 'Store, prepare and cook food', 'Structure and access', 'All drains working', 'Electricity'—because they indicate not only low average proportions of housing achieving 100 per cent OK against these HLPs, but also the narrow 'spread' of 100 per cent OK results for these HLPs (indicating that high numbers of communities were scoring poorly against them).

The critical HLPs against which housing was found to be most functional include:

- Power, water and waste connected (Critical HLP 1.1)—67 per cent average proportion of housing achieving 100 per cent
- Flush Toilet Working (Critical HLP 4.1)—57 per cent average proportion
- Children: Basin/Bath/Tub (Critical HLP 2.2)—45 per cent average proportion.

It is acknowledged that, according to the FHBH Project standard, it is essential to score 100 per cent OK against **all** critical HLPs to achieve a safe and functioning house. However, further insight into the state of housing in the communities participating in the FHBH program can be obtained by noting the average scores achieved against the critical HLPs.

Figure 2: 100 per cent OK results distribution and the average proportion of housing across all communities achieving 100 per cent OK for each critical HLP at Survey Fix 1



Thus, although a high proportion of communities were shown to have high proportions of housing not 100 per cent OK against the 'Structure and Access' critical HLP, the average score for this HLP across all communities was 0.67. Similarly, with respect to the 'Drains Working Properly' critical HLP (which fared poorly against the 100 per cent OK test), the average score against this indicator for all housing subject to the FHBH Projects was 0.75. A higher average score for a HLP means the communities were closer to achieving 100 per cent OK for that HLP.

The critical HLPs against which high average scores at Survey Fix 1 were achieved included:

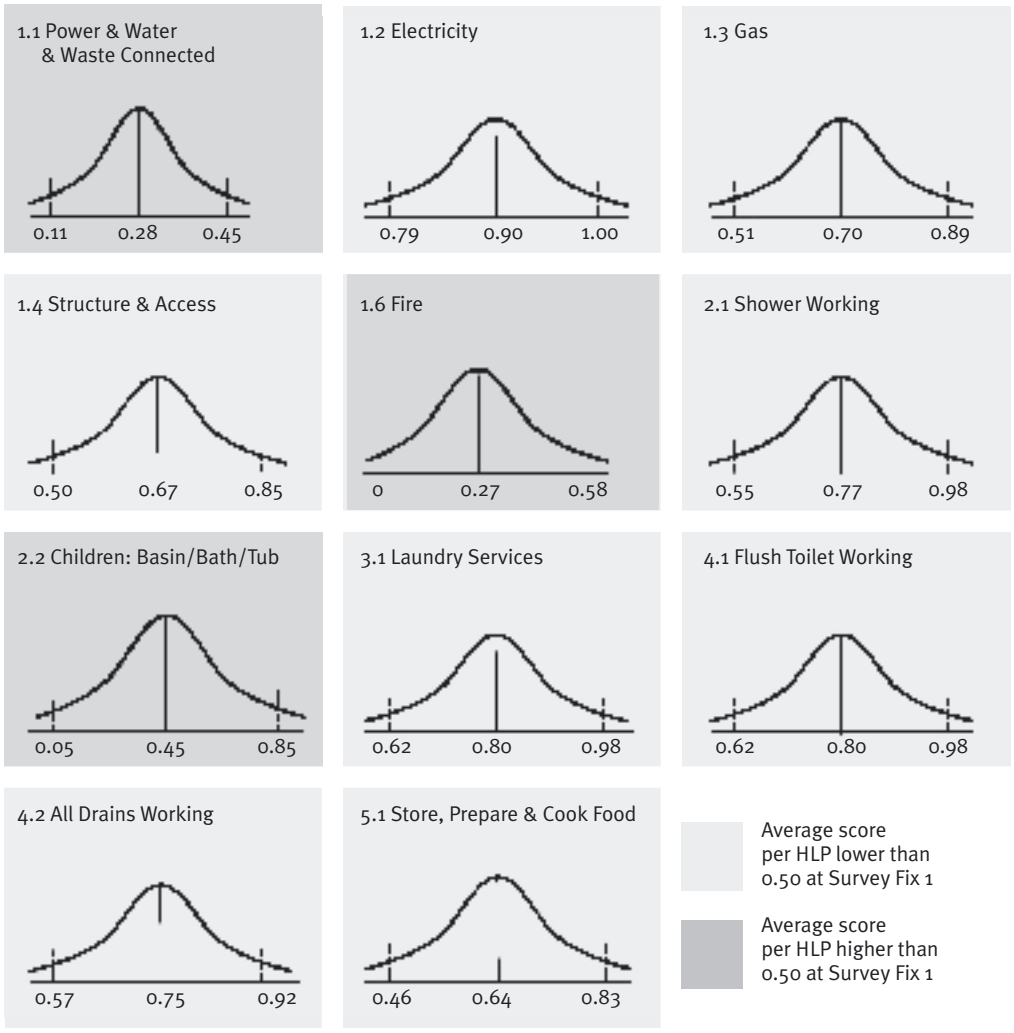
- Electricity, as noted above; the average score was 0.90 out of 1 for this HLP
- Laundry Services, average score of 0.80
- Flush Toilet Working, average score of 0.80
- Shower Working, average score of 0.77
- Gas, average score of 0.70.

The critical HLPs against which low average scores at Survey Fix 1 were achieved included:

- Fire, average score of 0.27 out of 1
- Power, water and waste connected, average score of 0.28
- Children (Basin/Bath/Tub), average score of 0.45.

Distribution plots showing the 'spread' of average scores for all critical HLPs at Survey Fix 1 are shown in Figure 3.

Figure 3: Distribution plots showing the 'spread' of average scores against all critical HLPs at Survey Fix 1



Case study analysis and findings

Table 5 sets out brief summaries of the most significant results for each of the case studies for the 100 per cent OK tests, average scores and points of general observation.

Table 5: Housing condition prior to FHBH: case studies. Significant results for 100 per cent OK critical HLP tests, average scores, and general observation

	Significant results	General observation
Case Study A	**100 per cent OK tests** Low proportion of houses passing the 100 per cent OK test for electrical (11%), structure and access (10%), fire (0%), drainage (8%) and food storage and preparation (0%). The proportion of houses passing 100 per cent OK tests in all other areas of functionality was low, at around 30%. **Average scores per house** Highest: Electricity 0.93 Lowest: Fire 0.28	Generally poor, structural failure, not waterproof, no hot water service, electrical safety issues, failed kitchens, serious plumbing/drainage problems
Case Study B	**100 per cent OK tests** Low proportion of houses passing 100 per cent OK tests for electrical (13%), gas (0%), fire (0%), drainage (3%) and food storage and preparation (1%). Only the tests for power and water and toilet flushing saw more than a third of houses pass as 100 per cent OK. Some variation within the community, with outstations experiencing particularly low scores (often under 20% of houses passing the 100 per cent OK test) across all HLPs. **Average scores per house** Highest: Electricity 0.89 Lowest: Fire 0.14	Variable according to age—older houses poor but all housing needing maintenance of plumbing and electrical fixtures—outstation housing worse due to lower maintenance frequency
Case Study C1 and C2	**100 per cent OK tests** Both communities showing a low percentage of houses passing 100 per cent OK tests for gas (at 8% and 0% respectively), structure and access (both at 0%), fire (both at 0%), and food preparation and storage (at 11% and 3% respectively). There is little variation between the two communities although C1 scores lower on electrical 100 per cent OK tests (at 16%) compared to C2 (at 35%). **Average scores per house C1** Highest: C1 Electricity 0.97/C2 Electricity 0.95 Lowest: C1 Fire 0.42/C2 Fire 0.38	Generally relatively new, reasonable external appearance. Under supply at C2. Many items requiring maintenance, serious hygiene problems prevalent both communities
Case Study D	100 per cent OK tests The proportion of houses passing electric (0%), gas (4%), fire (0%), laundry services (4%), drains (10%) and food preparation and storage (0%) was very low. The percentage of houses passing other HLPs was generally low, with only the tests for toilet flushing and power and water connection having over 50% of houses passing. Average scores per house Highest: Electricity 0.88 Lowest: Power, water, waste connected 0.19	Reasonably good standard with reasonable maintenance history. Some housing serviceable after 25 years. Wet areas a problem, due to poor design and finishing

The case study analysis shows that across all case studies, housing condition prior to the FHBH Projects as assessed at Survey Fix 1 was poor against a number of HLPs. Case Studies C1 and C2 demonstrated the poorest housing conditions, perhaps reflecting their remoteness and relatively low capacity. Case study specific comments include:

- For Case Study A, despite high average scores for critical HLPs 1.2 (Electricity) and 3.1 (Laundry Services), the majority of houses still failed to score 100 per cent OK against these HLPs at Survey Fix 1.
- For Case Study B, for all but three HLPs the proportion of houses scoring 100 per cent OK on any particular HLP was at 20 per cent or less, while no houses scored 100 per cent OK on HLPs 1.3 (Gas) and 1.6 (Fire). Average scores for all but four HLPs at 0.68 or above, although average scores for 1.1 (Power, Water & Waste Connected), 1.6 (Fire) and 2.2 (Children: Basin/Bath/Tub) were particularly low at 0.24, 0.34 and 0.14 respectively.
- For Case Studies C1 and C2, there was a more mixed and less positive picture. Although the proportion of houses 100 per cent OK was at 68 per cent, for four out of eleven HLPs for both communities at Survey Fix 1, zero houses scored 100 per cent OK on HLPs 1.4 (Structure & Access) and 1.6 (Fire), while for HLPs 1.3 (Gas) and 5.1 (Store, Prepare & Cook Food) the proportion of houses scoring at 100 per cent OK was at 11 per cent or less in both cases. Average scores show that many of the HLPs tested close to 1.00 at Survey 1—with scores for six out of eleven HLPs at or above 0.8 for both communities—across certain HLPs, however, the standard of housing in both communities was markedly poor, with average scores of only around 0.4 for HLPs 1.1 (Power, Water & Waste Connected) and 1.6 (Fire).
- For Case Study D, a variety of problems were recorded at Survey Fix 1. Figure 4 shows that no houses in the community were 100 per cent OK for HLPs 1.2 (Electricity), 1.6 (Fire) and 5.1 (Store, Prepare & Cook Food), while only 10 per cent or less were 100 per cent OK for HLPs 1.3 (Gas), 3.1 (Laundry Services) and 4.2 (All Drains Working). Survey 1 data for HLP 4.1 (Flush Toilet Working) were more encouraging with over 50 per cent of houses 100 per cent OK and an average score for the community of 0.80. Average scores for HLPs 1.3 (Gas) and 1.6 (Fire) were also comparatively low at 0.59 and 0.42 respectively indicating a low overall standard across the community housing stock in these areas. A low average score was also recorded for HLP 1.1 (Power, Water & Waste Connected) of 0.19, despite the fact that a comparatively high proportion of houses scored 100 per cent on that HLP.

1.2 What was the state of housing after FHBH occurred? What problems were fixed?

Whole-of-program analysis and findings

Results comparing Survey Fix 1 outcomes to those at Survey Fix 2 show that substantial improvements to housing were achieved during and after the completion of the FHBH Projects. In fact, for all critical HLPs, there was an across-the-board improvement in terms of the proportion of housing in FHBH Project communities achieving 100 per cent OK.

The series of graphs in Figure 4 shows the improvement in the average proportion of housing in all communities achieving 100 per cent OK against each of the critical HLPs. The grey curve in each of the figures is the distribution and average at Survey Fix 1 (before FHBH). The black curve in each of the figures is the distribution and average at Survey Fix 2 (after FHBH). The further the black curve moves towards 100 per cent the better. A taller curve demonstrates a large number of communities are achieving around the average proportion of houses 100 per cent OK (the average is therefore stronger and more representative). These graphs also show results for each of the case study communities, represented by the letters A, B, C1, C2, and D, where the grey letter is as at Survey Fix 1 and the black letter is as at Survey Fix 2. An arrow indicates the direction and indicative amount of movement. Note that at the time of the evaluation the Survey Fix 2 data for Case Study D were not available (so there are no 'black Ds' in the graphs).

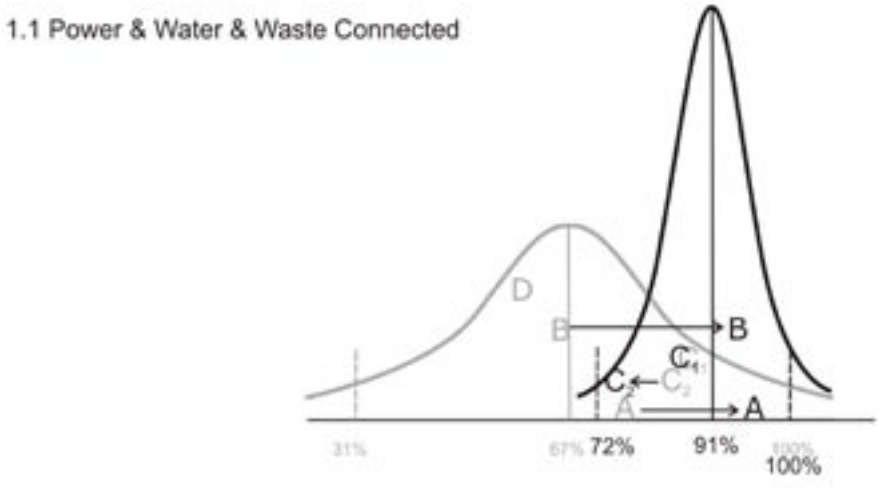
The following summarises the results for the whole-of-program analysis for each critical HLP:

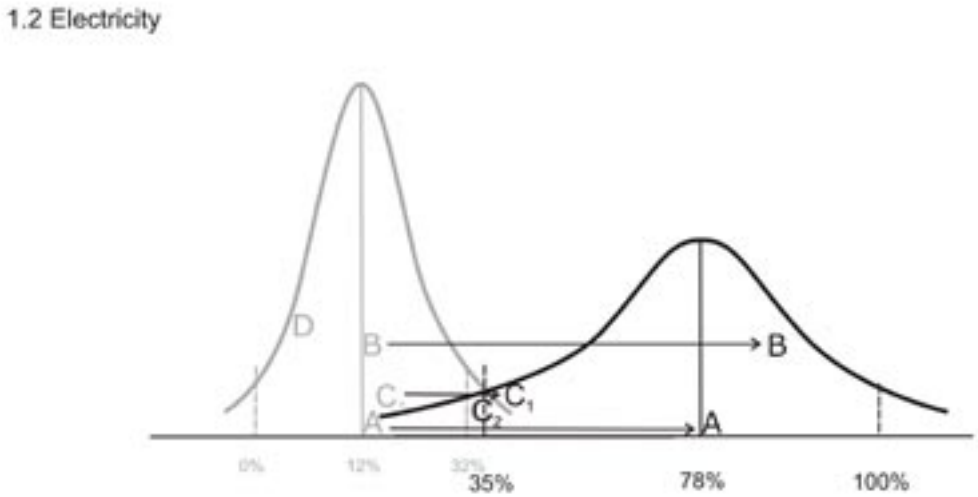
- 1.1 Power and Water and Waste Connected—average proportion of houses achieving 100 per cent OK improved from 67 per cent to 91 per cent, with the distribution narrowing slightly. **Large improvement.**
- 1.2 Electricity—average proportion of houses achieving 100 per cent OK improved from 12 to 78 per cent, with the distribution widening significantly. **Large improvement.**
- 1.3 Gas—average proportion of houses achieving 100 per cent OK improved from 15 to 19 per cent, with the distribution widening significantly. **Large improvement.**
- 1.4 Structure & Access—average proportion of houses achieving 100 per cent OK improved from 11 to 48 per cent, with the distribution widening very significantly. **Large improvement.**
- 1.6 Fire—average proportion of houses achieving 100 per cent OK improved from 2 to 7 per cent, with the distribution widening significantly. **Little improvement.**
- 2.1 Shower Working—average proportion of houses achieving 100 per cent OK improved from 33 to 82 per cent, with the distribution narrowing significantly. **Large improvement.**
- 2.2 Children: Basin/Bathroom/Tub—average proportion of houses achieving 100 per cent OK improved from 45 to 70 per cent, with the distribution staying about the same. **Large improvement.**
- 3.1 Laundry Services—average proportion of houses achieving 100 per cent OK improved from 28 to 73 per cent, with the distribution staying about the same. **Large improvement.**
- 4.1 Flush Toilet Working—average proportion of houses achieving 100 per cent OK improved from 57 to 88 per cent, with the distribution narrowing significantly. **Large improvement.**
- 4.2 All Drains Working—average proportion of houses achieving 100 per cent OK improved from 16 to 49 per cent, with the distribution widening significantly. **Large improvement.**

- 5.1 Store, Prepare and Cook Food—average proportion of houses achieving 100 per cent OK improved from 4 to 8 per cent, with the distribution widening significantly. **Little improvement.**

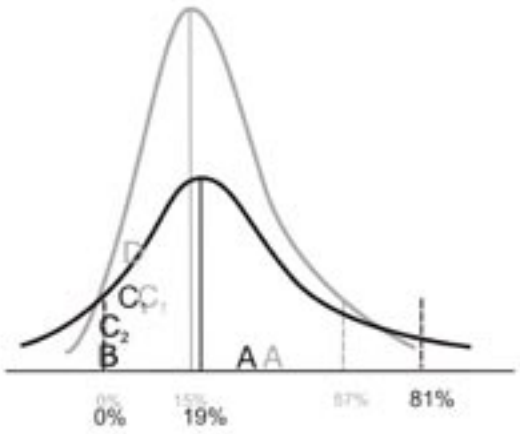
Thus, large improvements were achieved across nine of the 11 critical HLPs. There was little improvement for Fire and Store, Prepare and Cook Food. This reflects the fact that the per-house budget available during a FHBH Project would usually be used up before improvements to the structure of houses and kitchens could be addressed.

Figure 4: Improvements between Survey Fix 1 and Survey Fix 2—distribution curves and average proportion of houses achieving 100 per cent OK against each HLP

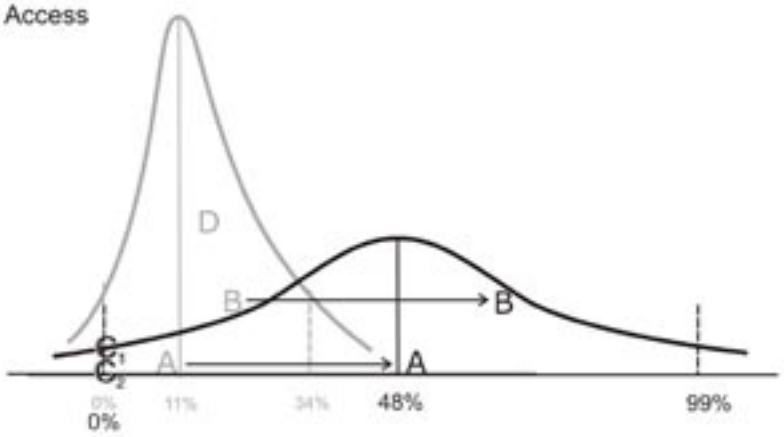




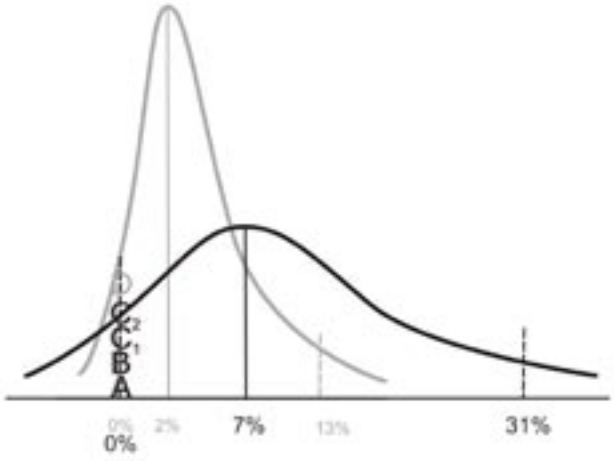
1.3 Gas



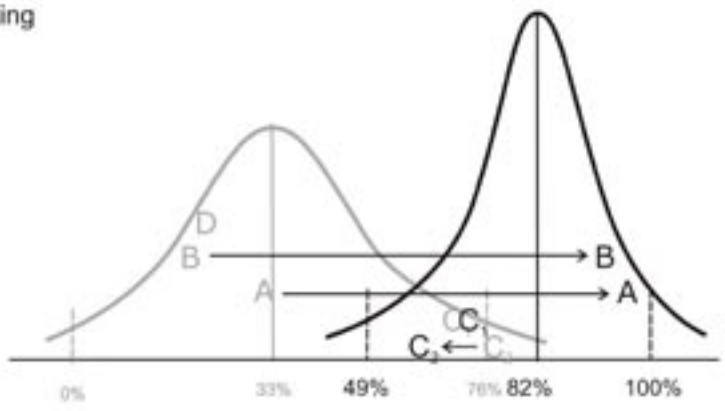
1.4 Structure and Access



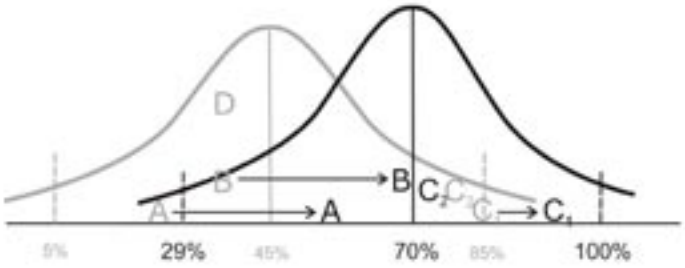
1.6 Fire



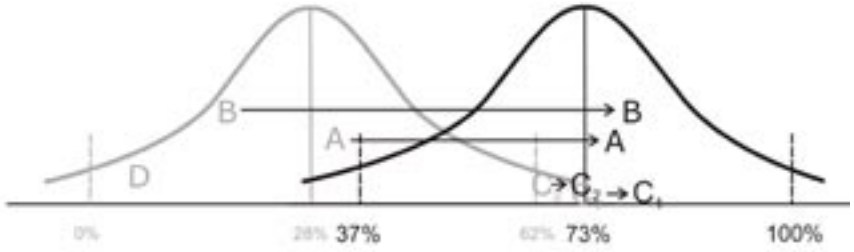
2.1 Shower Working



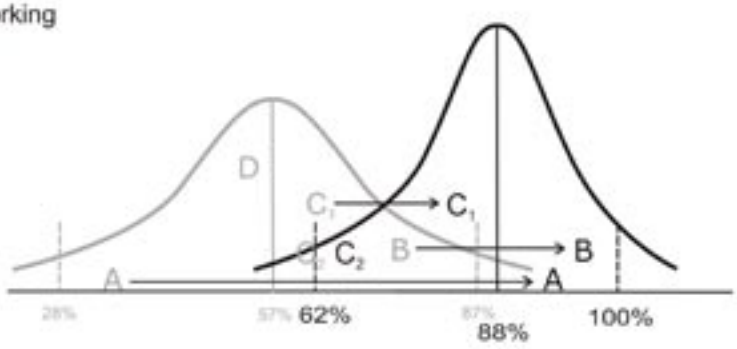
2.2 Children : Basin/Bath/Tub



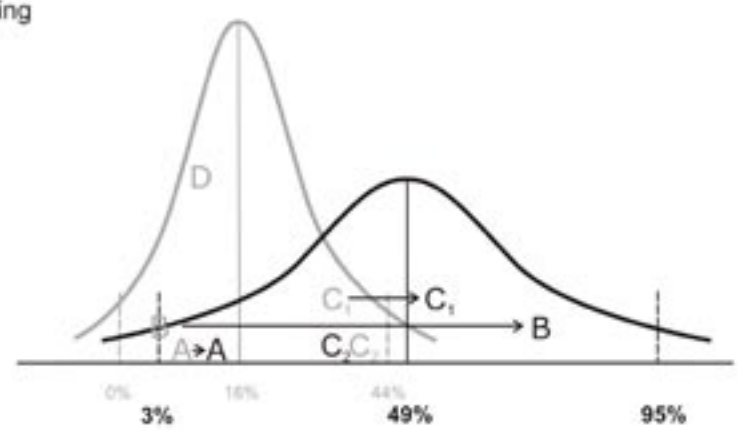
3.1 Laundry Services



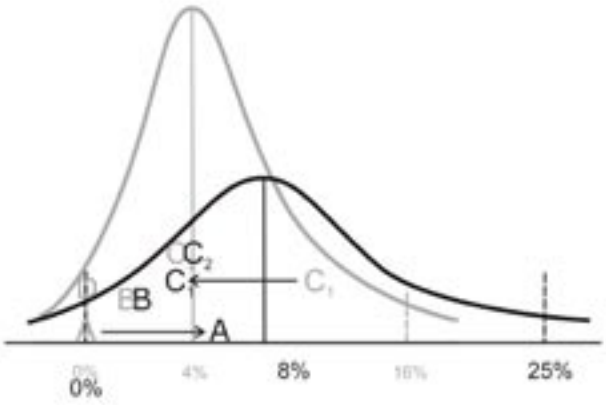
4.1 Flush Toilet Working



4.2 All Drains Working



5.1 Store, Prepare and Cook Food



Graphs have also been produced to show the improvement between Survey Fix 1 and Survey Fix 2 in **average scores** for each critical HLP across the whole program. These are contained in Figure 5. Again, the grey curve represents average scores at Survey Fix 1 (before FHBH) and the black curve represents average scores at Survey Fix 2 (after FHBH). Again, the case study community average score changes are included in these graphs.

Generally, there has been an improvement in the whole-of-program average scores for all critical HLPs. Those critical HLPs that demonstrated the most improvement in average scores per HLP on the majority of communities (denoted by a taller black curve) include:

- 1.2 Electricity—which has improved from 50 per cent of communities being over 0.90 at Survey Fix 1, to 50 per cent of communities being over 0.97 at Survey Fix 2
- 1.3 Gas—which has improved from 50 per cent of communities being over 0.70 at Survey Fix 1, to 50 per cent of communities being over 0.96 at Survey Fix 2
- 2.1 Shower Working—which has improved from 50 per cent of communities being over 0.77 at Survey Fix 1, to 50 per cent of communities being over 0.94 at Survey Fix 2
- 3.1 Laundry Services—which has improved from 50 per cent of communities being over 0.80 at Survey Fix 1, to 50 per cent of communities being over 0.94 at Survey Fix 2
- 4.1 Flush Toilet Working—which has improved from 50 per cent of communities being over 0.80 at Survey Fix 1, to 50 per cent of communities being over 0.94 at Survey Fix 2,
- 1.4 Structure and Access—which has improved from 50 per cent of communities being over 0.67 at Survey Fix 1, to 50 per cent of communities being over 0.89 at Survey Fix 2
- 4.2 All Drains Working—which has improved from 50 per cent of communities being over 0.75 at Survey Fix 1, to 50 per cent of communities being over 0.89 at Survey Fix 2.

The average scores for the following critical HLPs improved but in not as many communities as those above (thus their 'black curves' are not as tall as for the above HLPs):

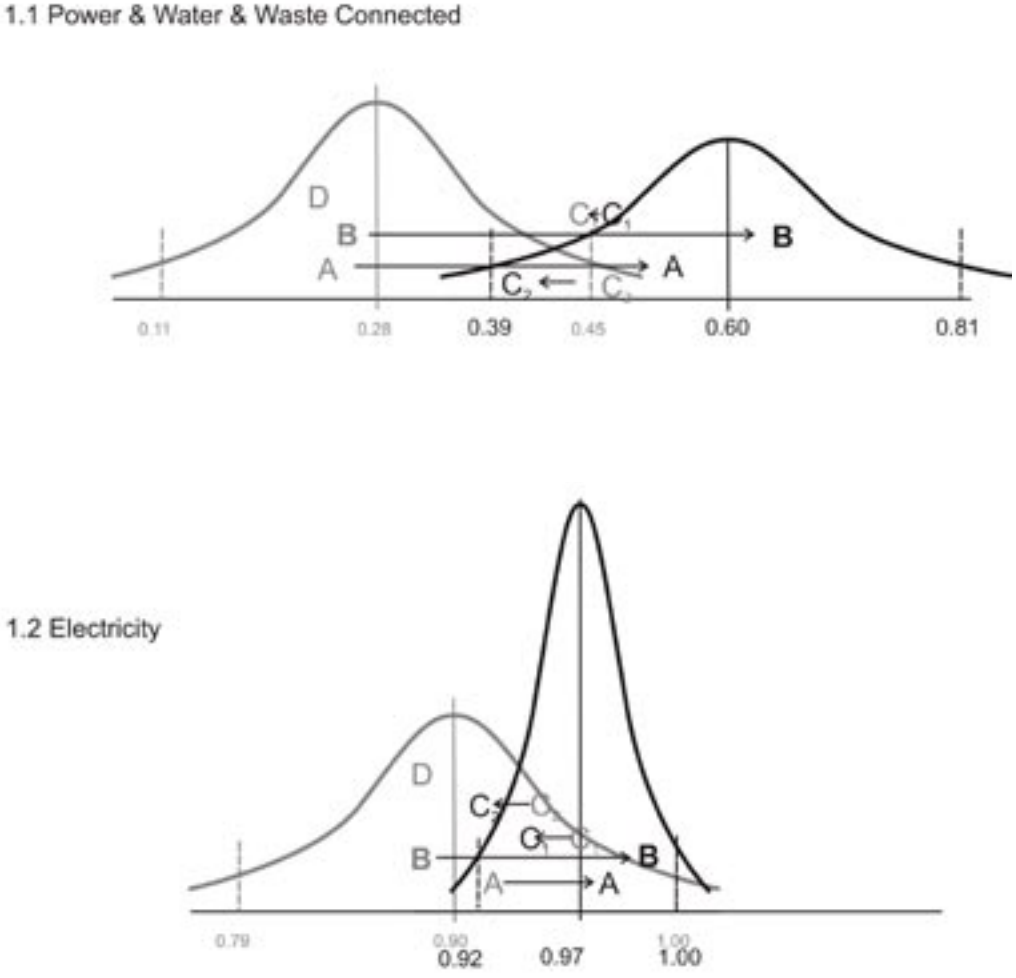
- 1.1 Power & water and waste connected—average score improved from 0.28 to 0.60
- 1.6 Fire—average score improved from 0.27 to 0.41
- 2.2 Children: basin/bath/tub—average score improved from 0.45 to 0.70
- 5.1 Store, prepare and cook food—average score improved from 0.64 to 0.72.

In discussions with stakeholders some general observations were made about the characteristics of those communities with a high proportion of improved housing after a FHBH Project had been completed. The main frequently mentioned observation was that those communities in or near rural towns, with mixed populations (Indigenous and non-Indigenous), and with better access to a range of services and tradespeople often fared much better. Common observations

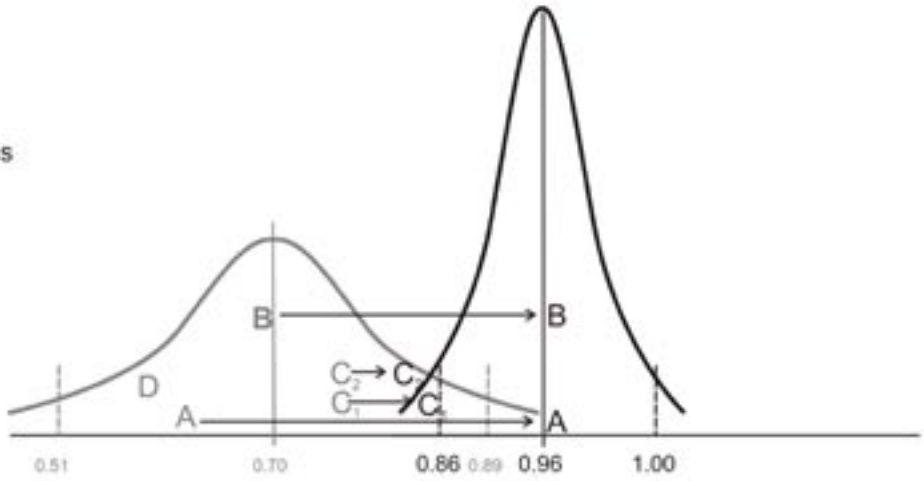
made about those communities with a high proportion of housing not improving included that the communities:

- are remote/very remote, have only unsealed road access, and require fly in/out in wet season
- have a very high rate of population per household (overcrowding)
- have a high mineral salt content in the local water supply.

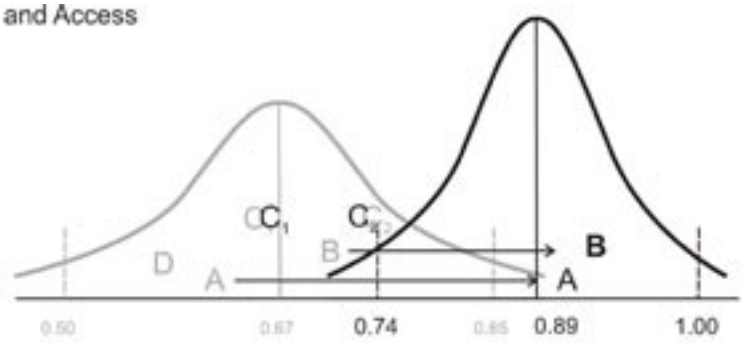
Figure 5: Improvements between Survey Fix 1 and Survey Fix 2—distribution curves and average scores per HLP



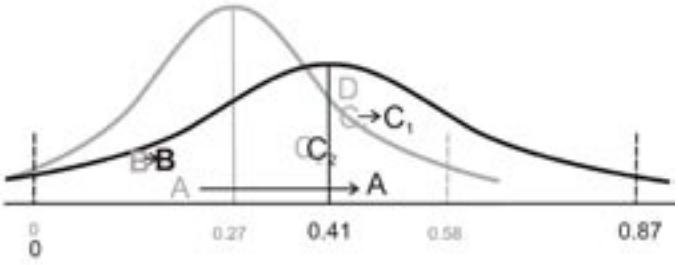
1.3 Gas



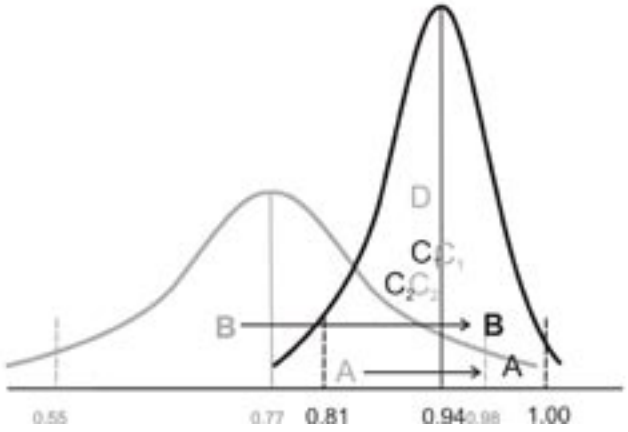
1.4 Structure and Access



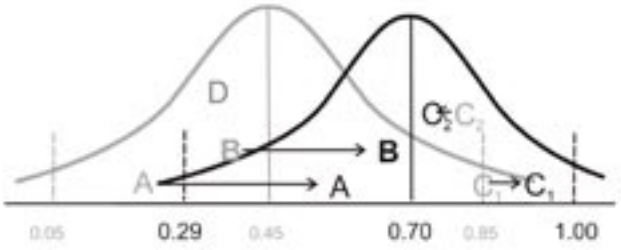
1.6 Fire



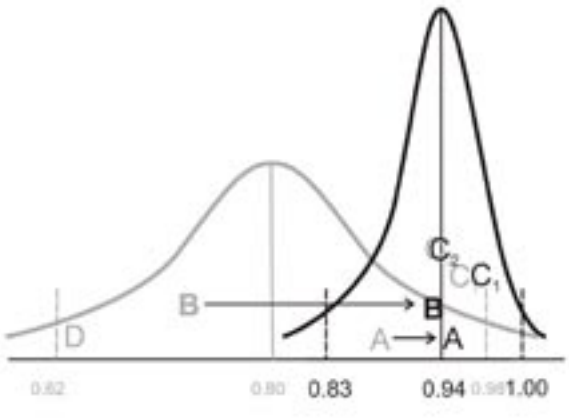
2.1 Shower Working



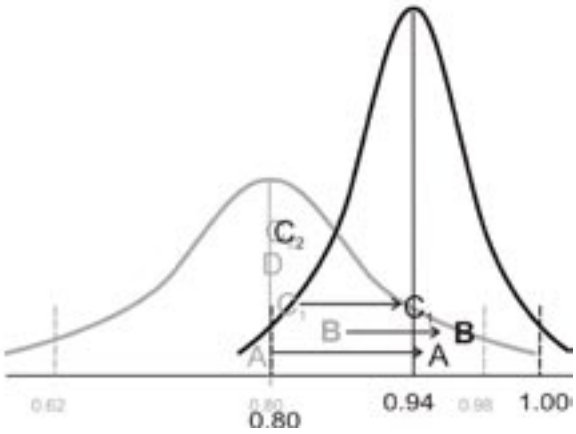
2.2 Children : Basin/Bath/Tub



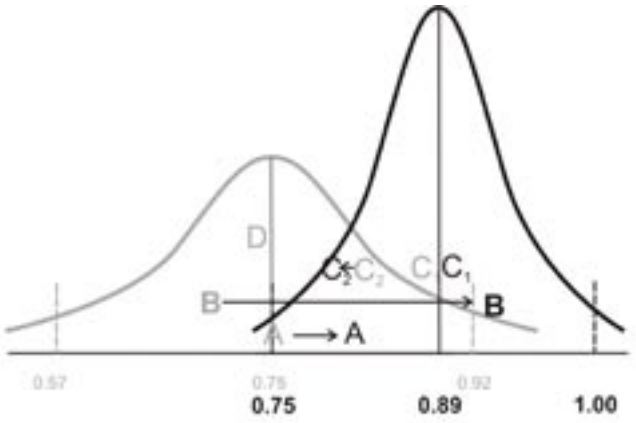
3.1 Laundry Services



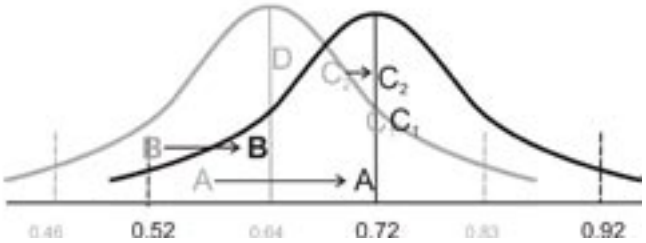
4.1 Flush Toilet Working



4.2 All Drains Working



5.1 Store, Prepare and Cook Food



Case study analysis and findings

Table 6 summarises the results for the case study communities. While there were significant improvements in proportions of houses achieving 100 per cent OK for most critical HLPs, Case Study Communities A and B performed better than Case Study Communities C1 and C2, which failed to achieve significant improvements and for some critical HLPs slipped backwards (such as C2's 'Shower Working' HLP). The average score per-HLP per-house results for the case study communities showed a similar trend, with Case Study Communities A and B performing better than Case Study Communities C1 and C2. Again, in some cases C1 and C2 slipped backwards in average scores. C1 slipped backwards in Electricity and Shower working, and C2 slipped backwards in Power, Water, Waste Connected, Electricity, Structure and Access, Children's Wash Areas and all Drains Working. The lower rates of improvement for C1 and C2—both of which are very remote, have significant overcrowding in housing, have high mineral salt contents in water supply, and which are hard to supply regularly with trades, services and materials—tend to confirm the general observations about communities where it is hardest to improve housing conditions via a FHBH Project.

Table 6: Improvements between Survey Fix 1 and Survey Fix 2: case studies. Significant results for 100 per cent OK critical HLP tests, average scores, and general observation

	Significant results	General observation
Case Study A	**100 per cent OK tests** The number of houses passing electrical, structure and access, shower, laundry, and flushing toilet tests rose. However there was little improvement in the proportion of houses passing drainage, food storage and preparation and fire tests. **Average scores per house** Without exception—an improvement in average scores for each HLP, with pronounced improvements in the average scores for Power, Water & Waste Connected and Children: Basin/Bath/Tub, which increased by 33 points and 35 points respectively.	Priority given to electrical safety, kitchens, hot water service, drainage problems
Case Study B	**100 per cent OK tests** The number of houses passing electrical, structure and access, shower, and laundry tests rose, as did drainage tests. However, the proportion of houses passing gas and fire tests remained at 0%, and only 1% more of houses had adequate food storage and preparation. The proportion of houses passing HLP tests at the community's outstations continued to be low. **Average scores per house** Substantial increases in the average score for the majority of HLPs occurred (see Figure 5), improvements of 29, 34 and 41 points for Shower Working, Children: Basin/Bath/Tub and Power, Water & Waste Connected. Further improvement is, however, required if the average scores for these HLPs are to reach the levels of leading HLPs such as 1.2 (Electricity).	Standard improved, variation in housing quality improved. Essential items in all houses fixed to raise general standard. Budget allocated strategically. Community understands connection between maintenance and health outcomes
Case Study C1 and C2	**100 per cent OK tests** Overall little improvement in the percentage of houses passing HLP tests, although C1 has experienced a moderate improvement (of around 10% to 15%) in the number of houses passing electrical, children's wash areas, laundry, flushing toilets and drainage tests. The proportion of houses passing HLP tests in C2 however has remained low and in several cases has reduced; for example the proportion of houses with working showers fell by 15%. **Average scores per house** Marginal improvement and some decline. C1: small improvements in nine out of eleven HLP average scores. Decreases for Electricity and Shower working. C2: six out of eleven HLP average scores have decreased by up to 5 points.	Significantly lower degrees of improvement in both C1 and C2 backed by observations of housing under severe stress. Though the housing at both these communities is relatively new, it appeared that there was little or no maintenance program in place. Overall appearance of housing very poor
Case Study D	**100 per cent OK tests** Survey Fix 2 data not available **Average scores per house** Survey Fix 2 data not available	Housing generally of a reasonable standard and good environmental standards maintained

1.3 What has been the effect of the passage of time on the outcomes of FHBH? Have improvements been sustained? Why or why not?

Whole-of-program analysis and findings

Generally there is a period of around six months between the Survey Fix 1 and the Survey Fix 2 assessments. The whole-of-program results show a very good level of improvement over this time. However, it is a widely held view that few communities would have an ongoing housing maintenance program operating at the same standard as a FHBH Project, after a FHBH Project finishes. It was a common observation among most stakeholders that without a comprehensive asset management system as good as the FHBH standard, the gains made during a FHBH Project can be expected to dissipate rapidly. However, community-level stakeholders suggested that it would be very difficult for them to resource a housing maintenance program to the same standard as a FHBH Project. Nonetheless, many did recognise that Maintaining Housing for Better Health (MHBH) would be and is a useful follow-up program to achieve sustained outcomes.

The available data are not regarded as sufficient to provide statistically valid insights to the longitudinal success of the FHBH Projects in achieving sustained outcomes. The generally short time frame between Survey Fix 1 and Survey Fix 2 means that the assessments should rightfully be regarded as 'point-in-time' assessments. Many stakeholders at all levels also recognised the need for a longer-term follow-up assessment program to accurately determine how sustainable FHBH Project outcomes might be. This could offer a comparison between communities with and without ongoing maintenance programs of a similar level.

Case study analysis and findings

Table 7 sets out some general observations about the passage of time and the potential for FHBH Projects to achieve sustained outcomes.

The case study community observations tend to confirm the views of stakeholders about the ability to achieve sustained outcomes from FHBH Projects. The case studies show that:

- In all cases, having a FHBH Project meant the lifting of a major maintenance burden.
- Those communities with a post-FHBH Project ongoing maintenance program of a reasonable standard are best placed to achieve sustained outcomes.
- Those communities without an effective post-FHBH Project maintenance program show signs of losing any improvements in housing condition immediately.
- The task of sustaining improvements is threatened by underlying causes that the FHBH Projects are not designed to address, such as lack of resources, overcrowding, low community capacity, social issues and the sheer size and scope of the task, particularly for remote communities and those servicing outstations.

In the case of C1 and C2, the faltering capacity and failure of an established regional maintenance delivery service is a particularly complicating factor. Stakeholders were of the view that once a group of communities have local service provision replaced by a regional service, if the regional service collapses a 'service vacuum' opens up. When local communities have come to depend upon regional maintenance services, local systems become redundant. When

the regional system falters or collapses, the local systems are no longer in place to take up the cause. This has happened for C1 and C2 and this is a key threat to sustained outcomes for these communities.

Table 7: Sustained outcomes. General observations—case study communities

	General observation
Case Study A	Major maintenance burden overcome. Improvements sustained, maintenance budget under control. Culture of maintenance established and practised.
Case Study B	Overall improvement but threatened without ongoing maintenance, especially outstations. Essential items most susceptible to failure.
Case Study C1 and C2	Too early to tell, although without an ongoing maintenance program, achievements unlikely to be sustained even over short term.
Case Study D	Outcomes are being sustained, has lifted some pressure off the general maintenance burden. Ongoing maintenance practices are in place.

1.4 Do the residents feel that their houses are safer and healthier since FHBH?

Whole-of-program analysis and findings

This question could not be answered via data at the whole-of-program level, as the surveys do not collect information that might provide statistically valid insights. It was thought by most stakeholders that this is a very subjective question, the answers to which the FHBH Projects are unlikely to be the main influence. While the idea was raised that the FHBH Projects could capture these attitudes, it was widely thought that this would not necessarily be an informative or appropriate exercise insofar as evaluating the FHBH Projects is concerned.

General observation among stakeholders suggested that the answer to this question varies between individuals and communities. Most residents are very positive towards 'direct benefits'—that is, the improvements made to their homes. They respond well to the 'instant fix' aspect of the process. Higher-capacity residents and communities also appear to make a strong link between the FHBH Project and the intended 'indirect benefits' such as improved health and safety. In other communities, some observations suggested some indifference to what the health and safety benefits of the FHBH Projects might be. While there is no evidence to confirm reasons, suggested reasons for such indifference were priorities placed on other community issues, cultural and lifestyle factors.

Case study analysis and findings

During the case study visits, attempts were made to achieve some closer observation in relation to the feelings of residents about the impact of the FHBH Project. In the case of the C1 and C2 visits, the consultants participated as team members in a Survey Fix 2 assessment. Through this involvement, they were able to meet with and talk to householders. However, there were significant limits to how far the consultants were prepared to probe for insights with regard to this question. The FHBH Project process is—by definition and necessity—a short-term but significant impost upon the private enjoyment of the family home. As such, the consultants made the most of casual interaction with householders to gain insight, as opposed to structured interviews. Table 8 sets out the key observations made for each of the case studies.

Table 8: Residents' feelings and perceptions regarding the FHBH Projects and the health and safety of their homes. General observations—case study communities

	General observation
Case Study A	Yes—positive feedback from residents and housing officers which indicated an appreciation of the direct and indirect benefits of the FHBH Projects.
Case Study B	Difficult to establish feelings and perceptions conclusively by field observation. Maintenance officers suggested that the majority of residents understood and appreciated what the FHBH Project set out to achieve.
Case Study C1 and C2	There seemed to be strong support among residents for the program. FHBH seen as an adjunct to community service provision. Note that there were observations of serious hygiene/health issues—many houses are not safe. Some householders were very strong in their views about this.
Case Study D	No effective response available. Improvements have been delivered to housing that was already at a reasonable standard.

1.5 What are the remaining problems within housing in Indigenous communities?

Whole-of-program analysis and findings

This question is answered substantially by the analysis in Section 1.2. Despite the significant improvements made during the FHBH Project timeframe, there were still problems remaining after Survey Fix 2. This is best highlighted by the fact that at Survey Fix 2, there was still no community scoring between 80 to 100 per cent OK for all housing against all critical HLPs. Thus, problems remain with housing condition in FHBH Project communities, although in varying degrees between communities and across most HLPs.

Noting the movement in average scores, and the movement towards communities achieving between 80 and 100 per cent of housing being 100 per cent OK against the critical HLPs, it can be seen that there are still a number of common problems remaining in housing condition in the FHBH Project communities, particularly with regard to:

- Fire—over half the communities are still scoring below 0.41 on this HLP, and at Survey Fix 2, over 88 per cent of communities still have less than 20 per cent of their housing 100 per cent OK with regard to this HLP.
- Power, Water and Waste Connected—average score of 0.60 shows that a significant number of communities are scoring low against this critical HLP. Very low average proportions of housing in communities assessed as 100 per cent OK against Fire (7 per cent), and Store, Prepare and Cook Food (8 per cent).
- Children: Basin/Bath/Tub—over half the communities are still scoring below an average of 0.70, and only two communities had between 80 per cent and 100 per cent of their housing 100 per cent OK at Survey Fix 2.
- Store, Prepare and Cook Food—0.72 average score, with all but three communities only having up to 20 per cent of their housing 100 per cent OK.

As stated earlier, it is not surprising that there are remaining problems with the Fire HLP, as many of the problems against this critical HLP are instances of shortcomings with the design of dwellings and infrastructure, aspects of housing function that the FHBH Projects were not designed or resourced to address. The same can be said for the Store, Prepare and Cook Food HLP, but also, kitchen improvements were not as highly prioritised as repairs to other essential HLPs. Low results for Children: Basin/Bath/Tub also relates to some extent to design issues, that is, no tub provided/tubs being too small to bathe children in.

Case study analysis and findings

As Table 9 shows, the case studies tend to confirm the whole-of-program trends with regard to what the remaining problems are, that is, which critical HLPs have improved the least, with the main variation being in the degree to which problems remain among the case study communities. Case Study A's remaining problems were less acute compared to B's. Again, the remaining problems at both C1 and C2 were much more severe in degree compared to both A and B. Once more, this seems to confirm the hypothesis that in complex contexts (like those found in C1 and C2) the task of raising the standard of housing conditions is more difficult compared to elsewhere. The context for Case Study Community B includes outstations, and these appear to influence the degree of remaining problems as well. Case Study Community A is remote and small in population size but able to achieve a greater improvement, which seems to indicate that something other than physical context is at play. Perhaps the fact that community capacity is regarded as being higher here compared to other case studies is an influencing factor. However, without more rigorous assessment, it is hard to be conclusive.

Nonetheless, the case studies' analysis also shows that FHBH Projects as they are currently designed and implemented can only go so far to address housing condition. It would appear that other influencing factors beyond the reach of the FHBH Projects are at play to limit outcomes.

Table 9: Remaining problems with housing conditions. Significant results and general observations—case study communities

	Significant results	General observation
Case Study A	**100 per cent OK tests** The proportion of houses passing gas, structure and access, fire, children's wash area, drainage, storage and food preparation tests remains low at 27%, 50%, 0%, 59%, 12%, and 6% respectively. **Average scores per house** Lowest averages scores for: Power, Water, Waste Connected—0.56 Fire—0.48 Children: Basin/Bath/Tub—0.59	Waterproofing of roofs of older houses. Seasonal overcrowding an issue
Case Study B	**100 per cent OK tests** High proportion (100%) of houses failing gas and fire tests, whilst only 65% pass structure and access tests, 68% pass children's washing area tests and only 2% pass food storage tests. Outstations still require work on electrics (only a 14% pass rate), laundry services (a 36% pass rate) and drainage (a 29% pass rate). **Average scores per house** Lowest averages scores for: Power, Water, Waste Connected—0.65 Fire—0.13	Lack of capacity and dependence on external trades. Serious overcrowding, no coordination between FHBH, other housing and health programs. Cultural and social issues impact on housing and use of housing resources
Case Study C1 and C2	**100 per cent OK tests** The pass rate for electrics is under 40% for both communities and for gas tests it is at 0% for C2 and 3% for C1. The pass rate for both communities in structure and access and fire tests is at 0%, while the pass rate for food storage is under 5%. Overall the proportion of houses failing HLP tests in C2 is slightly higher than for C1. **Average scores per house** Lowest averages scores for: C1: Power, Water, Waste Connected—0.51 Fire—0.49 C2: Power, Water, Waste Connected—0.42 Fire—0.38	Seriousness of impact of poor housekeeping should be emphasised
Case Study D	**100 per cent OK tests** Survey Fix 2 data not available **Average scores per house** Survey Fix 2 data not available	Several bathrooms and kitchens remain in need of repair/ upgrade

1.6 What have been the budgets for the FHBH Projects?

1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?

Key evaluation questions 1.6 and 1.7 are explored together.

Whole-of-program analysis and findings

On average a budget of $5,000 per dwelling has been allocated. However, this budget is allocated on a regional basis and then divided up between FHBH Project communities. In some cases, this results in some communities getting slightly less than $5,000 per dwelling, with others receiving slightly more funding. While it was not altogether clear how funds were to be divided between communities and houses, stakeholder views indicated that it appeared to depend upon the share of regional need or the feasibility assessment conducted before the commencement of a FHBH Project. During a project, some houses would require less improvement than others. In these cases, 'spare' budget from one house could be applied towards more improvements in another.

Specific and detailed information on the budgets expended in each community during the FHBH Projects was difficult to obtain for this evaluation. As noted previously, the consultants were confined to analysing financial information regarding only some of the FHBH 2 and FHBH 3 generations of projects. Healthabitat indicated that it initially thought it was beyond the scope of the FHBH Project method to ensure that financial reports were produced, as the Australian and state/territory governments agreed on budgets and costs prior to project implementation. As such, Healthabitat indicated that, originally, reported accountability for project budgets rested with the responsible authority. Despite this, in response to a growing demand for simpler and consistent accounting of project-by-project expenditures, and realising the potential insights that such information could provide regarding project improvements, Healthabitat has now developed a reporting system so that detailed financial summaries for each project can be produced in future. An example output of this information, for a hypothetical town, is shown in Figure 6.

Nonetheless, as indicated above the consultants did obtain some financial information for some of FHBH 2 and FHBH 3 generation communities—although it should be noted that some of the detail associated with the distribution of money spent might only be approximate or inaccurate. For example, in some communities it was noted that 0 per cent was spent on 'project establishment' and/or 'design specification and tender' and/or 'project finalisation'. An allocated expenditure of $0 for these aspects is highly unlikely and as such, it is recommended that a retrospective analysis of cost information be undertaken as soon as the new financial system is in operation, if the system allows for retrospection.

Figure 6: Project-specific financial information available in future

Test Town

FM01 budget overview Budget + expenditure are exc GST

Budget line	Account code	Budget exc GST	Amount paid exc GST	Balance	Notes
		$	$	$	
1. Project establishment					
1 HH all payments	4600	0.00	0.00	Zero	
2 Community consulting	4601	300.00	8.64	291.36	
3 Monitoring equipment	4608	0.00	0.00	Zero	
4 Other		0.00	0.00	Zero	
Group total		**300.00**	**8.64**	**291.36**	
2. Survey/Fix 1					
1 Electrical SF1	4603	2,805.00	1,132.36	1,672.64	
2 Plumber SF1	4602	2,805.00	2,313.64	491.36	
3 Other staff SF1	4605	1,500.00	0.00	1,500.00	
4 Aboriginal Staff SF1	4607	3,000.00	1,300.00	1,700.00	
5 Consumables SF1	4608	1,410.00	639.47	770.53	Local supplier not available
Group total		**11,520.00**	**5,385.47**	**6,134.53**	
3. Design spec. and tender					
1 Architect/consultants	4609	16,513.00	4,703.91	11,809.09	
Group total		**16,513.00**	**4,703.91**	**11,809.09**	
4. Capital Upgrade					
2 Aboriginal Staff upgrade	4608	2,100.00	0.00	2,100.00	
3 Appliance service (WMR)		0.00	0.00	Zero	
4 Bathrooms		0.00	0.00	Zero	
5 Carpentry/minor works		5,741.00	0.00	5,741.00	
6 Electrical upgrade		13,500.00	1973.93	11,526.07	
7 Glazier (safety)		0.00	0.00	Zero	
8 HWS Supply & install		0.00	0.00	Zero	
9 Insulation (temp control)		0.00	10,037.45	(10,037.45)	
10 Occupational Therapy		0.00	0.00	Zero	
11 Pest Control (reduce pests)		2,700.00	0.00	2,700.00	
12 Plumber upgrade		9,000.00	363.64	8,636.36	
13 Roofer (safety)		0.00	0.00	Zero	
14 Septic tank works (waste)		0.00	0.00	Zero	
15 Stove supply/service		3,240.00	1,875.36	1,364.64	
16 Water iso. Valves/meters		0.00	0.00	Zero	
17 Woodheaters		0.00	525.00	(525.00)	
Group total		**36,281.00**	**14,775.38**	**21,505.62**	
5. Survey/Fix 2					
1 Electrical SF2		2,310.00	0.00	2,310.00	
2 Plumbing SF2		2,310.00	11.27	2,298.73	
3 Other staff SF2		1,500.00	0.00	1,500.00	
4 Aboriginal Staff SF2		3,000.00	0.00	3,000.00	
5 Survey Consumables SF2		225.00	0.00	225.00	
6 Data Analysis		800.00	0.00	800.00	
Group total		**10,145.00**	**11.27**	**10,133.73**	
6. Reporting & Project completion					
1 Reporting costs		500.00	0.00	500.00	
2 Print, phone, fax, data		0.00	0.00	Zero	
3 1 Other		0.00	0.00	Zero	
Group total		**500.00**	**0.00**	**500.00**	
GRAND TOTAL		**75,259.00**	**24,884.67**	**50,374.33**	

Important observations made from the cost information available for FHBH 2 generation projects include:

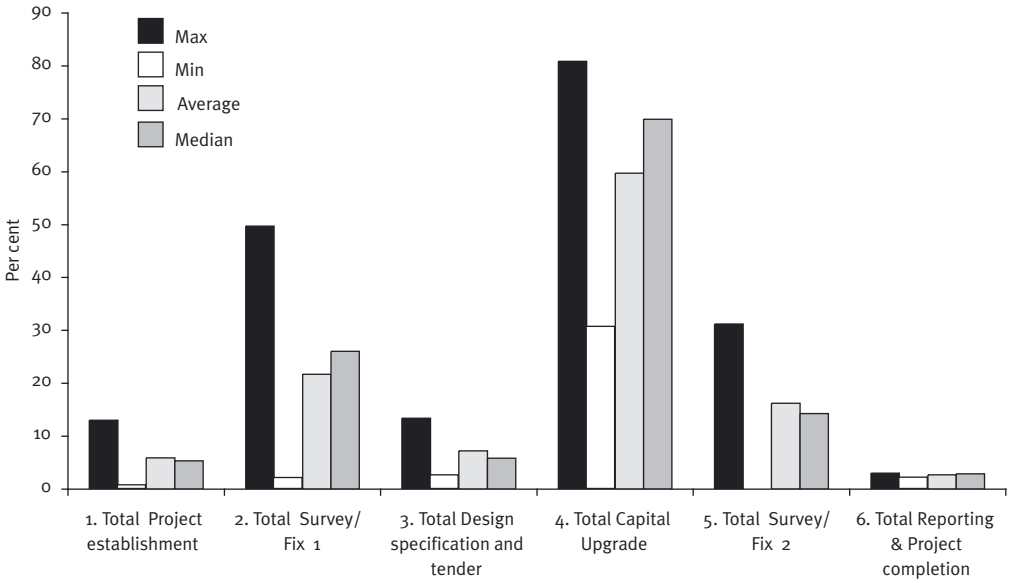
- As summarised in Table 10, the majority of the money is being spent on capital upgrades, that is, major fix/repair works—an average of 60 per cent of budgets is spent on capital upgrades, with the median percentage at 70 per cent. Capital upgrades can account for up to 80 per cent of total budgets in some communities and decreases to around 30 to 40 per cent in three of the communities.
- The majority of funds expended on capital upgrades are for 'plumbing' works (on average 22 per cent of total budgets spent on this trade), and 'carpentry' works (11 per cent on average). Other monies are spent relatively evenly across different trades. The averages were:
  - electrical upgrade 8%
  - septic tank works (waste) 5%
  - Aboriginal staff upgrade 4%
  - hot water service supply and install 3%
  - MHBH all costs (maintenance training) 3%
  - pest control (reduce pests) 2%
  - electrical on costs distributed 1%
  - other 1%.
- Glazier (safety), Roofer (safety), water isolation valves/meters, appliance service (washing machine/repair, stove supply/service), insulation (temp control) all scored 0 per cent.

Table 10: Overall budget summary

	Average % spent in communities	Median % spent in communities	Max % spent in communities	Min % spent in communities
1. Total project establishment	6	5	13	1
2. Total survey/Fix 1	22	26	50	2
3. Total design specification and tender	7	6	13	3
4. Total capital upgrade	60	70	81	31
5. Total survey/Fix 2	16	14	31	0
6. Total reporting and project completion	3	3	3	2

For the FHBH 2 generation of projects and for those communities where some money had been spent on project establishment and design specification and tender, the average proportion of the total community budgets were 6 per cent and 7 per cent respectively. This seems to be a reasonable proportion of expense for an intensive program such as the FHBH Projects, and the improvements in housing condition the projects achieve. It compares favourably to margins included for design specification and tender in private sector capital works projects—which range from 5 per cent to 15 per cent on average.

Figure 7: Overall budget summary



Case study analysis and findings

Some actual budget figures were available for two of the case study communities, as Table 11 indicates. Some general comments and observations regarding budgets are also available.

A major theme in stakeholder discussions was the manner in which the average allocation of $5,000 per house was set. It was a widely held view that this budget was too low in general to achieve some of the improvements the FHBH Project method aspires to; for example, addressing fire access would require major structural works, replacing kitchens would be also very expensive on a per-house basis. However, some stakeholders suggested that the per-house budget for any one project should be at least partially set with reference to the Survey Fix 1 housing condition assessment, which provides a very accurate account of house by house needs in a community. It was agreed that there should always be a minimum amount set per house to allow for the preparation and carrying out of Survey Fix 1, but opinion was varied as to what that minimum amount should be.

Otherwise, project managers thought that they had substantial flexibility with regard to the allocation of funds at the community level and found themselves setting priorities in accordance with need. That is, there was a clear a tendency to fund the 'absolutely essential' fix work first, such as electrical safety, safe connection of power, hot water and waste services. Some houses would forego expenditure on some less essential items so that other houses lacking essential items could be improved.

Table 11: Actual budgets and some observations—case study communities

	Budget information	General observations
Case Study A	$181,213 FHBH 2 for a total of 38 houses ($4,770 per house) Plus $33,840 for a MHBH Program	Priority to health and safety Kitchens and hot water service most expensive. Cost-efficient on-site fabrication of recyclable kitchens was a cost efficiency
Case Study B	$818,488 for 220 houses ($3,720 per house) Other non-FHBH housing maintenance funding sources were leveraged.	Majority on trades, hardware and building costs up to 5 times metro costs. Use of local labour and focus on maintenance rather than rebuilding could achieve savings
Case Study C1 and C2	C1: N.A C2: N.A	N.A
Case Study D	N.A	FHBH per house allocation seen as inefficient – better to allocate funding on basis of Survey Fix 1 outcomes. Tendering inefficiencies in this jurisdiction. Some FHBH data collection seen as inefficient/unnecessary because the survey forms are designed for the remote and most severe contexts

1.8 Approximately what proportion of problems (routine, damage, faulty) (essential, urgent, routine) within communities is being fixed through the budgets?

Whole-of-program analysis and findings

No useful information about this component was available within the whole-of-program database. It was recommended by some stakeholders that this information should be clarified and incorporated into the consolidated database as soon as practicable. This would allow an efficient means of performing a global assessment of the basic causes of problems for housing condition in FHBH Project communities.

Individual project-by-project observations from Healthabitat indicated that the majority of problems are either routine (due to environmental conditions) and/or faulty (in some cases due to incorrect installation), and that on average, only around 9 per cent of housing problems are associated with damage caused by home occupiers.

Case study analysis and findings

No assessment for this question was undertaken for the case study communities.

1.9 Are the most serious problems being fixed? Does this differ between communities?

Whole-of-program analysis and findings

No whole-of-program assessment could be performed for this question due to data constraints.

Case study analysis and findings

Information regarding high-priority versus low-priority jobs was available for the case study communities. The consultants analysed this information and made the following observations:

- For Case Study Communities A and B, there were more high than low-priority tasks completed. However, in Community C1 and C2 more low-priority tasks were completed—see Figure 8.
- As Figure 9 demonstrates, although it is difficult to align the works performed by tradespeople with each of the critical HLPs (for example, one trade might undertake a job that covers a range of HLPs), generally speaking, the overall proportion of high-priority jobs being completed aligns with those components of the housing that were most dysfunctional at Survey Fix 1 (refer to discussion under 1.1 above). The exception to this is for the Fire critical HLP—which is not unexpected, given the need for structural change beyond the scope of the budgets for the FHBH Projects.
- As Figure 10 shows, the local, on-site Survey Fix Team is undertaking the majority of the low-priority jobs.

Thus from the above assessment, it would seem that relatively similar proportions of high and low-priority jobs are being fixed across FHBH Projects, at least for the case study communities. However, caution is required in interpretation because analysis of these data alone can be misleading. For example, there may be a higher number of low-priority jobs being fixed as the local Survey Fix Team can complete these tasks for little if any extra time/resources while they are undertaking the survey assessments. The majority of the budget might be spent on fixing those components that are considered most serious, in this case electricity and drainage. Juxtaposing the count of job information with the budget information tends to indicate that this is indeed appears to be the case. Furthermore, noting the improvements in housing condition after Survey Fix 2 (refer to discussion under 1.2 above) it would seem that the most critical factors are being addressed.

Figure 8: Number of tasks/jobs required at Survey Fix 1, jobs remaining after Survey Fix 2 and number of jobs completed through FHBH

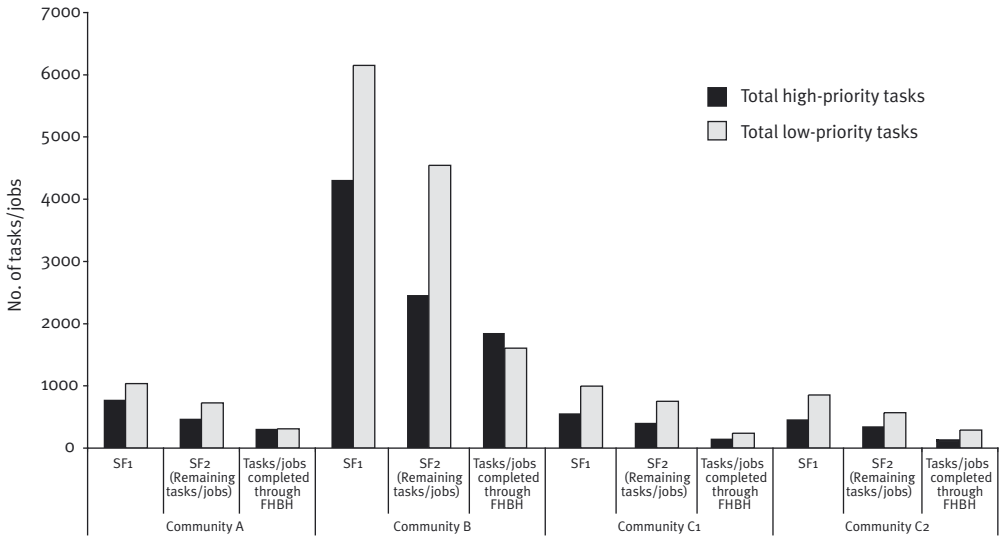


Figure 9: Percentage of high-priority jobs being completed through FHBH by trade

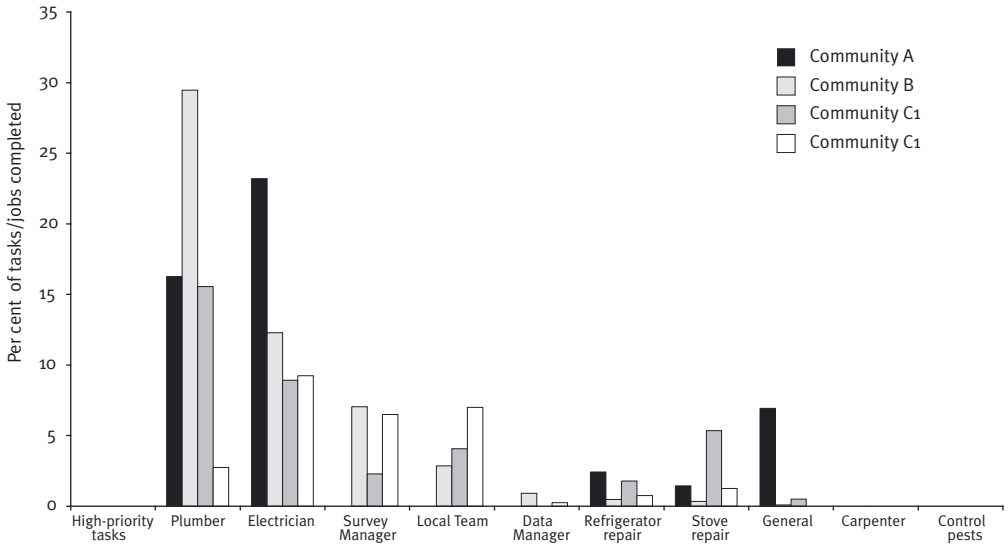
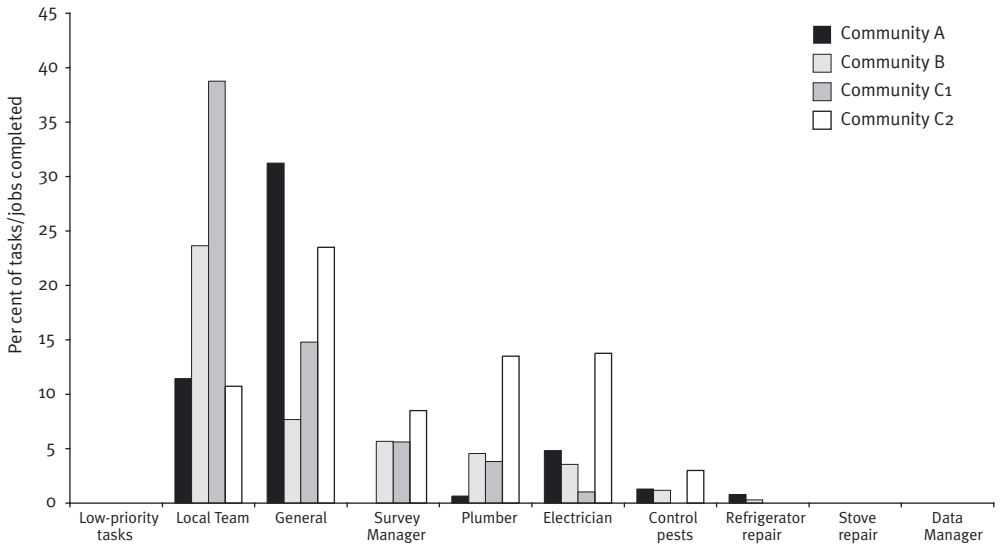


Figure 10: Percentage of low-priority jobs being completed through FHBH by trade



1.10 What is the sensitivity of the level of money spent? That is, if we allocated 50 to 100 per cent more or 50 per cent less, what is the likely increase/decrease in the number of problems that will be fixed?

Whole-of-program data

The evaluation initially anticipated that there would be access to 'count of job' information and budget information for at least the case study communities, if not for the 'whole-of-program' analysis. However, both these pieces of information were made available only for Case Study Community A. An analysis for this question has therefore been undertaken for Case Study Community A.

It is important to note that generalisations based on the outcomes of this analysis should not be made. Nonetheless, outcomes of the analysis performed are of interest and provide some indication of how the sensitivity of money spent can be understood.

The analysis conducted on the sensitivity of the budget spent in Case Study Community A was undertaken as follows:

- Budget information for the critical trade areas of electrician, plumber and carpentry was noted. For Case Study Community A, this represented 91 per cent of all funds allocated to that community.
- Information on the count of jobs associated with these areas was noted. This accounted for 66 per cent of all jobs (high and low-priority) undertaken in Case Study Community A.
- An average rate of '$ per trade area per job' was established, by dividing the total budget allocated to each trade by the count of jobs for each trade. As such, the budget for 'electrician' was divided by the count of jobs completed by an electrician, the budget for plumbing was divided by the count of jobs completed in plumbing and so on. The carpentry budget was divided by the jobs completed in the 'carpenter' or 'general' category.
- The rates produced from the above manipulation were then applied to the number of remaining jobs/tasks.

Undertaking the above analysis produced the following outcomes for Case Study Community A:

- Rates per trade area were as follows:
  - electrical—on average spending $161/job
  - plumbing—on average spending $182/job
  - carpentry—on average spending $458/job.
- Remaining jobs post Survey Fix 2:
  - electrical—174 jobs
  - plumbing—341 jobs
  - carpentry—483 jobs.
- Required budget:
  - electrical—$28,200
  - plumbing—$62,200
  - carpentry—$221,400.
- Total additional budget required:
  - $311,800 (or $8,200/house).
- Initial budget spent (on capital upgrade/tradespeople only):
  - $155,300 (or $4,090/house).

Thus using this basic analysis, it could be concluded that Case Study Community A would likely require at least $12,000 per house to fix remaining short falls in housing condition against the FHBH Project standards.

It should be noted that this is simply a broad indication of the extra budget that might be required to fix the remaining problems in Case Study Community A. The precise budget required to 'fix' all remaining problems at Survey Fix 2, that is, to bring all housing in a community up to 100 per cent OK against the critical HLP measures would depend on many things. For example, the estimations of remaining budgets might be significantly underestimated because there may be expensive structural work required to lift some of the critical HLPs to 100 per cent OK. Alternatively, it might be that many of the 'big' issues are dealt with through the Survey Fix method, and that the remaining problems require fewer resources. The actual situation is likely to be somewhere between these two spectrums, particularly as the improvement in average scores on housing is vastly improving between Survey Fix 1 and Survey Fix 2.

What can be said with confidence is that no community has between 80 and 100 per cent of their housing 100 per cent OK against every critical HLP at the end of a FHBH Project, and therefore additional resources are required in all communities, if such a standard is to be obtained.

It is highly recommended that this type of analysis be undertaken at the whole-of-program level once all information is available in the consolidated database to determine whether this case study example is typical. This would also help with the setting of average per-house budgets for the FHBH Projects.

Case study analysis and findings

A series of general observations about budget sensitivity were obtained for the case study communities. These are set out in Table 12.

Table 12: Residents' feelings and perceptions regarding the FHBH Projects and the health and safety of their homes. General observations—case study communities

	General observation
Case Study A	More money would have enabled more kitchens/major drainage works. Less money would have restricted work to critical safety targets.
Case Study B	Better efficiency possible by investing additional funds in health education, HLP education.
Case Study C1 and C2	Forced to prioritise funds because of the $5,000 budget. Some elements cannot get any attention because of the limits to resources.
Case Study D	Prioritisation appears appropriate—started from a relatively good standard—has allowed focus on bathrooms/wet area upgrades.

KPO 1 Summary of findings

- There were very significant problems with Indigenous housing conditions in all FHBH communities prior to the commencement of the FHBH Projects.
- Given the spread/range/number of communities receiving a FHBH Project, and that no community 'failed' the feasibility assessments, it is likely that the state of Indigenous housing conditions in FHBH Project communities is reasonably representative of other rural, remote and very remote Indigenous communities.

- Key problems with Indigenous housing condition prior to FHBH Projects were found in relation to most critical HLP areas, and particularly the HLPs for Fire, Structure and Access, and Drains.
- The FHBH Projects fixed a significant number of problems over the average six-month period between Survey Fix 1 and Survey Fix 2. In fact, in most cases, the least functional housing at Survey Fix 2 was more functional than the average level of functionality prior to Survey Fix 1.
- The Survey Fix method moved a considerable number of communities towards having a large proportion of their housing 100 per cent OK, particularly with regard to Power, Water and Waste Connected, Flush Toilet Working, Shower Working, Electricity, and Laundry. In addition, improvements in average scores were also recorded for Electricity, Gas, Structure and Access, and Drains.
- Despite these large improvements, there are still a significant number of problems remaining with Indigenous housing conditions after FHBH Projects. After Survey Fix 2, there was still no community that had between 80 to 100 per cent of their housing 100 per cent OK against all critical HLPs. Problems remain with structural elements of houses (for example, egress associated with escaping from fires), bathing children, and storing and preparing food.
- Limited financial information was available, but it would seem that the majority of FHBH Project budgets have been spent on capital upgrades/fix and repair work—over 60 per cent on average and up to 80 per cent in some communities. Expenditure shares align reasonably well with critical HLPs requiring the most attention. On average, about 6 to 7 per cent of FHBH Project budgets were spent on project establishment and design specification and tender. This does not seem excessive and indeed seems necessary to ensure tasks required can be managed and completed.
- Given the improvements, and the analysis of the types of jobs completed, it would seem that, in general, the most critical problems are being fixed. Although the number of low-priority and high-priority tasks finalised are almost equal among the case study communities, tradespeople are being used appropriately and efficiently to fix critical (high-priority) problems in the majority of cases, whereas local Survey Fix Teams are fixing many of the low-priority jobs.
- Based on the fact that no community achieved between 80 and 100 per cent of their housing 100 per cent OK against all critical HLPs at Survey Fix 2, it would seem that the average of $5,000 per house was not sufficient to achieve the FHBH Project standard in any community. This was confirmed by a limited financial analysis for Case Study A, which indicated that, all other things being equal, to complete the remaining jobs required to bring all housing to 100 per cent OK against the FHBH Project standard after Survey Fix 2, an indicative total budget of around $12,000 per house would be required.

KPO 2 To transfer housing maintenance systems, skills and employment to the Indigenous communities (and Indigenous Community Housing Organisations) in which FHBH has operated

The research for Key Program Objective 2 was guided by four key evaluation questions. The following discussion is structured according to each of those questions.

2.1 What level of community/ICHO involvement in employment, training and project management opportunities occurred through FHBH? Has this been an appropriate level? Did communities want to be involved?

Whole-of-program analysis and findings

Although records are kept for the participation and payment of community members involved in the FHBH Projects, the consultants were unable to access such data aggregated at the whole-of-program level. Nonetheless, some important general observations can be made based on stakeholder discussion.

On the question of participation, there were generally good levels of community involvement/ICHO involvement during FHBH Projects. The degree of involvement varied from minimal to significant, with the main variable being the capacity and interest of the community to derive benefits through their involvement.

The Survey Fix process is designed for implementation at the community level by local Survey Fix teams, led by a FHBH Project team manager. Virtually all projects were able to find four to five local community members interested in participating. Those community members who did participate were formally employed during the FHBH Project survey assessments, receiving a market wage for their time.

Case study analysis and findings

Some general observations were gathered about participation at the case study level. Across all case study communities, there were good levels of participation from individuals. However, it was noted during the C1 and C2 case study visits that the wider community administration appeared to greet the FHBH Project Survey Fix 2 assessments with a degree of indifference. When the reasons for this indifference were explored, it was found that the FHBH Projects were regarded as 'just another program passing through'. Table 13 provides a brief statement of participation observations for each case study.

Table 13: Participation in FHBH Projects in case study communities. General observations—case study communities

	General observation
Case Study A	Good level of participation—community very positive. Exact numbers not available but a group of about 10 members were involved. Same members involved in Survey Fix 1 and Survey Fix 2.
Case Study B	Fourteen community members involved in FHBH—additional members in Survey/Fix. Residents happy to have houses fixed. Mostly the same members involved in Survey Fix 1 and Survey Fix 2.
Case Study C1 and C2	Four to six participants per community. Some indifference observed at the community administration level. C1—mostly the same members involved in Survey Fix 1 and Survey Fix 2. C2 had less success achieving same participants between Survey Fix 1 and Survey Fix 2. Significant time spent 'rounding up' participation.
Case Study D	The Aboriginal Housing Office and community provided four to six survey team members for both Survey Fix 1 and Survey Fix 2.

2.2 What housing maintenance systems and skills are communities/Indigenous Community Housing Organisations and individual participants left with after FHBH? What did they have before? Is there new employment as a result of FHBH?

Whole-of-program analysis and findings

With regard to training, the method for training community members for involvement was regarded by the majority of stakeholders as excellent. The use of 'training boards' upon which community members were shown various simple fix techniques, and upon which community members could practise was particularly well received. Training was also provided in data entry and the survey check process.

However, it was also observed that, even though the training method was effective, only a very basic level of training and skill was provided. A common observation among stakeholders was that the vast majority of the necessary higher-level skills are 'imported' with FHBH Projects.

Sustained outcomes in terms of skills transfer were found to be very limited. It was widely recognised by stakeholders that the achievement of this aim is subject to significant capacity constraints.

Nonetheless, it was possible to identify some examples of communities continuing on with rigorous housing maintenance systems after a FHBH Project had been implemented. Some communities were taking up the Maintaining Housing for Better Health program as a follow up to a FHBH Project, and most communities were deriving benefits from use of the FHBH Project data set for their housing management. However, few communities were found to be directly adopting the FHBH Project approach for ongoing housing maintenance, primarily because of resource constraints.

It was hard to attribute any ongoing new employment to FHBH Projects alone but anecdotal accounts suggested this has happened on occasions.

Case study analysis and findings

Some general observations were made at the community level with regard to training and skills outcomes. These are set out below in Table 14. At the case study community level, in two cases—A and B—the FHBH Projects appeared to give the local communities some much needed and embraced skills. In C1 and C2, it was observed that there was not so much interest in the skills acquisition aspect of participation as there was in the opportunity to earn reasonable income. Participants in one of the Survey Fix teams appeared to have substantial skills in assessing problems with housing infrastructure such as plumbing. No effective observations were achieved for Case Study Community D.

Table 14: Skills transfer in case study communities. General observations—case study communities

	General observation
Case Study A	Some community members had building and maintenance experience beforehand. Former FHBH participants now Housing Manager and members of maintenance and building team—in total six FHBH.
Case Study B	FHBH supported plans for development of low skills entry to construction activities.
Case Study C1 and C2	Minimal skills transfer. Participants primarily saw FHBH as an opportunity to supplement income.
Case Study D	No effective observation.

2.3 Have the systems and skills that have been learnt through FHBH been used by communities/Indigenous Community Housing Organisations towards housing maintenance? If so, where and under what circumstances? Have these systems and skills been used in other ways in the community?

Whole-of-program analysis and findings

Direct evidence of the consistent reuse of skills learned during a FHBH Project across the whole program was hard to find.

However, the general view among stakeholders with regard to the 'reuse of skills' suggested that, in communities where there is a certain level of pre-existing housing maintenance and general capacity, there has been a lot of success in the ongoing take-up of some aspects of the FHBH Project method. For example, it was observed by stakeholders that higher-capacity Indigenous Community Housing Organisations saw the benefits of the detailed housing condition assessment and subsequent database produced by a FHBH Project for understanding the forward maintenance load and resources required in the community. Conversely, it was feared by some stakeholders that once a FHBH Project was complete, there were some instances where the kind of skills used during the projects might not be used to improve housing maintenance practices.

Related to the question of community capacity are the systems of governance and service delivery. It was widely regarded as an issue that in those communities where services are delivered via a 'silo' model, the prospects of achieving a

community-wide, holistic understanding and approach to a FHBH Project were very limited. This was regarded as a threat to the true potential of a FHBH Project to achieve community-wide, ongoing benefits.

Many stakeholders agree there is a great need for systemised approaches to service delivery—similar to the FHBH Projects—for other areas of community management.

Case study analysis and findings

The case study community visits went some way towards providing some direct examples of how FHBH Project methods and skills were being used in an ongoing manner. Table 15 sets out some succinct general observations.

In general, it was again found that there was some link between those communities perceived to have higher pre-existing capacity and sustained outcomes (as measured by ongoing use of some of the methods and skills learned). Case Study Communities A and B showed progress in this regard while C1 and C2 again demonstrated very limited progress. Community D showed mixed results.

Table 15: Ongoing use of FHBH Project skills. General observations—case study communities

	General observation
Case Study A	Yes. Strong housing maintenance program established with good documentation. Former FHBH participants involved in all levels of current housing program. Two FHBH participants using skills in other communities. Team is now confident to initiate and carry out projects.
Case Study B	FHBH data collection has improved asset management and strategic resource allocation. Little evidence for transfer of housing maintenance skills.
Case Study C1 and C2	No. No apparent capacity to absorb skills and new capacities. Communities facing severe limits in governance capacity and grappling with other social issues.
Case Study D	Uptake of FHBH skills was difficult due to low capacity of some community members but community attitudes to environmental health show positive change since FHBH.

2.4 Do the communities/Indigenous Community Housing Organisations and community members who were involved in FHBH feel confident that they could maintain housing better now that they have obtained systems and skills through FHBH (or would they require further support applying these)? Do they use/prefer other systems and skills and if so why?

Whole-of-program analysis and findings

It was difficult to answer this question objectively, but a number of community-level stakeholders believed that experiences with the FHBH Projects had taught the community some useful approaches to managing housing maintenance. However, expectations were that further capacity development and training would be needed to achieve ongoing application of FHBH Project systems and skills in most cases.

Other skills and systems (of arguably lesser standards) are used widely and sometimes preferred (especially in those communities with well established pre-existing maintenance systems of their own). It was a widely held view that to perform the FHBH Project method at the required standard would be resource intensive and therefore difficult to achieve. In fact, it was widely recognised that resource limitations are often the main determinant of the housing maintenance method employed or preferred at the community level.

Case study analysis and findings

General observations at the case study level tended to confirm stakeholder views. Table 16 provides the summary.

Table 16: Confidence in FHBH and use of other systems. General observations—case study communities

	General observation
Case Study A	Yes. A maintenance culture is well established. FHBH skills and systems and other systems are used in combination.
Case Study B	Asset management improved, greater consideration of health outcomes in general housing programs.
Case Study C1 and C2	No. To be effective in these contexts FHBH needs to be delivered in conjunction with other programs designed to address broader issues such as environmental health and community capacity development.
Case Study D	FHBH methods not warmly embraced by ICHO—seen as too intrusive in this context where people are used to the quiet enjoyment of their homes.

KPO 2 Summary of findings

- Levels of community involvement/ICHO involvement during FHBH Projects were generally good.
- Those community members who did participate were formally employed during the FHBH Project survey assessments, receiving a market wage for their time.
- The method for training community members 'excellent'. Training was provided in simple fix techniques, data entry and the survey check process.
- However, only a very basic level of training and skill was provided. The vast majority of the necessary higher-level skills are 'imported' with FHBH Projects.
- Sustained outcomes in terms of skills transfer were found to be very limited, but there are some examples of communities using skills learned continuing on with rigorous housing maintenance systems after a FHBH Project had been implemented. It was hard to attribute any ongoing new employment to FHBH Projects alone but anecdotal accounts suggested this has happened on occasions.
- Direct evidence of the consistent reuse of skills learned during a FHBH Project across the whole program was hard to find. However, the general view suggested that, in communities where there is a certain level of pre-existing housing maintenance and general capacity, there has been some success in the ongoing take-up of some aspects of the FHBH Project method.

Many stakeholders agree there is a great need for systemised approaches to service delivery—similar to the FHBH Project—to other areas of community management.

- The 'silo' model for service delivery is a threat to the true potential of a FHBH Project to achieve community-wide, ongoing benefits.
- Expectations were that further capacity development and training would be needed to achieve ongoing application of FHBH Project systems and skills in most cases.
- Resource limits are often the main determinant of the housing maintenance method employed or preferred at the community level.

KPO 3 To encourage states and territories to adopt housing assessment and maintenance programs in their asset management systems

This section provides analysis and findings against Key Program Objective 3. Three Key Evaluation Questions guided the research for Key Program Objective 3. The following discussion is structured according to each of those questions.

3.1 Has any state or territory adopted the FHBH assessment (or something similar)? Why/why not?

Whole-of-program analysis and findings

In New South Wales, the NSW Health department uses the 'housing for health' method widely and independently of the FaCS-sponsored FHBH Projects, recognising the potential of the method for achieving better environmental health outcomes as well as better physical housing conditions. An alternative housing assessment method is used in Western Australia. A recent comparative study showed that this approach has much similarity to the FHBH Project method. Some communities and regions are using or have also used a similar method in the past.

It was found that there is a degree of mild resistance to adopting the FHBH Project method independently among some states and territories. It was suspected that this related to perceptions about the sufficiency of pre-existing historical responsibilities/approaches and differing perspectives on the healthy housing debate—that is, whether the focus should be upon physical housing condition or improvements in environmental health education and behaviours.

It was also found that licensing arrangements for the FHBH Project are perceived to be an impediment to wider adoption of the method at the state and territory level.

Case study findings and analysis

Some general observations about the adoption of the FHBH Project method were made at the case study community level. Those observations are set out in Table 17.

The benefit of thinking about this question at the case study level was the acquisition of local opinion about what is being/has been tried as an alternative to FHBH Projects. However, there were no alternatives found to be as rigorous and well implemented as the FHBH Project method during the case study visits.

Table 17: States/territories/regions independently adopting FHBH Project method. General observations—case study communities

	General observation
Case Study A	Western Australia—This community uses the MHBH assessment sheet for regular maintenance inspections and Indigenous Housing Management System for data recording, asset and tenant management.
Case Study B	Northern Territory—Adopted aspects of the FHBH approach; for example, survey then issue jobs for repairs, but still using a pre-established system at this community.
Case Study C1 and C2	South Australia—Has sought to deliver a similar approach based on a regionalised model of delivery. Success is impeded by organisational and governance capacity.
Case Study D	New South Wales—NSW Department of Health promotes and employs the 'housing for health' method through its own programs as well as via FHBH.

3.2 Do the states and territories have a clearer understanding of maintenance requirements of Indigenous Housing as a result of FHBH? Has this understanding translated into improvements to documented (and budgeted) maintenance programs?

Whole-of-program analysis and findings

It was found that all states and territories thought that the FHBH Projects should rightly be recognised as one approach to understanding and developing Indigenous housing maintenance requirements, and that there are merits in other approaches too. For example, some states and territories take an environmental health education approach to housing maintenance, alongside addressing the physical structure of a house.

It was also found that, in general, there is a growing push among states and territories for better resourced and documented maintenance programs, but it was not clear the extent to which FHBH Projects had been responsible for raising the standard.

Some states and territories expressed a view that whole-of-government coordination and cooperation around Indigenous housing, including the adoption of specific systems of maintenance such as FHBH, should not be imposed but negotiated.

Case study analysis and findings

No effective observations obtained at the case study level.

3.3 Has FHBH influenced the allocation of state and territory funds with regard to maintaining Indigenous Housing? Have FHBH funds been used to leverage better outcomes?

Whole-of-program findings and analysis

Many examples were found of where FHBH Project funds were used in conjunction with other resources and funding sources to leverage better housing maintenance outcomes, including in most of the case study communities.

It was often found that FHBH Project funds could 'take care of the basic essentials' in maintenance needs, thereby freeing up other funding sources to focus on 'big ticket' improvements such as minor and major upgrades.

This aspect was widely recognised as a very successful aspect of the FHBH Projects and demonstrated the power of coordinated efforts.

Case study analysis and findings

The case study visits observed some specific examples of how state and territory resources and funds were leveraged by or alongside a FHBH Project to improve overall housing condition. Table 18 sets out the summary observations.

Table 18: Leveraging state/territory and other resources. General observations—case study communities

	General observation
Case Study A	FHBH has been leveraged with state's housing renovation program through recycling of FHBH kitchens and transfer of staff skills.
Case Study B	FHBH funds combined with funds from other sources, including Indigenous Housing Authority of the Northern Territory, to leverage a greater scope of works.
Case Study C1 and C2	SA Government has provided some in kind support for FHBH project delivery, such as Area Manager time and travel expenses.
Case Study D	State Government uses 'housing for health' methodology separately and in conjunction with FHBH. NSW and AHO funds are sometimes used with FHBH funds to deliver a greater scope of works.

KPO 3 Summary of findings

- Other states and territories, and regions and communities, are aware of and in some cases are using or have used the FHBH Project method independently.
- Degree of mild resistance to adopting the FHBH Project method independently among some states and territories, perhaps due to perceptions about the sufficiency of pre-existing historical responsibilities/approaches and differing perspectives on the healthy housing debate.
- Licensing arrangements for the FHBH Project are said to be an impediment to wider adoption of the method at the state and territory level.
- States and territories recognise that the FHBH Projects should rightly be recognised as one approach to understanding and developing Indigenous housing maintenance requirements, but that there are merits in other approaches/philosophies.
- A growing push among states and territories for better resourced and documented maintenance programs, but it was not clear the extent to which FHBH Projects had been responsible for raising the standard.
- Some states and territories expressed a view that whole-of-government coordination and cooperation around Indigenous housing, including the adoption of specific systems of maintenance such as FHBH, should not be imposed but negotiated.

- Many examples were found of where FHBH Project funds were used in conjunction with other resources and funding sources to leverage better housing maintenance outcomes, including in most of the case study communities.
- It was often found that FHBH Project funds could 'take care of the basic essentials' in maintenance needs, thereby freeing up other funding sources to focus on 'big ticket' improvements such as minor and major upgrades. This aspect was widely recognised as a very successful aspect of the FHBH Projects and demonstrated the power of coordinated efforts.

KPO 4 To provide a point-in-time analysis of the quality of housing stock in Indigenous communities (to determine progress towards Building a Better Future outcomes)

This section provides analysis and findings against Key Program Objective 4. The research for Key Program Objective 4 was guided by six key evaluation questions.

4.1 Has a baseline understanding and framework for that understanding been developed that assesses the quality of housing stock in Indigenous communities before and after FHBH? How does this relate to NRF/CHINS/census analysis?

Whole-of-program analysis and findings

It was found that the FHBH Projects database is an excellent framework for understanding housing conditions in Indigenous communities. It was widely agreed by stakeholders that the database has a much broader, more objective and detailed housing assessment coverage compared to other housing and housing-related data sets. It was also widely agreed that if the FHBH Project database was applied nationally it would, as variably described, provide a very 'necessary', 'detailed', 'contextualised', 'comparable' and 'objective' baseline statement of Indigenous housing stock quality across the country. This could then inform a more efficient, needs-based allocation of housing resources.

It was also recognised that there are very significant (and misleading) limitations in other data sets that are often used to understand and predict housing need in Indigenous communities, increasing the importance of the FHBH Projects database.

As an example of such limitations, as noted in Section 3, the Australian Institute of Health and Welfare (AIHW) released a paper titled *Indigenous Housing Indicators 2003–2004*, which aims to provide the first consolidated statement of progress made towards the BBF desired outcomes indicators. This paper nominates a series of major findings regarding progress so far against the 38 indicators. Overall, the paper suggests that reasonable progress is being made against a number of the indicators:

- The majority of Indigenous people in all jurisdictions reported that they were in houses that had working facilities for washing people, washing clothes or bedding, and for storing and preparing food.

- The proportion of Indigenous people with working facilities for these three FHBH healthy living standards was lowest in the Northern Territory, with:
  - 94.4 per cent of people having working facilities for washing people
  - 93.9 per cent of people having working facilities for washing clothes/bedding
  - 68.5 per cent of people having working facilities for storing/preparing food.
- The proportion of people with these three working facilities did not vary significantly by tenure type, except that renters of social housing (87.7 per cent) were less likely to have working facilities for storing/preparing food than were home owners (98.2 per cent) or other renters (97.1 per cent) (AIHW 2004).

However, the paper also acknowledges some significant limitations regarding the data upon which its major findings are based. Of particular interest to this evaluation, there is a significant limitation regarding the paper's measurement of progress towards Indicator 9. The paper states that data for this indicator were not included in the AIHW 2003–04 NRF data collection. Instead, data from the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) for all tenure types were provided for only three of the nine healthy living practices. Data regarding reduced overcrowding (a fourth healthy living practice) were used elsewhere in the paper. The note to 'Table 1.9: Number and proportion of Indigenous persons aged 15 years and over in dwellings meeting the nine FHBH healthy living standards, by state and territory, by tenure type, 2002' in the paper also warns of an estimated relative standard error of between 25 and 50 per cent for some of the data used in the table. The title of Table 1.9 is also misleading as it refers to measurement against all nine healthy living practices, when only three are considered.

The FHBH Project database is far more comprehensive and verifiably accurate than the above example, and this higher standard proves the utility and need for the FHBH Project point-in-time analysis.

Case study analysis and findings

No effective observations made at the case study level.

4.2 Has this framework allowed an 'any-point-in-time' analysis of the quality of the housing stock?

4.3 What proportion of Indigenous housing stock is analysed/assessed as part of FHBH? Is this adequate and effective?

Key Evaluation Questions 4.2 and 4.3 are explored together.

Whole-of-program analysis and findings

It is important to note that while the FHBH data do extend across many Indigenous communities and jurisdictions, the data is not a census of the entire Indigenous population. The FHBH Projects are focused upon rural and remote Indigenous communities. Thus, while the outcomes of this study are very important indicators of the condition of Indigenous housing in many areas, generalisations of the data across all Indigenous communities should not be made. Nonetheless, a very basic analysis of the spatial location of communities that have undergone FHBH through FaCS funding shows that a large number of remote and very remote areas have been subjected to FHBH. It is therefore concluded that the database is a sound and strengthening indication of the likely condition of Indigenous housing in other rural, remote and very remote areas of Australia. The database does provide a point-in-time analysis of housing condition in FHBH Project recipient communities.

Case study analysis and findings

Some observations were made at the case study community level regarding the effectiveness of the FHBH Project database as a useful point-in-time analysis and its potential to support the ongoing monitoring of housing condition. Table 19 sets out the summaries.

In general, all housing in a community receiving a FHBH Project is assessed prior to and during a FHBH Project, and this was regarded as both necessary and appropriate. At the feasibility assessment stage, a small minority of houses are earmarked as needing major upgrade work or replacement (beyond the scope of FHBH Project resources) and therefore may not be surveyed during a FHBH Project. It was found that coverage can be marginally inconsistent between Survey Fix 1 and Survey Fix 2, but this was considered a rare occurrence and thus a minor issue.

Table 19: Leveraging state/territory and other resources. General observations—case study communities

	General observation
Case Study A	Excellent point-in-time analysis. Should be possible to assess and track quality over the long run using this community's database, which has adapted aspects of the FHBH Project method.
Case Study B	Excellent and welcome point-in-time analysis. This community uses an alternative that is not as detailed as FHBH but notionally FHBH data set could be used to assess and track quality.
Case Study C1 and C2	Very sound point-in-time statement of conditions. Notionally FHBH data set could be used to monitor conditions over the longer term but concerns regarding the capacity of communities to use meaningfully.
Case Study D	Excellent point-in-time statement. Notionally agreed that the FHBH data set could be used to assess and track quality over time.

4.4 How and why has this (the point-in-time analysis) framework changed over time?

Whole-of-program analysis and findings

The FHBH Projects' data collection and handling frameworks have consistently evolved, based on field experience and learning as the various generations of projects have occurred. Examples of change included:

- collecting more detail while maintaining a relatively simple approach to collecting information
- cost information formats now being improved
- adjusting the database or analysing it differently to improve 'fix' techniques and the quality of materials used.

It was found that the framework has changed over time because of:

- experience and insight gained during different generations of FHBH Projects
- feedback about possible improvements to the framework from users such as licence holders, area managers, Indigenous Community Housing Organisations and communities
- improvements in software and communications technology.

Case study analysis and findings

No effective observations made at the case study community level.

4.5 Is the current (point-in-time analysis) framework still considered to be a useful measure of quality of housing in Indigenous communities?

Whole-of-program analysis and findings

It was a widely held view that the major advantage of FHBH Project data is its accuracy, standardisation and high level of objectivity. It was found that even if communities and/or states and territories adopted locally tailored systems which accord with basic asset management principles, the high standard survey component of the FHBH Project method—which informs the database—would be an essential tool in monitoring housing condition and overall progress in an area of critical national importance. The ongoing usefulness of the FHBH Project database as a measure of housing condition in Indigenous communities was very widely embraced.

Case study analysis and findings

No effective observations made at the case study community level.

4.6 Has the framework (point-in-time analysis) assisted the government and Indigenous communities to understand/scope the capacity and context of Indigenous communities, and to undertake and systemise the maintenance requirements for Indigenous housing with regard to capacity and context?

Whole-of-program analysis and findings

According to stakeholder comment, this was considered to be the 'million dollar question'. At the close of the evaluation there was little doubt that the FHBH Projects database had taken great strides in developing a much deeper understanding of housing asset maintenance needs among Indigenous communities in a very broad range of contexts with differing capacities. The FHBH Projects had managed to seamlessly combine the collection of vital information with urgent repair and practical change. This is a model to be roundly applauded.

However, at present no single body in Australia carries or takes ultimate responsibility for the improvement of Indigenous housing conditions. This has created a fragmented policy context in which databases such as the FHBH Projects are formed. It was concluded that the FHBH Project database has the potential to be a nationally used, commonly understood standard for assessing to a necessary level of detail the work ahead of the nation to improve Indigenous housing conditions in remote and rural contexts. Many stakeholders were of the view that no matter how successful or effective a program might be—and FHBH Projects have been—it will still be necessary to find ways and means of better coordination between the various efforts of different agencies if outcomes are to be maximised and sustained. That is, a good understanding of the problem as developed via a high-quality database is a necessary but not sufficient tool in its own right.

KPO 4 Summary of findings

- The FHBH Projects database is an excellent framework for understanding housing conditions in Indigenous communities. It provides a very 'necessary', 'detailed', 'contextualised', 'comparable' and 'objective' baseline statement of Indigenous housing conditions.
- It was also recognised that there are very significant (and misleading) limitations in other data sets that are often used to understand and predict housing need in Indigenous communities, increasing the importance of the FHBH Projects database.
- The FHBH database is not a census of the entire Indigenous population. The FHBH Projects are also focused upon rural and remote Indigenous communities. Thus, while the outcomes of this study are very important indicators of the condition of Indigenous housing in many areas, generalisations of the data across all Indigenous communities should not be made.
- Nonetheless, the database is a sound indication of the likely condition of Indigenous housing in remote and very remote areas of Australia. The database does provide a point-in-time analysis of housing condition in FHBH Project recipient communities.

- The FHBH Projects' data collection and handling frameworks have consistently evolved, based on field experience and learning as the various generations of projects have occurred.
- The ongoing usefulness of the FHBH Project database as a measure of housing condition in Indigenous communities was very widely embraced.
- The FHBH Projects database had taken great strides in developing a much deeper understanding of housing asset maintenance needs among Indigenous communities in a very broad range of contexts with differing capacities. It is a model to be roundly applauded.
- No matter how successful or effective a program might be—and FHBH Projects have been—it will still be necessary to find ways and means of better coordination between the various efforts of different agencies if outcomes are to be maximised and sustained. That is, a good understanding of the problem as developed via a high-quality database is a necessary but not sufficient tool in its own right.

5 Conclusions and recommendations

5.1 Recalling the terms of reference

The background to this study is that the Indigenous housing sector is a sector in crisis, with a very high proportion of substandard housing, overcrowding, resource and capacity constraints, remoteness from mainstream services and systems of governance, and the most socially disadvantaged population in Australia. In this environment, basic housing asset management systems in Indigenous communities are unevenly applied across the country and in many instances are absent. Consequently the incidence of substandard 'health hardware' in dwellings is very high—with serious health consequences.

The FHBH Projects have evolved over four generations as a tool to:

- fix the most critical health hardware deficiencies in participating communities
- compile a comprehensive database on the condition of Indigenous housing at a point in time.

Secondary objectives relate to the carrying out of the 'survey–fix' process and include:

- augmenting the capacity of communities to undertake basic asset management functions
- developing partnerships with states and territories to improve asset management functions.

The terms of reference (TOR) for this study required investigation of the following aspects of the FHBH Program:

1. Program context and development
2. Program design
3. Program implementation
4. Program outcomes
5. Program costs
6. Program cost-effectiveness
7. Program change.

The study involved the following tasks:

- a focused literature review
- consultations with key people in communities and government agencies, as well as with people responsible for designing and delivering FHBH programs
- field work/case studies
- formulation of an evaluation framework and its application, including an agreed set of key evaluation questions and analysis of data held by Healthabitat.

The conclusions of the study relate to the areas where change may be contemplated and are discussed under the follow headings:

- achievement of program objectives
- potential for improvements
- sustainability of outcomes and relationship to other programs.

5.2 Achievement of program objectives

In mainstream Australian society, substandard housing and poor dwelling conditions have not been tolerated for over a century. These recognised risks to health have been legislated against, originally by a suite of public health legislation, supplemented these days by a wide range of laws that relate to matters such as building design and construction standards; landlord and tenant rights and responsibilities; the number of people who are permitted to live in a dwelling; and asset management.

However, in Indigenous communities, dwelling conditions often fall to levels well below minimum standards set and enforced by such laws, with obvious adverse health outcomes for occupants. It is well understood that adverse health outcomes are a significant cause of low social, cultural and economic achievement in any community. This can in turn lead to social exclusion, and ultimately generate wide spread despondency. In parts of Australia's Indigenous community, this cycle has had profound intergenerational effects, which are compounding. Thus, improving the condition of dwellings occupied by Indigenous people must be a key element in breaking this cycle.

The essential steps towards improving dwelling conditions are to objectively assess the physical condition of dwellings, set priorities for repairing faults, and carry out the necessary repairs.

Ideally, the task of continuously assessing dwelling conditions and repairing faults would be carried out at the community and/or regional level with assistance from the states and territories. However, the ability to achieve this is inconsistent across the nation due to the complex context of competing priorities, resource constraints, and a lack of governance and management capacity in certain cases. Communities, regions, states and territories have struggled with these factors and have attempted a range of policies and systems to improve these circumstances. Notwithstanding these attempts, the management of Indigenous housing is failing to deliver adequate standards.

Given the ongoing critical nature of this situation, the Australian Government's provision of resources towards an independent, practical and objective method of improving the physical standard of Indigenous homes for better health outcomes via the FHBH Projects—which have the primary objective of fixing the most critical health hardware items in Indigenous homes—is endorsed by this evaluation.

The FHBH Projects' other primary objective of compiling a comprehensive database on the condition of Indigenous housing is also endorsed by this evaluation as an essential element of the FHBH Projects. There is a significant amount of subjective, confusing and inconsistent data about the quality and status of Indigenous housing. This clouds the political debate about how to

respond and hampers an objective, needs-based allocation of resources. It is essential that objective information such as that collected and analysed via the FHBH Projects be available to improve the opportunity for evidence-based planning of appropriate policies and programs for Indigenous housing.

The secondary objectives of the FHBH Projects, that is, those that relate to capacity building at the community level and developing federal partnerships with the states and territories, remain highly relevant and important. This evaluation has found that there are examples of success in these areas and these achievements need to be built upon.

However, it ought to be recognised that capacity and partnership building is a responsibility for the whole of government. While individual programs such as the FHBH Projects can play an important demonstration role in this regard, whole-of-government coordination of policies and programs aimed at capacity and partnership building is still essential to achieve satisfactory outcomes for Indigenous housing. For example, the Building a Better Future framework should be informed by the lessons of single programs such the FHBH Projects and should look to apply those lessons to other areas of policy aimed at achieving improvements in the delivery of the whole-of-government response.

Recommendation 1

That the success of the FHBH Projects in achieving the primary objectives of fixing the most critical health hardware deficiencies of dwellings located in participating communities and compiling a comprehensive database which records the 'point-in-time' condition of Indigenous housing be acknowledged and the FHBH Projects' primary objectives be strongly endorsed as a means of improving Indigenous housing outcomes.

Recommendation 2

That the FHBH Project delivery method be acknowledged and endorsed as a successful means of program delivery, particularly with regard to good resource planning and achieving practical outcomes in relation to 'on-the-spot' fixing of health hardware deficiencies. It is a conceptually straightforward methodology which accords with best practice asset management principles, and which can be successfully applied by FHBH Project managers and participating communities. It has been shown to be appropriate and adaptable to its circumstances and to provide an objective 'evidence-based' means of assessing the status of Indigenous housing.

Recommendation 3

That the demonstration role of the FHBH Projects in capacity and partnership building be built upon, but with explicit regard for the limits to what this role can achieve, and with a recognition of the pressures inter-program coordination can place upon local project managers. High-level whole-of-government policy and program coordination (such as the Building a Better Future framework) should continue to be promoted as the primary means of improving the context in which the FHBH Projects operate, and should seek to leverage the demonstrated benefits that the projects provide.

5.3 Potential for improvements

It is important to record that, notwithstanding suggestions for methodological change and alterations to funding and planning arrangements, the FHBH Projects are acclaimed as a successful method of improving the physical condition of housing by repairing health hardware, by all stakeholders consulted, including housing tenants, community housing organisations and Australian Government, state and territory agency personnel. The FHBH Projects deliver urgently needed relief for critical housing problems, gather useful data and involve community members. None of the respondents with whom the evaluation has consulted suggested that the FHBH Projects were not useful. Most were enthusiastic for the program to continue and to be expanded. Communities that had hosted a FHBH Project were generally enthusiastic for a FHBH Project to return in future.

This is a stand out result for a program of this type. Many funding programs delivered to Indigenous communities are perceived at the community level as limited in their scope and/or burdensome in their compliance requirements. Some communities tolerate them because they have no alternative while other communities reject them if they have the capacity to make other arrangements.

A number of respondents praised the design of the FHBH Projects so as to include the participation of community members as a very successful way of engaging Indigenous communities in program delivery. Respondents praised the energy of the program delivery method and the enthusiasm that is generated during the Survey/Fix phases.

Recommendation 4

That the FHBH Projects be acknowledged for widely applauded success in providing critically required practical improvements for housing, collecting useful information about housing conditions, actively engaging communities in project delivery, and winning the support and enthusiasm of community members in particular.

Nevertheless, some areas have been identified where improvements might be made.

Budget setting

Currently per-house budgets are set in advance of detailed survey-based housing assessments. The per-house budget is also nationally averaged, to provide equity across jurisdictions. This means that the per-house budget is fixed before functionality per house is determined, and functionality can vary significantly between houses and communities. The evaluation's findings, using limited data, suggested that, in many cases, at least double the current budget of $5,000 per house would be required to achieve 100 per cent OK for all HLPs. On this basis, there is a case to support some flexibility in budget setting. Ideally, after Survey Fix 1 has been conducted, the database would be interrogated and a relationship established between Survey Fix 1 scores achieved per house and the funds required to reach a satisfactory level of outcome per house for that particular FHBH Project.

However, it is also the case that Survey Fix 1 would still need to be resourced by a minimum average budget per house, to facilitate the carrying out of the survey and performing 'on-the-spot' fix and repair work.

State and territory agencies raised the problem of the short-term nature of FHBH funding which can cause the loss of skilled staff at the end of projects. If longer-term funding (three to five years) was available agencies could commit resources to training dedicated staff in agencies and communities, as well as plan and achieve more efficient articulation of FHBH Projects with state and territory programs.

Recommendation 5

That, once there is sufficient information available, a program-wide evaluation of financial data be undertaken to investigate the relationship between 'average' critical health hardware function at Survey Fix 1 and the resources required to achieve 100 per cent OK for health hardware, as a means of establishing an effective average budget per house for the FHBH Projects.

Recommendation 6

That the principle of introducing flexibility in budget setting post-Survey Fix 1 be adopted, and that research be undertaken into developing a budget-setting formula based on scores achieved in the initial survey. This could produce two stages for setting budgets for FHBH Projects:

- Stage 1—a standard minimum average allocation per house to allow preparation for and implementation of Survey Fix 1
- Stage 2—a budget allocation based on the results of Survey Fix 1 for further fix work/capital upgrades and Survey Fix 2.

Recommendation 7

That the funding for FHBH Projects in each state and territory be based on a multi-year budgetary cycle, of three to five years.

Housing standard assessment

The current system applied by Healthabitat is to identify the critical 'Healthy Living Practice (HLP)' elements of a household and to link each of these HLPs to an assessment of critical health hardware in a house required to achieve the HLP. For each component there is a test derived from the survey form as to whether a health hardware component is 'OK'. If any one of the critical components of health hardware for a particular HLP is not 'OK' the HLP is 'failed'. Failed HLPs are deemed to pose a continuing real threat to the health and/or safety of house occupants, and this deemed threat is supported by the evaluation's observations.

This last point is not widely understood and hence is open to challenge. It would be useful to make the implications of this assessment method more transparent and to provide support for the link between assessment ratings and health outcomes.

Recommendation 8

That HLP ratings of health hardware function are validated by an independent verification of the assessment method and the relationship between HLP assessments and health risks. This verification would, as a minimum, have regard for mainstream benchmarks for housing standards that demonstrate a connection to health outcomes.

As discussed in the evaluation's findings, the FHBH Projects are less able to achieve outcomes for poorly performing HLP elements of dwellings that would require large-scale changes to the structure and design of a house for improvement, for example, fire risks. This is because FHBH Project resources are not intended to cover the large expense that might be required to make these changes.

Recommendation 9

That the housing condition assessments undertaken by FHBH Projects should continue to collect information about elements of critical health hardware that would require major structural changes to dwellings to achieve better outcomes (so as to inform other responses such as improvements in housing design). However, the success of a FHBH Project in improving HLPs in this category should be assessed with resource limitations understood.

Data management and use

The management of data associated with the FHBH Projects has undergone many changes throughout the evolution of the FHBH Projects. The resultant system has a number of positive features:

- The database is protected from unauthorised manipulation and protects community and tenant privacy.
- The database has built-in checks to ensure data entry errors are minimised.
- Operators are trained through an accredited system.
- Data-handling processes throughout the Survey Fix process guard against data loss.
- Data on HLPs are stored in individual community databases and a consolidated database. The latter allows evaluation/monitoring of the FHBH Projects to be undertaken in an efficient way.

This evaluation did have difficulty accessing consolidated and consistent data relevant to financial analysis and also the 'count of jobs' at Survey Fix 1 and Survey Fix 2. However, it is understood that proposed future changes to the data collection and storage systems will see these components more easily incorporated into the consolidated database.

There is a recognised need for a better national understanding of the condition of Indigenous housing that is consistent and objective. The FHBH Projects database has large potential to provide such an understanding, if it is resourced to do so. The general public should then have access to nationally aggregated FHBH data to advance the knowledge of those policies, programs and research efforts

looking to improve housing outcomes for Indigenous communities. However, access to the database should be regulated so as to protect the integrity of the data and to ensure that it is used primarily for constructive purposes.

FHBH Project data are already being used in other ways (for example, there have been over 80 studies conducted in the health field using FHBH Project data). As such, there is evidence that the FHBH Projects are already considered to be a very important data source for other users. Therefore, maintaining this database over the long term has good potential to enhance the influence and contribution of the FHBH Projects to Indigenous housing and health, and other policies, programs and studies.

Recommendation 10

That changes to the FHBH information system be implemented so as to enable project-by-project financial information to be incorporated, and that all available financial information previously gathered be integrated into this system.

Recommendation 11

That, for the benefit of advancing the national understanding of the condition of Indigenous housing, nationally aggregated FHBH Project data be held by and accessible via a suitable public or non-profit body, which would regulate the use of the data under a suitable public licence and monitor access.

5.4 Sustainability of outcomes and relationship to other housing and environmental health programs

Sustainability of outcomes

The relationship between the capacity of communities and their governance/administration, and the sustainability of FHBH Project outcomes is intuitively predictable. This is borne out by the evaluation's field observations and the experience of the stakeholders consulted. Notwithstanding the fact that the FHBH Projects have helped communities to address urgent housing maintenance issues, the high risk of a lack of sustainability of these outcomes is widely regarded as a major concern. Although FHBH participants may develop some housing assessment and maintenance skills during a project, if such skills are not incorporated into an ongoing, well resourced and managed housing maintenance program that continues to apply the fundamental principles of the FHBH approach, these skills are unlikely to be used.

A number of communities, particularly small remote communities, struggle with a myriad of infrastructure and community priorities of which housing maintenance is but one. Some small communities do not have the required 'critical mass' of skills and funding to support a regular, reliable maintenance program, and, in these cases, maintenance issues accumulate to crisis point until external help can be engaged.

Thus, a lack of community capacity to keep up the housing maintenance effort after a FHBH Project has finished is seen as a major impediment to achieving the objective of the sustainable transfer of maintenance skills and systems to communities. Addressing this problem calls for a better understanding of the influence of community capacity, governance structures, skills shortages and other issues at the community level that can dictate the achievement of sustained outcomes.

Recommendation 12

That regionally-based delivery of FHBH Projects and subsequent routine maintenance programs be investigated as an option for servicing smaller remote communities with limited capacities; and that the feasibility of using Shared Responsibility Agreements as a means of supporting the sustainability of FHBH Project outcomes be investigated further. When investigating these options, regard should be given to the risks associated with the potential collapse of regional delivery systems and agreement-based approaches, which could leave individual communities stranded without the skills and support necessary to manage housing.

Relationship with other programs

The Indigenous housing sector has suffered from a fragmented, uncoordinated response to issues for many years. There have been deficiencies in:

- coordination between program objectives and resource allocation
- evaluation of the practical effectiveness of solutions before they are applied on a large scale
- the sustainability of outcomes.

In many communities, governance systems are also program-focused with service delivery emanating from 'silos'. There exist only a limited number of examples of a holistic approach being applied in practice.

Programs such as NAHS and CHIP are intended to be more comprehensive in their scope and resource allocation than the FHBH Projects and ideally these responses could work in with FHBH. A FHBH Project provides a baseline objective assessment of a community's housing conditions that could be used for structuring the specific responses of programs such as NAHS for particular communities. The Survey Fix 2 phase of a FHBH Project could then provide a detailed and objective review of outcomes achieved by all programs targeted at improving housing conditions. Adoption and use of the FHBH Project's Survey Fix 1 assessment of housing condition to inform a program's response could be made a condition of funding under these and other programs targeting the improvement of dwelling standard and condition.

The capture and maintenance of longitudinal data about Indigenous housing conditions is a necessary requirement for objectively measuring the success or failure of all program responses.

Recommendation 13

All housing-related programs should be preceded by a standardised and comprehensive 'planning assessment' of community conditions. This planning assessment would identify and assess opportunities for the implementation of housing programs and threats to the sustainability of housing program outcomes. The planning assessment would assess areas such as governance, human resources, asset management capability and the influence of remoteness. The planning assessment would also identify or prescribe the need for other non-housing programs, such as community capacity-building programs, to operate ahead of or alongside housing programs.

The planning assessment would inform all subsequent strategic planning for a coordinated program response at the community level.

Recommendation 14

To maximise the FHBH Project's value as a resource planning and outcomes evaluation tool:

That consideration is given to adopting Survey Fix 1 as a standard, comprehensive baseline assessment of individual dwelling condition in all communities. This baseline assessment of dwelling condition would then inform the allocation of resources from all housing and infrastructure programs towards the repair and provision of housing and housing-related infrastructure

and

That Survey Fix 2 is conducted on a periodic basis as a tool for evaluating progress and the sustainability of outcomes for all housing and infrastructure programs.

Recommendation 15

That the data collected via standardised Survey Fix 1 and Survey Fix 2 assessments be used to maintain the national FHBH Project database as the definitive measure of Indigenous housing condition, so as to facilitate nationally consistent longitudinal monitoring and assessment of housing standards, and to coordinate program responses over the long term.

Other factors that can affect healthy housing outcomes

While the presence of functioning health hardware items is a critical factor in better health outcomes for housing occupants, there are other causes of health risks in dwellings, particularly in remote communities. Householders may struggle to maintain healthy living environments because of factors such as:

- environment
- overcrowding
- social and cultural practices
- a limited understanding of the connection between household hygiene and health
- a limited understanding of housekeeping techniques.

These factors can limit the effective achievement of a consistent housing maintenance effort over time.

The expansion of the FHBH Projects to directly address the area of behaviour-related environmental health issues would, however, be highly problematic. There is a danger of losing focus on what the FHBH Projects achieves best (fixing health hardware) and of having resources spread too thinly across an onerous scope of tasks.

However, the commencement of a FHBH Project in a community could be complemented by the commencement of a separate special purpose household environmental health and capacity-building program for communities, where the need for such a program has been identified. The identification of this need

could be achieved during the planning assessment process referred to previously. Where state or territory environmental health programs already exist, these would ideally interact with and work alongside the FHBH Projects.

Recommendation 16

That consideration be given to, where required, supporting FHBH Projects with a complementary household environmental health and capacity-building program which could be mobilised during or subsequent to a FHBH project, with the aim of contributing to and sustaining better healthy housing outcomes.

Appendix A — Case study reports

Community A

The community and its people

Community A is located in the northern region of Western Australia. It is serviced by housing and municipal services, a Community Development Employment Project (CDEP) program, care for the elderly and pre-primary educational facilities; support is also provided to community artists.

The community is incorporated as an Aboriginal Corporation, which runs a small community office, an arts centre, workshops and a range of other service facilities. Electricity and domestic water supplies are reticulated from a nearby township and houses are metered for both water and power. Housing and community buildings are connected to a community sewerage system. The Aboriginal Corporation meets the costs of these services and levies households for each service. Community members pay rental for their houses. Limited services are also provided to associated homelands.

The community has a dry season population of around 300[14] people, which increases in the wet season when outstation residents move into the main community. In addition, many of the community's primary and secondary school children attend an outlying residential education centre, contributing to an additional seasonal population increase when the children return.

The jurisdictional context

Community A was included in the FHBH 2 round of funding, for which a total of around $950,000 was allocated to the Western Australia Department of Housing and Works [DHW (WA)], for work on up to 172 houses across the state. A proportion of this amount was expended on work in Community A (for well under 50 houses) although Community A also received a small allocation as Maintaining Houses for Better Health funding. The FHBH Project commenced in April 2002 and was completed in July 2003.

The Aboriginal Housing and Infrastructure Unit (a portfolio body of the Western Australia Department of Housing and Works) managed the delivery of the program as the licence holder, with project management support from the private consultancy, Practical Management and Development Pty Ltd.

Housing in Community A

The community's housing stock of well under 50 dwellings consists of:

- houses dating from the 1970s, each with a modular bathroom extension added as a result of the ATSIC HIPP program (Health Infrastructure Priority Projects) in the 1990s
- houses designed by Troppo Architects, also constructed as part of the ATSIC HIPP program in the 1990s (an additional Troppo house is located at a nearby outstation)
- houses (some duplexes) of various ages including some relatively new housing. All of the community's housing stock was included in the FHBH 2 program.

The community housing program run from the community office manages the housing stock. Housing tenants pay a small rental contribution for each resident adult per week. Authorised rental deductions are made from CDEP wages and through Centrelink's deduction system for tenants who are receiving social security payments. A small levy per dwelling is also charged to cover the costs of power and water supplies.

The housing officer is responsible for the management of the housing program. The program has two elements. One is the upgrade of 1970s houses using funds provided by the DHW (WA) Management Support Program, operational when the FHBH project commenced. The program's activities consist of a complete strip-out of the houses (except for the roofs), including removal of asbestos sheeting and replacement of damaged wall framing. The houses are entirely refurbished by the community team, one of whose members is an experienced builder and welder. Plumbing and rewiring are carried out by tradespeople based in a nearby township. Two of the community team are former FHBH workers.

Seven of the older housing stock had been upgraded as at November 2005, with 12 remaining. The community maintains a swap house into which families move when their house is scheduled for renovation. Priority for renovation is decided on the basis of the number of children included in the household.

The other element of the housing program consists of management of the housing stock and conduct of the maintenance program. The Housing Officer uses the DHW (WA) Indigenous Housing Management System (IHMS) to record tenancy and rental arrangements and manage the maintenance program. The program is able to report globally on maintenance jobs and costs, by type of repair; and at the individual house level, on the levels and nature of expenditure for each property.

The housing officer conducts a bi-annual maintenance inspection of all properties using the one page MHBH survey form. In addition tenants report maintenance problems as they arise. Jobs identified from both sources are entered onto a damage report and subsequently into the IHMS system. Corrective work is commissioned either from the community maintenance team or the relevant trade. A monthly schedule of maintenance tasks is maintained.

A regular survey of water taps is also conducted. This responds to houses that are identified as showing heavy water use in the supplier's accounts, monitored by the housing officer. A report of houses requiring tap maintenance is prepared and passed to the maintenance team. The community maintenance team has two members who were both FHBH 2 participants and their work is well regarded by the housing officer.

The housing officer devotes considerable energy to education and achieving cultural change with respect to housing maintenance. Tenants are encouraged to take responsibility for reporting faults and they are encouraged not to transfer their service needs (for example, in the case of hot water) to another house. When tenants occupy new or refurbished houses they are held responsible for breakages outside of fair wear and tear, and the costs of repair are deducted from their income.

The electricity supply line for the community is having difficulty coping with the growing demand. The housing officer offers a free bottle of gas as an incentive to encourage tenants to switch to gas cooking, although there is resistance to gas because of safety concerns. Tenants are trained to undertake simple tasks such as changing fluorescent light tubes and a reluctance to do so reflects a fear of electricity.

The community maintains an Amenity Fund to which community members contribute from their income. These funds can be used for a variety of community purposes. Tenants moving into new or refurbished houses are able to obtain a loan from the Amenity Fund to purchase new furniture for their house.

The structure and content of field work

An FHBH evaluation team member visited Community A in May 2005, and was accompanied by: the Area Manager Supervisor for the group of FHBH 2 projects in which Community A was included, the current community housing officer, and the community housing officer for Community A at the time of FHBH. The Area Manager was able to provide details of the context for the FHBH 2 projects for the jurisdiction, together with details of ongoing housing issues in the community. The local community housing officer in the position at the time of FHBH was able to offer valuable insights into the immediate and long-term effects of the program and is an experienced building construction worker. The current local community housing officer for Community A also took part in discussions and house inspections during the visit.

The visit consisted of:

- discussions around the key evaluation questions
- brief discussions with the tenants of occupied houses
- a demonstration of the current housing maintenance system and the DHW (WA) Indigenous Housing Management System (IHMS)
- inspection of five dwellings including a 1970s house in the process of being refurbished as part of the Management Support Program funded by DHW (WA), an occupied 1990s dwelling designed by Troppo Architects, an abandoned 1970s dwelling now ready for refurbishment, a 1970s dwelling that had undergone a complete refurbishment, and an occupied 1970s dwelling that had been refurbished and recently reoccupied.

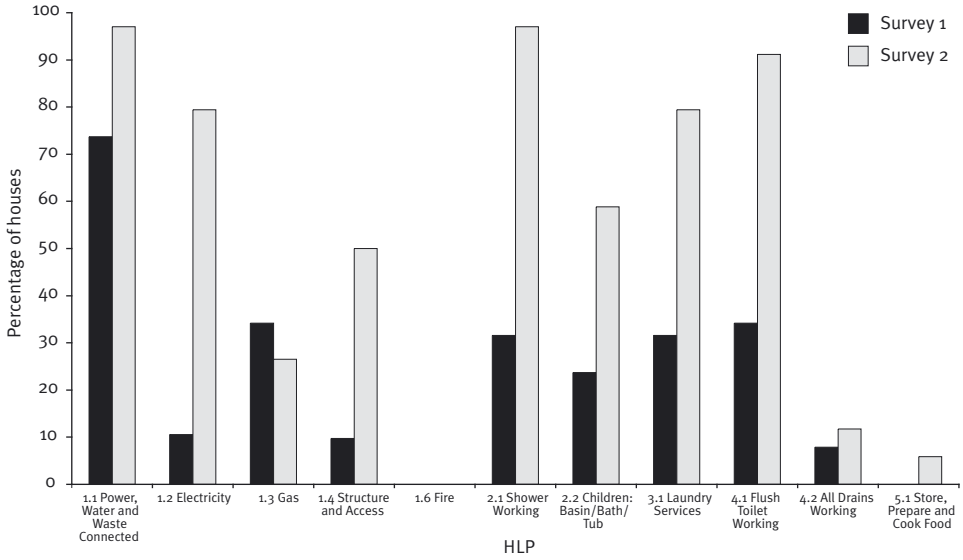
Field note responses to relevant research questions

This section of the report responds to the agreed evaluation questions, informed by a detailed analysis of the quantitative data available, and on the basis of field discussions and observations conducted during the visit. It should be noted that the FHBH Project in Community A commenced in 2002 and subsequent housing renovations and routine maintenance activities have obscured some of the project's effects.

1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?

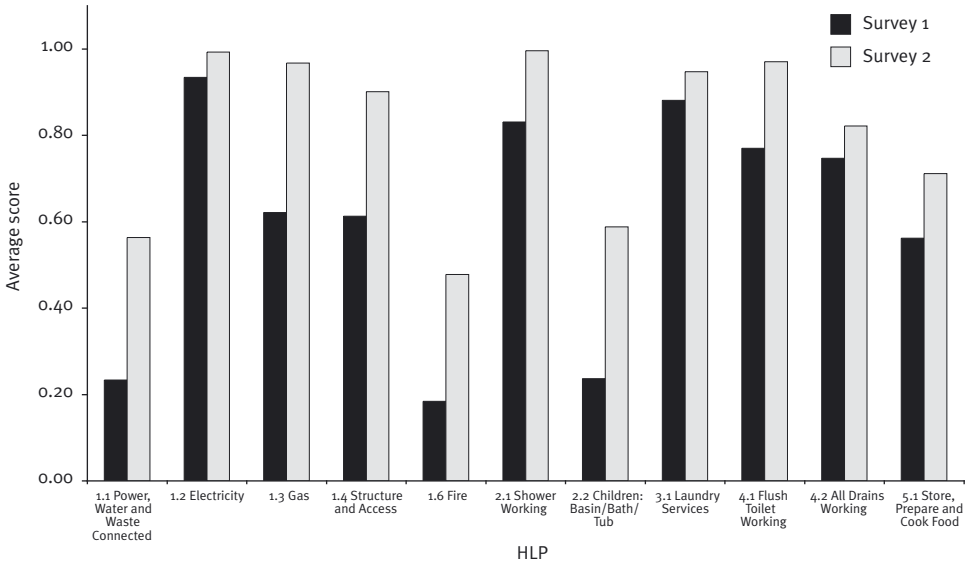
According to Figure A1 below, the overall standard of housing in Community A prior to FHBH (at Survey 1) was poor. With the exception of HLP 1.1 (Power, Water & Waste Connected) for which 74 per cent of houses scored 100 per cent OK, roughly less than one-third of houses were fully functioning on all other HLPs; the percentage of houses 100 per cent OK for HLPs 1.2 (Electricity), 1.4 (Structure & Access), 1.6 (Fire), 4.2 (All Drains Working) and 5.1 (Store, Prepare & Cook Food) was at around 10 per cent or less.

Figure A1: Percentage of houses scoring 100 per cent OK on critical HLP tests for Community A



Average score data for Survey Fix 1, shown in Figure A2, in part confirm this tendency, with average scores of less than roughly 0.60 for six out of eleven HLPs. Community A's average scores were particularly low for HLPs 1.1 (Power, Water & Waste Connected), 1.6 (Fire) and 2.2 (Children: Basin/Bath/Tub), at 0.23, 0.18 and 0.24 respectively, while only the average scores for HLPs 1.2 (Electricity) and 3.1 (Laundry Services) approached 1.00, with scores of 0.93 and 0.88.

Figure A2: Average critical HLP scores for Community A



Despite high average scores for HLPs 1.2 (Electricity) and 3.1 (Laundry Services), cross reference with Figure A1 shows that the majority of houses still failed to score 100 per cent on these HLPs.

A visual inspection of several houses confirmed that those built in the 1970s are suffering serious failure, including rusting-out of frames and dilapidation of other structural elements. Many houses are not weatherproof and lack hot water systems. There are also serious drainage and plumbing issues and several houses lack electrical safety switches and fans, while kitchen cupboards (constructed of chipboard) are failing. Some of the relatively new Troppo houses have serious plumbing failures and poor quality flooring allows dust, insects, snakes and vermin to enter these houses.

1.2 What was the state of housing after FHBH occurred? What problems were fixed?

Both Figure A1 and Figure A2 demonstrate a marked improvement in the overall state of housing in Community A, when comparing data from Survey Fix 1 with data from Survey Fix 2. Figure A1 shows that across all HLPs—with the exception of HLPs 1.3 (Gas) and 1.6 (Fire)—the proportion of houses scoring 100 per cent OK has increased. The proportion of houses 100 per cent OK for HLP 1.2 (Electricity), for example, increased from about 10 per cent to just under 80 per cent, while the proportion of houses 100 per cent OK for HLP 2.1 (Shower Working) increased from just over 30 per cent to just short of 100 per cent.

Similar trends are repeated for other HLPs and evidence of an improvement is compounded through a comparison of Survey Fix 1 and Survey Fix 2 data presented in Figure A2. This shows—without exception—an improvement in average scores for each HLP, with particularly pronounced improvements in the average scores for HLPs 1.1 (Power, Water & Waste Connected) and 2.2 (Children: Basin/Bath/Tub), which increased by 33 points and 35 points respectively.

The quantitative evidence of an improvement is confirmed by field discussions reporting that the major problems fixed include urgent electrical safety faults, faulty kitchen plumbing and units, and drainage problems. Minor issues such as lights and fans have also been attended to.

1.3 What has been the effect of the passage of time on the outcomes of FHBH? Have improvements been sustained? Why or why not?

Informants state that the improvements made to housing in Community A during FHBH are being sustained, and that FHBH has helped to overcome the housing maintenance burden in the community. The evaluation identified that important work was still under way, such as fitting smoke detectors, replacing power points and replacing lights and fans.

The continuing renovation of houses built in the 1970s renders some of the minor maintenance work carried out during FHBH 2 redundant, but the community appears pleased that the FHBH Project-funded kitchens can be recycled as part of the renovations.

The primary reason for the persistence of FHBH Project outcomes is considered by informants to be the enthusiasm of the housing manager and the community teams who undertake the maintenance work. There is a culture of maintenance in Community A and there appears to be a sound housing management system upon which tenants can rely.

1.4 Do the residents feel that their houses are safer and healthier since FHBH?

Limited discussions with residents indicate that people are happy with the state of their houses, and that satisfactory work is done on them, but it is unrealistic to expect people to reflect on particular aspects of the FHBH Project occurring over two years previous. The housing officer at the time did, however, say that the program was well received by tenants, adding that FHBH *'Is short and sweet and we'd like to see it back!'*

1.5 What are the remaining problems within housing in Indigenous communities?

Despite a significant overall improvement in Community A's housing stock following FHBH, on some measures, problems with elements of housing functionality persist, particularly in older housing which cannot be improved solely through a maintenance program.

Although the average score for HLP 1.6 (Fire) has increased by 30 points, it remains relatively low at 0.48 (see Figure A2), while no houses actually scored 100 per cent on this HLP at Survey Fix 2 (see Figure A1). Similarly, the average score for HLP 4.2 (All Drains Working) increased at Survey Fix 2 to 0.82 (see Figure A2), but only 12 per cent of houses in the community actually scored 100 per cent on this component of housing functionality (see Figure A1). A similar problem in respect to HLPs 5.1 (Store, Prepare & Cook Food) and 1.3 (Gas) also persists in older houses that can only be improved to a point by a housing **maintenance** program.

Field observations reveal that a shortage of housing remains a significant problem in Community A and overcrowding remains a problem, especially in the wet season when the resident population increases. 1970s houses are gradually being renovated but several projects are still to be completed.

1.6 What have been the budgets for the FHBH Projects? What was the budget for the FHBH Project in this community?

The FHBH budget for the state was roughly $950,000 and roughly one-fifth of this was spent in Community A, with an additional sum (under $50,000) provided by an MHBH program. Discussions held within the community housing team led to a decision to prioritise the repair and maintenance of urgent safety and health hardware, even in cases where the house was to be renovated at a later date.

The MHBH component focused on upgrading kitchens using the welding skills of the leader of the community housing upgrade team. Trainees were provided with accredited welding training and fabricated new modular kitchen cupboards with steel frames and stainless steel surfaces.

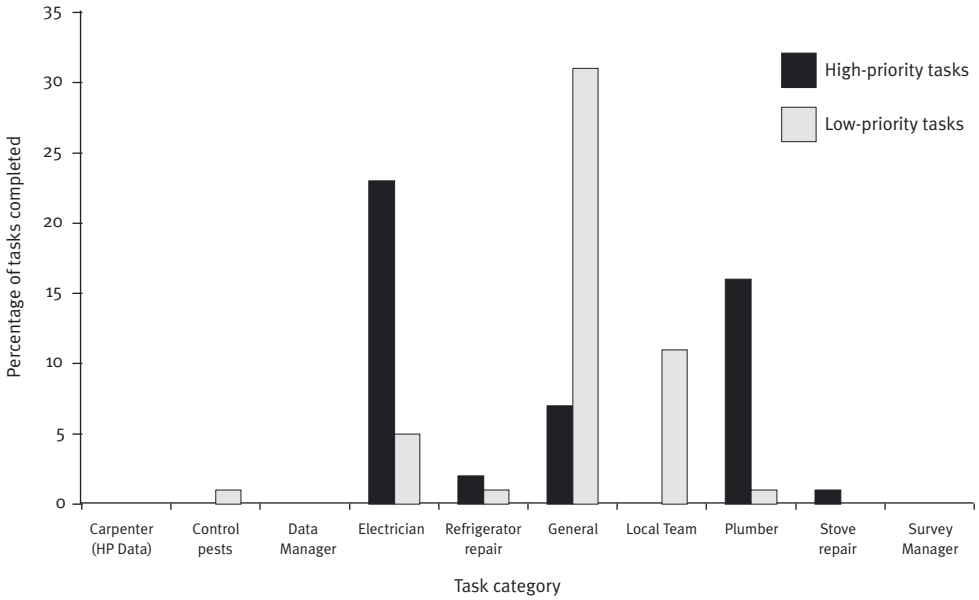
1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?

The FHBH budget was expended on a range of items including electrical and plumbing works as well as minor items. Kitchens and hot water systems are major expenses. However, investing in kitchens can be cost-effective since units can be reused during a renovation. The informants believed that significant cost efficiencies could also be achieved if the community had its own tradespeople and did not have to rely on external trades.

1.9 Are the most serious problems being fixed? Does this differ between communities?

'High-priority task' and 'low-priority task' information is recorded for Community A, and refers to the type of tradespeople used (aligned to general job categories) rather than specific tasks related to a particular HLP. Figure A3 suggests that in the case of Community A, a greater proportion of high-priority tasks have been completed compared to the proportion of low-priority tasks. Disparities do exist for particular task types, however, with a large proportion of high-priority tasks complete in the 'Plumber' and 'Electrician' categories, compared to a high proportion of low-priority tasks complete in the 'Local Team' and 'General' task categories.

Figure A3: Percentage of high-priority tasks versus low-priority tasks completed for Community A



1.10 What is the sensitivity of the level of money spent? That is, if we allocated 50 to 100 per cent more or 50 per cent less, what is the likely increase/decrease in the number of problems that will be fixed?

According to informants, if additional funds were allocated to FHBH in this community more expensive structural failures could have been addressed; additional kitchen replacements could have been undertaken; and major drainage work could have taken place. Accordingly, if 50 per cent less had been allocated the program would have been restricted to maintenance of critical items such as electrical safety.

2.1 What level of community/ICHO involvement in employment, training and project management opportunities occurred through FHBH? Has this been an appropriate level? Did communities want to be involved?

The people of Community A were active participants in the FHBH 2 program. Some community members already had sound building skills and maintenance management experience from when the FHBH program commenced. The FHBH project also combined successfully with the existing housing renovation project in the community. There was a level of expertise in the community that enabled key individuals to play a strong part in managing the FHBH Project and sustain outcomes into the future.

In terms of sustainable skills and employment outcomes, the current and former housing manager took part in the FHBH Project; members of the repair and maintenance crew and the house renovation crew were FHBH Project participants; and another FHBH Project participant is now a housing manager at a neighbouring community. The former housing manager is now taking a housing maintenance role in a new community. Arrangements are being made to certify the existing learning and experience of the building and maintenance crew.

FHBH maintenance assessment procedures are employed in the community and there is a consistent and dependable maintenance system available to tenants. The community has a computer-based maintenance record keeping and asset management system based on IHMS.

Summary of key issues

While it was not possible to examine the persistence or effect of the FHBH Project works on individual houses, the project appears to have been a significant success in this community—particularly in encouraging and developing the community's capacity in the area of housing maintenance and management. The presence of skilled and committed individuals was no doubt a key element in its success, as was its fit with the state-funded housing renovation program.

Some of the positive FHBH 2 outcomes can be summarised as follows:

- The project helped the community overcome serious health and safety issues (particularly electrical safety) as well as relieving the heavy maintenance load.
- It fitted well with the state housing initiative, and the two projects increased each other's effects.
- It empowered skilled individuals in the community.
- Participants in the project remain in the housing maintenance and renovation community teams two years after project completion, and others are working in the housing industry in other communities.
- FHBH methodologies are still being used for maintenance assessment purposes two years after the project.
- Key community people see the benefit in having an additional FHBH survey/fix project.
- The community housing team has the confidence to undertake routine maintenance and major rebuilding tasks (plans have been developed for construction of sheds and ablution blocks in outstations and tendering for work in other communities has been discussed).
- FHBH assisted in the development of a culture of maintenance, and subsequently the commissioning of the state IHMS system has assisted the very committed housing managers to put the maintenance system on a sound and well managed footing. The housing officer through tenant education, encouragement and incentives promotes the maintenance attitude.
- There has been an overall improvement in the housing stock, and where improvements have not been made it has generally been because of the age and design of the housing rather than a direct failure of FHBH.

Some possible shortcomings of FHBH Project outcomes can be summarised as follows:

- Participants at the start of the program did not necessarily appreciate what was expected of them, and more time could possibly have been allocated to project initiation and education. There is a sentiment that FaCS could assist in this regard by raising awareness about FHBH Projects more widely prior

to project initiation, thus providing the FHBH Area Manager with a starting point from which to raise more specific issues with potential participants as part of the feasibility process.

- Outstations were not included in the FHBH process, despite the fact that housing maintenance is required in these locations.
- There is a feeling that more effort should be made to provide FHBH Project workers with the opportunity to have their training and experience properly accredited, so that additional work opportunities may be pursued.
- The current Housing Officer feels that should FHBH return to Community A, it should fund the community's building team to a) construct ablution facilities in selected outstations (to encourage people to stay over the Wet Season), and b) carry out modifications on the existing Troppo houses to make them more suitable for the climate. While the details of the project would require development, with the community's agreement and cooperation, this package could be incorporated into a small diagnostic study of the community's housing management program, the reasons for its success, and the transferability of this community's approach to other communities in the region.

Community B

The community and its people

Community B and its outstations are located in the Northern Territory, with a total estimated population of well over 2,000 inhabitants.[15] Approximately one-twentieth of the population are aged over 50 years, around one-quarter are aged between 25 and 50 years, while the majority are aged less than 25 years. It is estimated that the population is growing at a net rate of over 3 per cent per annum.[16]

Road access to Community B is limited to the dry season between June and October, although access can be gained by air or barge.

Not nearly as active as it was in the mid-1900s, the Catholic Church in Community B has been hugely influential in the development of the community, both as a driver of settlement—through the provision of stable food and water sources—and as a shaper of behavioural change.

Community administration is now largely in the hands of a Community Council consisting of a president, a vice-president and 14 councillors. Although considered by the local police to be under control, clan divisions have provided the socio-historical background to recent outbreaks of violence between youth gangs.

The community is serviced by (among other services) a health centre, a CDEP scheme, a Women's Association, a school, various social clubs, a credit union, a takeaway, a basic supermarket, and a post office with Centrelink services. Enrolments at the local Catholic denomination school jumped by 50 per cent in 2005 following the completion of an on-site swimming pool; actual attendance rates, however, remain low.

Current critical issues affecting the development of the community include:

- the effects of a relatively large and growing population
- overcrowding in houses
- intra-community violence
- overstretched human services
- a lack of employment and training opportunities
- the effects of geographical remoteness upon transport costs.

The jurisdictional context

Delivery of FHBH 3 in Community B was the responsibility of the licence holder, the local council, with consultancy services provided by Practical Management and Development. FHBH 3 was begun in February 2004 and was completed in July 2004.

Housing in Community B

Housing in Community B is relatively well resourced compared to other remote Indigenous communities, and housing and construction generally has been identified as a priority issue by the community within its Shared Responsibility Agreement, signed in 2003. Current sources of funding for housing include:

- capital funding from the Australian and territory governments coordinated by the Council of Australian Governments (COAG)
- Australian Government funding through the National Aboriginal Health Strategy (NAHS) and FHBH
- Australian and territory government funding through the Community Housing and Infrastructure Programme (CHIP)
- other territory funding from the Indigenous Housing Authority of the Northern Territory (IHANT)
- housing rents
- other discretionary subsidies.

Total FHBH funding to Community B in 2004 was around $990,000 for around 200 homes. The mean occupancy rate for Indigenous housing is at about 16 people per house. At current population growth rates it is estimated that an extra 465 dwellings would be required over the next 20 years to bring occupancy rates down to seven people per house.[17] Current funding for housing construction, however, is only sufficient to build four new houses per year.

The majority of houses in Community B consist of three bedrooms, a toilet, a shower-room, a kitchen, and a covered outdoor area. The housing stock varies in age, with a small number of brick houses remaining from the 1970s, a selection of fibro houses built in the 1980s, and other brick and concrete houses built during the 1990s onwards.

The condition of housing in the community varies according to house age and the period of time since it was last fixed or upgraded. The older fibro housing tends to be in a poorer state of repair than the brick or concrete dwellings, although in the absence of regular maintenance all housing types would require a major upgrade (at a current cost of around $35,000) approximately every five to seven years.

Housing in Community B's outstations is characterised by its remoteness, higher maintenance costs per unit, and lower number of residents per house. Living conditions on the outstations are comparable to Community B itself, although it has been reported that a more varied diet of bush food means that residents are in better general health.

The structure and content of field work

Three evaluation team consultants undertook the fieldwork in Community B, over three days, from 6 to 8 June 2005. The purpose of the visit was to:

- gain an overall impression of the community and its outstations
- gain a better understanding of the management and operations of the local Housing Authority
- identify differences in the housing stock and its management between Community B and its outstations

- identify improvements in the housing stock and its management processes following FHBH
- identify economic, health, and other positive externalities that have occurred as a consequence of FHBH
- identify factors that have contributed to the success of FHBH in the region
- identify obstacles to the success of FHBH in the region.

Day one involved an orientation around Community B and its housing stock, guided by the Housing Authority coordinator. This was followed by a preliminary discussion regarding the Authority's management processes for FHBH, and around the relationship between FHBH and other housing programs the Authority operates. An unguided walk around the town to talk with residents (where possible and appropriate), and to view the housing stock in greater detail (from the outside only), was then undertaken.

Day two involved a tour of two outstations. During visits to these communities the consultants met with and visited the houses of three groups of residents, who allowed the consultants to enter and view all rooms in their homes. Upon returning to Community B the consultants proceeded to interview a number of information gatekeepers within the community, including the head clinician, the school principal, the police sergeant, the CDEP coordinator, and the Town Clerk. Unfortunately no interviews could be arranged with members of the Community Council because of other urgent Council business.

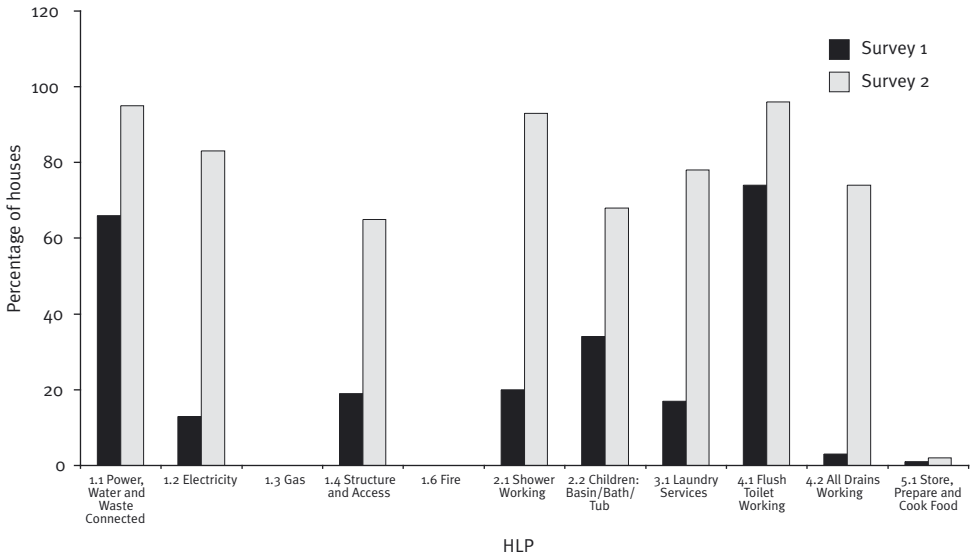
Day three involved further discussions with the Housing Authority's housing coordinator regarding the extent of employment generation and skills transfer arising from the FHBH Project. This was followed by a tour of a manufacturing facility for prefabricated concrete ablution blocks.

Field note responses to relevant research questions

1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?

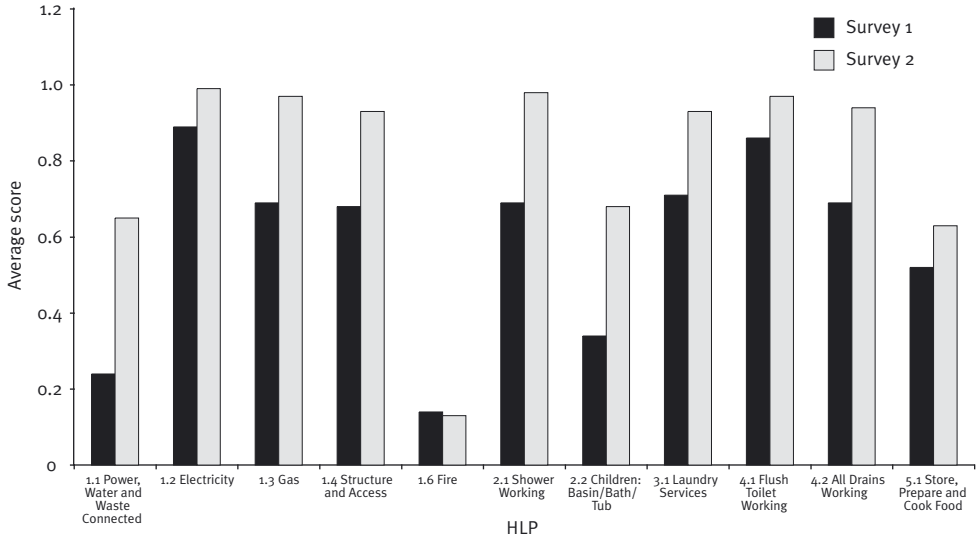
Figure A4 demonstrates that the overall state of housing in Community B at Survey Fix 1 was poor. For all but three HLPs, the proportion of houses scoring 100 per cent OK on any particular HLP was at 20 per cent or less, while zero houses scored 100 per cent OK on HLPs 1.3 (Gas) and 1.6 (Fire), although it should be noted that not all houses in Community B have the necessary gas and fire-safety infrastructure upon which a more critical evaluation can be based.

Figure A4: Percentage of houses scoring 100 per cent OK on critical HLP tests for Community B



Average score data for Survey Fix 1, shown in Figure A5, supported a slightly more positive assessment, with average scores for all but four HLPs at 0.68 or above, although average scores for 1.1 (Power, Water & Waste Connected) and 2.2 (Children: Basin/Bath/Tub) were particularly low at 0.24 and 0.34 respectively.

Figure A5: Average critical HLP scores for Community B



Field observation revealed that the condition of housing in Community B prior to FHBH varies in quality according to the age of the house and the type of housing construction; older houses and fibro houses are generally in a poorer state than newer constructions—one to five years—built of concrete or brick. The disrepair of interior fixtures, fittings and essential services is the main problem affecting housing standards in Community B prior to FHBH, with plumbing and electrics often in a state of severe disrepair.

The general condition of housing at Community B's outstations is observed to be worse than that at Community B prior to FHBH, since routine maintenance occurred less frequently.

1.2 What was the state of housing after FHBH occurred? What problems were fixed?

On all measures—with the exception of HLP 1.6 (Fire)—housing in Community B improved at Survey Fix 2, following FHBH. The proportion of houses 100 per cent OK (shown in Figure A4) increased markedly across several HLPs, with particularly large increases for HLPs 1.2 (Electricity), 2.1 (Shower Working), 3.1 (Laundry Services) and 4.2 (All Drains Working); up 70, 73, 61 and 71 points respectively.

Substantial increases in the average score for the majority of HLPs also occurred (see Figure A5) with improvements of 29, 34 and 41 points for HLPs 2.1 (Shower Working), 2.2 (Children: Basin/Bath/Tub) and 1.1 (Power, Water & Waste Connected). Further improvement is, however, required if the average scores for these HLPs are to reach the levels of leading HLPs such as 1.2 (Electricity).

Average score data and the proportion of houses 100 per cent OK also improved for indicators such as HLP 3.1 (Laundry Services) and 4.1 (Flush Toilet Working), but from an already high benchmark at Survey Fix 1.

Field observation confirmed that the overall standard of housing in Community B and its outstations had improved since FHBH and that the variation in housing quality has been reduced. To bring the majority of housing to a common standard the strategy in Community B has been to prioritise housing needs and fix essential items within all houses, rather than carrying out a complete fix of all items within a single house.

This strategy has been facilitated by the flexibility of FHBH funding, making it unnecessary to spend the total budget provided per house on a single housing unit if the remainder can be used to fix more essential items elsewhere. Plumbing and electrics have been prioritised as essential items in Community B, with fly-screens and shelving receiving less attention.

The decision-making process and strategic allocation of resources in Community B has been made possible by the extensiveness of the information collected on the condition of the housing stock—a consequence of the comprehensive survey process, and the data management system used through FHBH.

The attitude to fixing houses in Community B has also changed following FHBH, with a new awareness around the relationship between housing conditions and potential health outcomes informing the prioritisation of fixes, and consequently the allocation of funds. An excellent example of this impact is in the selection and design of ablution blocks for outstations, which now reflect the healthy living principles of FHBH.

Given the flexibility of FHBH funding, which has enabled managers to prioritise resource allocation, it would appear that the majority of critical housing hardware problems are being fixed.

Disparities between communities have also been reduced, in that funding provided by FHBH has increased the Council's capacity to make additional necessary maintenance visits to Community B's outstations, where the cost of maintenance per unit is higher. Historically, the low frequency of visits to outstations has meant that maintenance issues remain unreported for relatively long periods of time.

1.3 What has been the effect of the passage of time on the outcomes of FHBH? Have improvements been sustained? Why or why not?

According to the housing officer, there has been an overall improvement in the quality of housing within Community B and its outstations since FHBH, while—with the exception of older housing stock—the difference in standard between houses has been reduced. However, there is a concern that without further ongoing maintenance much of the current improvement will be threatened, particularly on outstations where the cost of activity per housing unit is higher. Adding to this problem is the fact that essential items such as plumbing, sewerage, electrical and heating systems (including solar panels) tend to be both the most at risk of failure and the most expensive to maintain.

1.4 Do the residents feel that their houses are safer and healthier since FHBH?

The question of resident satisfaction is difficult to ascertain—given that engagements with residents were brief, in the presence of the Housing Officer, and constrained by language and culture—however, those residents interviewed did appear to be pleased with the improvements made to their homes.

1.5 What are the remaining problems within housing in Indigenous communities?

Despite an overall improvement in the standard of housing in Community B, certain aspects of house functionality require further improvement if each house is to pass on all HLP tests. For instance, the average score for HLP 1.6 (Fire) actually reduced 1 point from an already low level of 0.14 between Survey Fix 1 and Survey Fix 2 (see Figure A5) while—along with HLP 1.3 (Gas)—zero houses were recorded as 100 per cent OK on this indicator (see Figure A4).

Despite some improvement in the average score for HLP 5.1 (Store, Prepare & Cook Food)—up 11 points to 0.63—further improvement is necessary if it is to reach the level of indicators such as HLP 1.2 (Electricity), with an average score of 0.99 (see Figure A5). Indeed only 2 per cent of all houses in Community B passed on all elements of the test for this HLP (see Figure A4).

Given the lack of local Indigenous capacity in the housing construction and maintenance industries, administrators of Indigenous housing services must rely upon external materials and tradespeople whose price—largely because of geography and poor availability—is above market rate when compared to the nearest urban centre.

Although improvements have been made to housing hardware it is evident—from general observation, house visits, discussions with administrators and discussions with a senior clinician—that improvements in health outcomes have not be made.

It is difficult to envisage houses in Community B becoming significantly healthier living environments so long as acute overcrowding and unhygienic living conditions persist. The current estimated average number of people per (three bedroom) house is 16, and this is set to rise to 20 within the next five years. Given the scale of the problem, even within a comparatively well resourced community such as Community B, the current provision of four new houses per year is severely insufficient to keep pace with demand (estimated to be 10 houses per year). The result is that some older housing stock that might otherwise have been demolished has had to be retained and upgraded; a strategy that may prove to be more expensive in the long term.

It is not necessarily the case that fixing houses per se will produce improved health outcomes. The likely reasons why—despite programs such as FHBH—health outcomes are not improving in the community include the fact that there is no parallel health education or healthy living practices program; and there is a general lack of systematic coordination between housing and health functions within the community (compounded by the fact that there is currently no environmental health officer operating within the community). The distinct requirements of different funding streams may be partly responsible for this deficiency, while higher capacity administrations will be more able to coordinate with other human service providers within the community.

More generally, better health outcomes following housing interventions will not be achieved unless the relationship between Indigenous culture, society and living environment is more thoroughly understood. Issues to consider include:

- the way housing space is interpreted by Indigenous people
- the lack of regular income allocated to household cleaning and maintenance
- the appropriation of household resources by extended family members
- the high local price of household cleaning and maintenance items
- the absence of appropriate furnishings in the house, particularly appropriate sleeping furniture
- the priorities of decision-makers within the household
- the effects upon housing of familial and gang-related violence
- the lack of environmental health awareness
- the difficulty of balancing competing housing design requirements
- issues around the cultural sensitivity of programs to address the hygiene of Indigenous people.

A crucial obstacle to leveraging better health outcomes is the lack of systematic coordination between FHBH and other housing programs, and between FHBH and other social functions within the community. Lack of coordination can be attributed to the distinct requirements and discrete objectives of different programs, which run at different times, require different outputs and report to

different funding sources. However, the efficiency and efficacy to be gained from a more coordinated approach warrant investigation into improved systems of governance and mechanisms of funding. Given the multi-faceted nature of the problems affecting Indigenous people only a coordinated approach to service provision, which recognises these linkages, will achieve the results required.

1.6 What have been the budgets for the FHBH Projects? What was the budget for the FHBH Project in this community?

Total FHBH funding to the Community B Council in 2004 was $990,000. The maintenance budget per house includes $5,000 from FHBH, $1,700 from IHANT (Indigenous Housing Authority of the Northern Territory) and other monies from rent collection.

The concern in Community B is that given the current state of housing and the necessity of regular maintenance, this amount will not be enough. To optimise the effectiveness of FHBH resources in Community B the housing administrator has used funds flexibly by aggregating monies from different funding sources and by taking a whole-of-community approach to the budget spend.

The housing administration currently spends around $35,000 per house on a complete upgrade (new plumbing, kitchen, bathroom and electrics), and the cost of work on a house in Community B is thought to be five times that of undertaking the same work in an urban centre.

Although funding has been aggregated, enabling a community-wide prioritisation of need, the housing administration at Community B mentioned the administrative burden of managing various funding streams, with the added budgeting, reporting, and other program conditionality this entails. Because of the absence of surpluses within these funding streams, administrators also find it difficult to keep a proportion of their funding for investment in their own capacity development.

1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?

A large proportion of FHBH money is spent on tradespeople, although it should be noted that the cost of housing hardware is markedly more expensive in Community B than for an urban centre. The example given by the housing coordinator was that the cost of building a new house is up to five times more than that for a major urban centre, given the expense and logistical difficulty of transportation.

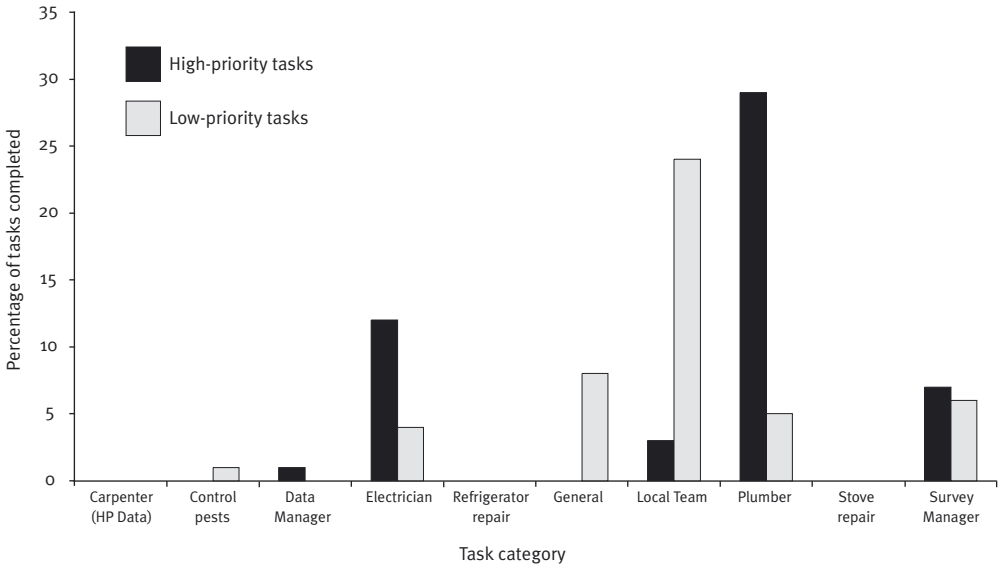
Greater cost-effectiveness could be achieved by investment in local labour, if the capacity is there, and by the use of local materials where available. An approach to housing management that emphasises regular maintenance over irregular overhauls may also increase cost-effectiveness over time.

Process efficiencies could also be gained through a more systematic exchange of best practice between providers of housing services. Although adherence to the FHBH methodology ensures the integrity of the survey–fix process, there is currently no FHBH forum for best practices in housing design and approaches to human services coordination to be exchanged.

1.9 Are the most serious problems being fixed? Does this differ between communities?

'High-priority task' and 'low-priority task' information is recorded for the community and refers to the type of tradespeople used (aligned to general job categories) rather than specific tasks related to a particular HLP. Figure A6 suggests that in the case of Community B fairly equal proportions of low and high-priority tasks have been completed, although—overall—the balance is in favour of high-priority tasks. Disparities do exist for particular task types; for example, a large proportion of high-priority tasks are complete in the 'Plumber' and 'Electrician' categories, whereas a high proportion of low-priority tasks are complete in the 'Local Team' and 'General' task categories.

Figure A6: Percentage of high-priority tasks versus low-priority tasks completed for Community B



1.10 What is the sensitivity of the level of money spent? That is, if we allocated 50 to 100 per cent more or 50 per cent less, what is the likely increase/decrease in the number of problems that will be fixed?

Rather than increased investments in the maintenance of housing hardware, greater efficacy and cost-effectiveness for a given outcome could be achieved through parallel investments in health education.

2.1 What level of community/ICHO involvement in employment, training and project management opportunities occurred through FHBH? Has this been an appropriate level? Did communities want to be involved?

ICHO involvement in Community B is strong, with 14 community residents employed on an ongoing basis, providing low to intermediate skill housing maintenance services. Additional residents were also temporarily employed during the survey–fix process.

Partly as a result of a successful FHBH experience the Council is continuing to develop approaches to Indigenous employment and business generation through the transfer of skills and other resources through, for example, joint ventures in industries with a low skill entry point. Examples include labour-intensive parts of construction and logging activities, which lend themselves to the use of Indigenous-owned lands and primary resources (helping to reduce the current imbalance of trade between Community B and the nearest urban centre).

More labour could be used for ongoing housing construction and maintenance if the capacity were present. The housing officer has plans to train local labour based on the outstations to address low skill maintenance needs *in situ*, rather than having to employ external—often non-Indigenous—tradespeople, whose hourly rates and journey to site times are higher.

Despite these examples there is little evidence to suggest that the creation of a relatively small number of new jobs has translated into a community-wide transfer of housing maintenance skills.

More generally there is strong anecdotal evidence to suggest that the people of Community B have embraced the opportunity to have their houses fixed through the FHBH process, and residents have enthusiastically received the program.

2.3 Have the systems and skills that have been learnt through FHBH been used by communities/Indigenous Community Housing Organisations towards housing maintenance? If so, where and under what circumstances? Have these systems and skills been used in other ways in the community?

The survey and documentation process of FHBH has produced wide-ranging benefits since the information has been used in Community B to improve housing asset management and to inform strategic thinking over the allocation of resources. Unfortunately this information has not been systematically shared with other service providers within the community, such as the clinic.

2.4 Do the communities/Indigenous Community Housing Organisations involved in FHBH feel confident that they could maintain housing better now that they have obtained systems and skills through FHBH (or would they require urther support applying these)?

As Community B is a relatively high-capacity community in terms of funding, staffing levels and skills, its housing administrators seem to have been able to capitalise upon FHBH by taking the opportunity to improve their asset management systems, and to give a greater consideration to health outcomes as part of their overall housing program. However, much of this capacity seems to be dependent upon the priorities and personalities of the senior staff involved.

There is evidence to suggest that those community members with direct experience of FHBH have maintained improvements to their houses, but the extent to which skills acquired during FHBH have diffused throughout the community is unknown. A weakness in the FHBH methodology is that residents who participated in the process are not documented and their progress towards FHBH outcomes is not compared over time.

Summary of key issues

The overall standard of housing hardware in Community B has improved since FHBH; inequity within the housing stock has been reduced, and the approach to housing maintenance has evolved, with an increased awareness of the relationship between housing and health. Furthermore, new jobs were created for community members during the survey–fix process, and a small number of employees have since been kept on. Some observed strengths of the FHBH project in the community include:

- the high capacity of the community council in terms of staff skills, commitment and financial resources
- the comprehensive nature of the FHBH methodology and its positive effect upon asset management practices
- the flexibility of funding allocations, enabling a better prioritisation of needs.

Housing maintenance improvements have occurred in Community B despite the pressures of a growing population (which continues to overstretch housing supply), high housing construction and maintenance costs, and the difficulty of maintaining older housing stock that exhibits structural failure. However, a number of FHBH-specific weaknesses have been observed:

- A shortage of funds for ongoing housing maintenance has been reported to be a continuing issue.
- The management of multiple funding streams is an administrative burden for the housing office and complicates human service coordination.

Moreover, there is little evidence of a wider transfer of housing maintenance skills within the community, although this cannot be attributed to a failure of the FHBH Project.

Communities C1 and C2

The communities and their people

The communities of C1 and C2 are located in the north-west of South Australia. At the 2001 Census there were fewer than 500 residents in C1, and fewer than 400 in C2. Of these people only 15 are over 65 years of age, while the majority are under the age of 24 years.[18]

Both C1 and C2 are governed by a regional community corporation, with local representation through an Aboriginal Corporation. A number of other groups (both incorporated and unincorporated) operate under the auspices of the Community Corporation. These include a Health Council, an Education Committee, a Media Centre, a Heritage Committee and an air service.

Each community has an office, a school, a Community Development Employment Project (CDEP) program, a store, a crafts centre, a clinic and an airstrip. Community C1 also has a church, a community recreation centre, and a cattle yard, while Community C2 has a police station.

Neither has on-site youth or environmental health workers, and at the time of the FHBH evaluation team's visits the community administrator for Community C2 was unwilling to participate, while there was no community management available in Community C1 except for the Municipal Services Officer.

Petrol sniffing is extensive in both communities and is overtly practiced predominantly by young males.

The jurisdictional context

Delivery and management of FHBH 4 in Communities C1 and C2 is the responsibility of the licence holder, the Aboriginal Housing Authority (a portfolio body of the South Australia Department for Families and Communities).

Housing in Communities C1 and C2

At the time of FHBH 4 there were fewer than 50 dwellings in both Community C1 and Community C2. The initial impression is that the housing in the two communities is of a good standard, relatively new (under 5 years) and well appointed with perimeter fencing, verandas and outside facilities such as clotheslines, rainwater tanks and yard taps. However, upon closer inspection it is apparent that the majority of facilities are unserviceable, while the interiors of several houses are acutely unhygienic, and likely pose a significant risk to health.

The structure and content of field work

Two FHBH evaluation team members visited Community C1 and Community C2 to participate in an FHBH survey fix for each community. An Aboriginal Housing Authority (AHA) team leader led this with two team members engaged especially for the project. A second AHA officer provided data entry support. In both cases between four and six additional community members participated in the survey process. Several of these had participated in 'Survey Fix 1', completed six months earlier.

The team went about their work diligently and the surveys were conducted in a thorough fashion. In Community C1, the tradespeople (carpenters, plumbers and electricians) commenced work while the surveys were still under way. They were scheduled to move on to Community C2 when their work at C1 was complete. The tradespeople appeared to be highly competent and committed to the program. They confirmed the economies that were being achieved through being able to undertake multiple tasks in one visit. The worksheets produced by the surveys enabled efficient ordering of materials, which could be transported in bulk.

Interviews in Community C1 were held with the Municipal Services Officer, the CDEP manager, the school principal and personnel in the clinic. In Community C2 interviews were held with the school principal and personnel in the clinic.

Field note responses to relevant research questions

1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?

Figure A7 shows that average scores for the majority of HLPs tested in both communities are close to 1.00 at Survey 1, with scores for six out of eleven HLPs at or above 0.8 for both communities. Across certain HLPs, however, the standard of housing in both Community C1 and Community C2 was markedly poor, with average scores of only around 0.4 for HLPs 1.1 (Power, Water & Waste Connected) and 1.6 (Fire).

Figure A7: Average critical HLP scores for Communities C1 and C2

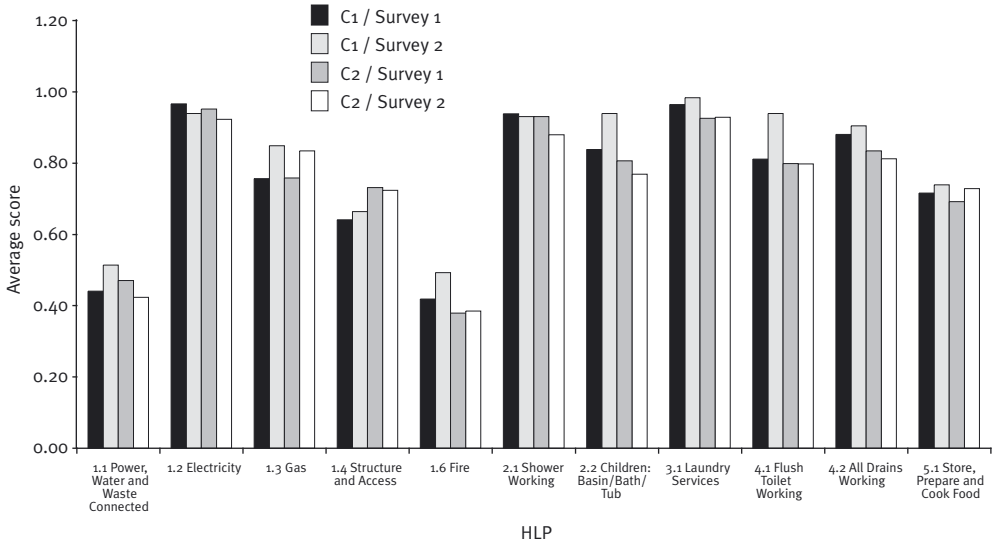
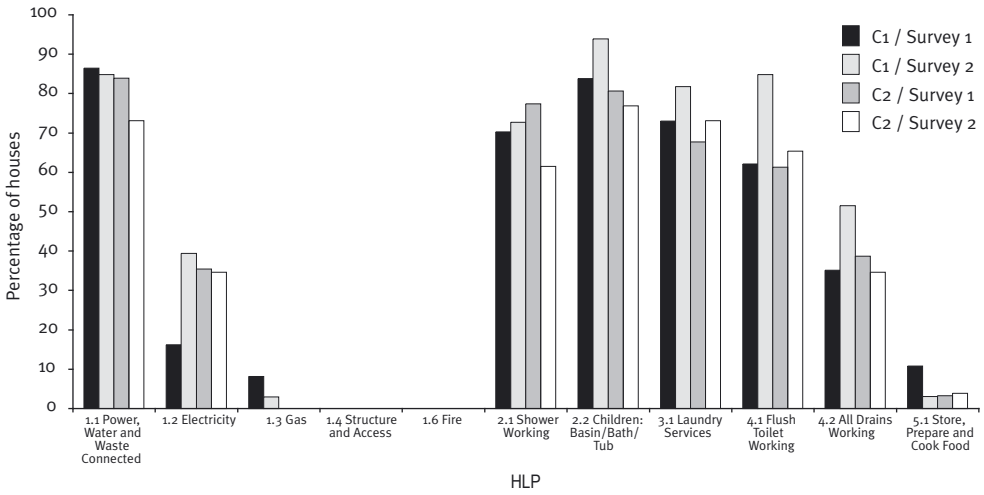


Figure A8 demonstrates a more mixed and on balance less positive picture. Although the proportion of houses 100 per cent OK is at 68 per cent or over for four out of eleven HLPs for both communities at Survey Fix 1, no houses scored 100 per cent OK on HLPs 1.4 (Structure & Access) and 1.6 (Fire), while for HLPs 1.3 (Gas) and 5.1 (Store, Prepare & Cook Food) the proportion of houses scoring at 100 per cent OK was at 11 per cent or less in both cases. As with Figure A7, Figure A8 shows little discrepancy between Community C1 and Community C2 for Survey Fix 1 results.

Figure A8: Percentage of houses scoring 100 per cent OK on critical HLP tests for Communities C1 and C2



Observation and discussions with housing officers reveal that housing in Community C1 is relatively new (under 5 years) but that there are major issues around its use. In Community C2 a similar situation exists, although there is reportedly a significant shortage of houses to cater for demand. The surveys revealed multiple items requiring maintenance, but in the context of the acutely unhygienic environment found in many houses these issues become less critical than they otherwise would be.

1.2 What was the state of housing after FHBH occurred? What problems were fixed?

Comparison between Survey Fix 1 and Survey Fix 2 data for Communities C1 and C2 shows a mixed picture of marginal improvement and decline, contributing to an overall image of gradual degeneration in the housing stock for these communities. In the case of Community C1, small improvements in nine out of eleven HLP average scores were recorded of between 2 and 13 points (see Figure A7). However, for HLPs 1.1 (Power, Water & Waste Connected) and 1.6 (Fire), improvements of only 7 points from a low base of 0.44 and 0.42 respectively are marginal.

Of more concern is the fact that for HLPs 1.2 (Electricity) and 2.1 (Shower Working), average scores for Community C1 have actually decreased, by 3 and 1 points respectively (see Figure A7). Evidence of this trend is pronounced in the case of Community C2, where six out of eleven HLP average scores have decreased by up to 5 points, while the maximum level of improvement in average HLP score (for HLP 1.3, Gas) was a mere 7 points.

Despite an improvement in the proportion of houses scoring 100 per cent OK for six out of eleven HLPs in Community C1 (HLP 4.1, Flush Toilet Working, improved by 23 points), data from Figure A8 confirm that, overall, both communities are experiencing a decline in the standard of their housing stock despite the influence of FHBH. Community C1, for example, has experienced a reduction—of between 1 and 8 points—in the proportion of houses scoring 100 per cent OK for three HLPs (HLP 1.1, Power, Water & Waste Connected; 1.3, Gas; and 5.1, Store, Prepare & Cook Food). Meanwhile, Community C2 has recorded a reduction of between 1 and 15 points for five out of eleven HLPs, most notably HLP 2.1 (Shower Working).

Neither community had any houses scoring 100 per cent OK on HLPs 1.4 (Structure & Access) and 1.6 (Fire) at either Survey Fix 1 or Survey Fix 2, and for those HLPs where Community C2 did improve the increase was marginal, with a maximum recorded increase of only five points (for HLP 4.1, Flush Toilet Working).

1.4 Do the residents feel that their houses are safer and healthier since FHBH?

There was little contact with residents when carrying out the surveys. Most chose to vacate for the duration. Those who offered an opinion said they were supportive of the program, although the general view was that had the community not supported it, access to individual houses would have been more difficult than it was.

1.5 What are the remaining problems within housing in Indigenous communities?

Given the overall decline in housing standards recorded in Figures A7 and A8 between Survey Fix 1 and Survey Fix 2, significant problems with housing in Communities C1 and C2 remain (refer to research question 1.2 above).

1.6 What have been the budgets for the FHBH Projects? What was the budget for the FHBH project in these communities?

The total FHBH 4 funding for South Australia was just under $700,000 for up to 125 houses, around two-thirds of which was allocated to Communities C1 and C2.

1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?

Insufficient data could be gathered to answer this question.

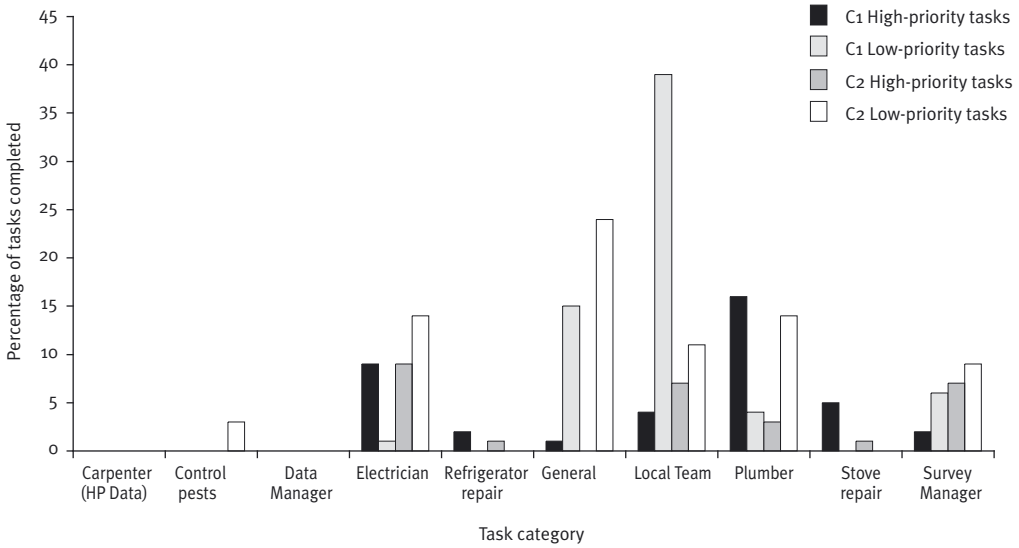
1.9 Are the most serious problems being fixed? Does this differ between communities?

'High-priority task' and 'low-priority task' information is recorded for Communities C1 and C2, and refers to the type of tradespeople used (general job categories) rather than specific tasks related to a particular HLP. In the case of Communities C1 and C2, a comparison between the proportion of high-priority tasks completed and the proportion of low-priority tasks completed shows that—in general terms—a greater proportion of low-priority tasks were completed overall.

Figure A9 clearly demonstrates that for Community C2, across several task types ('Electrician', 'General' and 'Plumber' for example) a greater proportion of low-priority tasks were completed than high-priority tasks. In fact, only in

two instances is the proportion of high-priority tasks greater ('Refrigerator repair' and 'Stove repair'). The picture for Community C1 is more mixed (with a higher proportion of high-priority tasks performed by 'Electrician' and 'Plumber' for example) but the large proportion of low-priority 'General' and 'Local Team' tasks is indicative of the general trend.

Figure A9: Percentage of high-priority tasks versus low-priority tasks completed for Communities C1 and C2



1.10 What is the sensitivity of the level of money spent? That is, if we allocated 50 to 100 per cent more or 50 per cent less, what is the likely increase/decrease in the number of problems that will be fixed?

Insufficient data could be gathered to answer this question.

2.1 What level of community/ICHO involvement in employment, training and project management opportunities occurred through FHBH? Has this been an appropriate level? Did communities want to be involved?

Insufficient data could be gathered to answer this question.

2.3 Have the systems and skills that have been learnt through FHBH been used by communities/Indigenous Community Housing Organisations towards housing maintenance? If so, where and under what circumstances? Have these systems and skills been used in other ways in the community?

According to informants for Communities C1 and C2, the FHBH Project was a useful adjunct to the services already provided. The local body responsible for maintaining houses uses a system based on tenant requests that are relayed by the Municipal Services Officer via a works order. Budget constraints lead to significant delays in responding and difficulties coordinating tradespeople have been reported.

Participants in the surveys view the program as an opportunity to gain an income supplement. They do not perceive that their communities offer any opportunity to advance themselves through skills acquisition.

Based on the limited intelligence gathered on the systems of governance it appears there is a lack of capacity to assimilate and benefit from programs such as FHBH. While there are highly committed individuals working in the areas of municipal services, education, health and CDEP there is no mechanism for a coordinated cross-portfolio approach, and the Community Councils are said to be ineffective. There are critical problems with basic 'law and order' in these communities. Hence capacity to benefit from programs such as FHBH is low.

Skills transfer is reported to be problematic due to the method used to administer transfer payments. Reference was made to new regimes that might improve this situation.

2.4 Do the communities/Indigenous Community Housing Organisations involved in FHBH feel confident that they could maintain housing better now that they have obtained systems and skills through FHBH (or would they require further support applying these)?

Local administrators have expressed a view that to be effective in these communities an FHBH Project would need to be accompanied by an intensive good housekeeping education program. One suggestion was that houses and grounds should be regularly cleaned for an extended period on a 'no blame' basis to demonstrate the benefits of improved hygiene in homes.

Summary of key issues

Communities C1 and C2 are examples of communities in crisis for a host of social, economic and governance reasons not directly related to the implementation of a housing maintenance program: conditions manifested by serious health issues and social disorder including petrol-sniffing-related violence. In this context, for delivery of improved health outcomes, the FHBH Project is a 'necessary but not sufficient' piece of service provision.

In terms of housing and housing maintenance systems at Communities C1 and C2, the data and observations show that despite a relatively new housing stock, the absence of community capacity means that the quality of this housing is under threat, despite the influence of FHBH.

Community D

The community and its people

Community D is a community of approximately 500 people located close to the New South Wales central coast north of Sydney. At the 2001 Census half of Community D's population were classified as Indigenous Australians, and of these people only seven were over 65 years, while the majority were under the age of 24.[19]

Given Community D's relative proximity to areas of high population density it cannot be described as a remote community, although there is a perception within the community that it is socially segregated from its more populous, predominantly non-Indigenous, neighbours. Proximity to a regional centre has, however, contributed to the housing administration's capacity to provide housing services, which are administered regionally.

The local Council administers the community, but power and influence within Community D is regarded as diffuse, with several competing personalities and political divisions along family lines; this makes the independence of programs like FHBH essential if such obstacles to success are to be avoided.

In addition to its housing office, Community D also has a medical centre, a community youth centre and a CDEP program.

Housing in Community D

The community's housing administration is responsible for a stock of over 50 dwellings, with an average occupancy rate of approximately eight to 10 people per house.[20] Dwellings vary in age and condition with some older housing stock remaining from the 1970s and 1980s. Major bathroom renovations have been identified as essential to improve the housing stock.

In general terms the housing stock has a history of being reasonably well maintained by tenants, and—based upon a brief visual assessment—the majority of houses are in a good state of repair. Ready access to nearby contractors has contributed to this outcome, although in the past housing has tended to be serviced by the cheapest tradespeople possible; a policy which does not necessarily lead to the best housing outcome over the mid to long-term.

Anecdotal evidence suggests that, on average, a dwelling in Community D can last for anywhere between five years and 25 years before major renovation is required, depending upon the quality of design and construction, and the length of any extended periods of vacancy (often leading to neglect and vandalism). Housing over 25 years, however, tends to show prominent signs of wear, which in some cases is exacerbated by poor overall construction. Some newer housing stock also showed signs of deterioration due to poor construction, with structural faults such as major floor to ceiling cracks and rising damp in bathrooms being prominent.

The jurisdictional context

The FHBH licence holder for Community D is the NSW Department of Health, operating through the Aboriginal Environmental Health Unit (AEHU), the FHBH project manager. The NSW Aboriginal Housing Office (AHO) and Department of

Aboriginal Affairs also provide monitoring and consultative support. Community D took part in FHBH 4 and received roughly half of a total allocation to the AHO, for 105 houses, of around $580,000.

The structure and content of field work

An FHBH Evaluation team member visited Community D in July 2005. The team member met with and was guided by the NSW Housing for Health officer and FHBH Area Manager for the area.

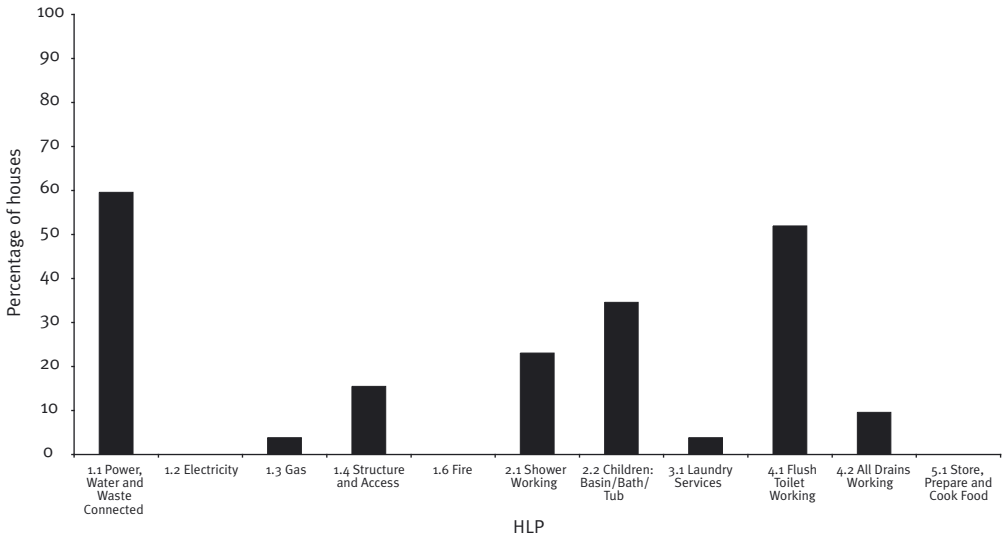
The visit consisted of an orientation tour around the community; an in-depth interview with the FHBH Area Manager; a second orientation tour, accompanied by a contracted architect and a plumber; and an inspection tour around seven of Community D's houses. The tour and house inspections provided an opportunity for informal discussions with several householders and community members and a member of the Aboriginal Land Council, in addition to the contracted architect and plumber assisting with the renovation of bathrooms.

Field note responses to relevant research questions

1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?

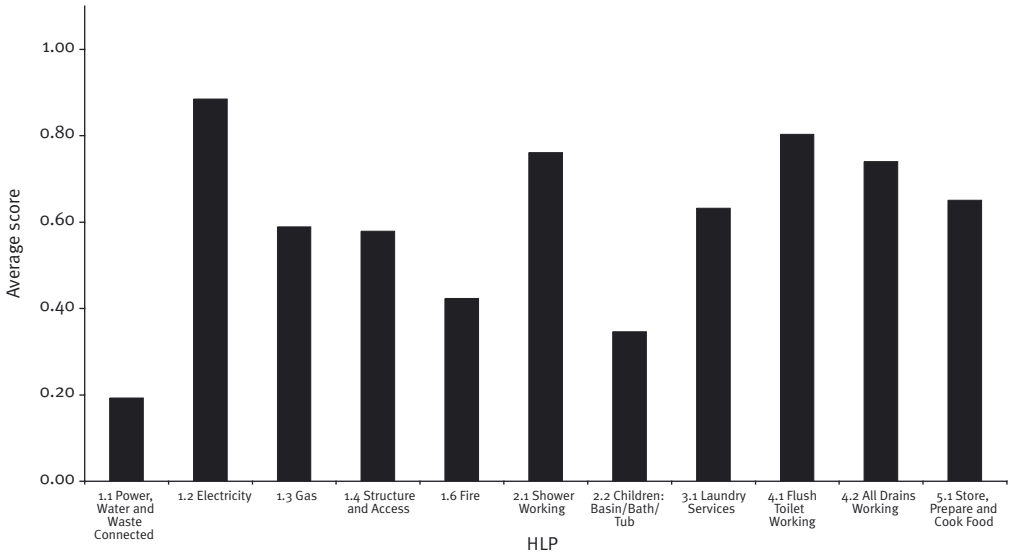
A variety of problems with the functionality of housing in Community D were recorded at Survey Fix 1. Figure A10 shows that no houses in the community were 100 per cent OK for HLPs 1.2 (Electricity), 1.6 (Fire) and 5.1 (Store, Prepare & Cook Food), while only 10 per cent or less were 100 per cent OK for HLPs 1.3 (Gas), 3.1 (Laundry Services) and 4.2 (All Drains Working). Survey Fix 1 data for HLP 4.1 (Flush Toilet Working) were more encouraging with over 50 per cent of houses 100 per cent OK and an average score for the community of 0.80.

Figure A10: Percentage of houses scoring 100 per cent OK on critical HLP tests for Community D



Average scores for HLPs 1.3 (Gas) and 1.6 (Fire) were also comparatively low at 0.59 and 0.42 respectively (see Figure A11) indicating a low overall standard across the community housing stock in these areas. A low average score was also recorded for HLP 1.1 (Power, Water & Waste Connected) of 0.19, despite the fact that a comparatively high proportion of houses scored 100 per cent on that HLP (see Figure A10).

Figure A11: Average critical HLP scores for Community D



Field observations revealed that a major problem with some housing in Community D was the condition of wet areas such as bathrooms, laundries and parts of kitchens. Several houses showed signs of substantial decay, with damp and mould prevalent. According to the tradespeople and professionals involved in house renovation at Community D, the problem was primarily the result of poor quality design and finishing, combined with bad plumbing. Forty bathrooms have been or will be completely renovated.

1.2 What was the state of housing after FHBH occurred? What problems were fixed?

At the time of the evaluation, Survey Fix 2 data for Community D were unavailable, but field observations reveal that as a result of FHBH the repairs have been to bathrooms and to areas of rising damp.

A brief visual inspection of seven houses revealed that all but one house—which showed evidence of structural movement—were structurally sound, although several houses still had signs of rising damp in wet areas and/or poor quality and deteriorating finishes. The majority of houses, however, even those at 20 years old, seemed to be well maintained and in generally good condition, while standards of environmental health were observed to be much higher than in other communities visited.

1.4 Do the residents feel that their houses are safer and healthier since FHBH?

No effective response could be determined in this case, although—from discussions with residents and housing maintenance staff—residents recognised and are satisfied with improvements made.

1.5 What are the remaining problems within housing in Indigenous communities?

No Survey Fix 2 data were available for Community D to allow a quantitative analysis of this question. As noted above, significant problems remained with structures of some older houses and wet areas in most houses.

1.6 What have been the budgets for the FHBH Projects? What was the budget for the FHBH project in this community?

The NSW Department of Aboriginal Affairs funds the Housing for Health strategy in the state, with contributions from the NSW Department of Health covering the costs of project management. FHBH funds secured for a community are added to the repairs component of the NSW Housing for Health budget. The total combined funds through NSW Housing for Health and FHBH were roughly $825,000 for around 105 houses, of which roughly half were in Community D.

1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?

The FHBH Area Manager for Community D cautioned that per-house funding allocations seem to be arbitrarily derived, and not necessarily based upon an assessment of need. An alternative approach suggested was to use Survey Fix 1 to assess the state of housing in a community, as the basis for determining the allocation of funds. More generally there is a perception that the FHBH Project is driven from the top-down by funding baselines rather than from the bottom-up by performance baselines, which means that when the funds run out the project may be over, but the need remains.

An inefficiency identified in the NSW context is that policies for tendering tend to slow the process for engaging contractors on minor works, since three written quotes are required for expenditures greater than $1,500. Higher-than-usual levels of paperwork are reputedly off-putting for some tradespeople who would otherwise provide quality work at a price that provides value for money. For example, accounting for minor repairs such as washer replacements is disproportionate compared to the small amount of time and cost of making the repair.

Occupational health and safety issues are also a concern for some tradespeople, who have been known to increase their rates in order to compensate themselves and manage the risks they perceive themselves to be under.

Other observations relating to project efficiency relate to the design and administration of the FHBH survey. The FHBH Area Manager for Community D queried the usefulness, for his purposes, of some of the information collected. It was also noted that some of the information gathered was repetitious and overlapped with information contained on the MHBH database. In other instances, for example in relation to problem wet areas, it was thought that the FHBH survey was not detailed enough.

2.1 What level of community/ICHO involvement in employment, training and project management opportunities occurred through FHBH? Has this been an appropriate level? Did communities want to be involved?

There is strong community involvement in housing-related employment generally in Community D, with five residents working full-time on building and construction, and one resident working on a wood-heater replacement effort.

Several community members were involved in the FHBH survey process, which helped kick-start the Indigenous Community Housing Organisations direct involvement in and momentum around housing maintenance. In addition to employment outcomes, survey team leaders received appropriate technical training in order to undertake house inspections.

2.3 Have the systems and skills that have been learnt through FHBH been used by communities/Indigenous Community Housing Organisations towards housing maintenance? If so, where and under what circumstances? Have these systems and skills been used in other ways in the community?

The perception of the FHBH Area Manager was that transferring the FHBH approach to the community remains difficult, given limited levels of individual capacity. However, there does seem to have been a change in community attitudes to environmental health since FHBH (although not necessarily attributable to FHBH), such as a recent community-sponsored clean up of public spaces.

2.4 Do the communities/Indigenous Community Housing Organisations involved in FHBH feel confident that they could maintain housing better now that they have obtained systems and skills through FHBH (or would they require further support applying these)?

There are some social tensions in Community D that may threaten the sustainability of FHBH outcomes in the community, including violent and anti-social behaviour by male youths.

More directly, there has been—at times—an uneasy relationship between the FHBH program and the local ICHO, whose members have criticised the survey–fix process as unnecessarily invasive for individual houses.

Summary of key issues

The housing stock of Community D is, overall, in good condition compared to other communities visited during this evaluation. The effect of being relatively close to large population centres may be an influencing factor, especially where it reduces the costs of overcoming the market failure so characteristic of remote communities (such as excessive service delivery costs and the increased costs of tradespeople and materials).

Since Survey Fix 2 data are unavailable, it is difficult to assess the overall level of deterioration or improvement as a result of FHBH, but limited observation would suggest that FHBH fixes are generally being sustained, and there is a higher overall standard of environmental health compared to other communities.

As in other Indigenous communities, there is evidence of structural damage in older housing stock. However, a criticism particular to the New South Wales context is that procurement processes for the program are inefficient, since

three written quotes must be provided for all works over $1,500 (as opposed to using a 'trusted' tradesperson by default).

More general criticisms of FHBH at Community D include a perception that:

- funding allocations are not based upon need
- the FHBH survey is too in-depth in areas not relevant to the local context
- the FHBH survey is intrusive for householders.

Appendix B — Miscellaneous items

List of stakeholder agencies consulted

Australian Government Department of Family and Community Services

Habitat Solutions

Healthabitat Pty Ltd

Katherine West Health Board

Murdi Paaki Regional Housing Corporation

Nyirranggulung Mardrulk Ngadberre Regional Council

NSW Department of Health

NT Department Community Development, Sport and Cultural Affairs

OTG Environmental Solutions

PM+D Architects P/L

Q Social Research Consultants

SA Aboriginal Housing Authority

Studio Mango

Thamarrurr Regional Council

Torres Strait Regional Authority

Western Australian Department of Housing and Works

Example forms

- Feasibility Report format
- Licence Deed format
- Survey Fix Sheets
- Survey Progress Report format

Housing for Health / Fixing Houses for Better Health:

Feasibility Report

Project Name		Date this Feasibility report submitted to HH		**Cover Sheet of sheets**

Checklist to be completed before returning to Healthabitat

		Notes if required
☐	**All questions answered**	.....
☐	**All sheets in order** (check number bottom right hand corner)	.....
☐	**All attachments have been included**	.....
☐	**Project is suitable of a HfH/FHBH project**	.....
☐	**Project is currently NOT in a position to ensure the successful completion of a HfH/FHBH project and the following would need to be established/confirmed before a project could proceed (give summary below and attach additional information if required)**	

.....
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.....

Data entry checklist for HH use only		Notes if required
☐	Preliminary feasibility data entered and date (right)	.....
☐	Additional information needed (note Q numbers at right)	.....
☐	Additional information OK data entered and date (right)	.....
☐	Feasibility completed and OK for licence to be prepared	.....

Project Details

Managers initials	
Date completed	

	Project name			
	Project Code			This code is assigned by HH and is to be used in ALL communication and documents to ensure confidentiality
	Name of the Project Licence Holder (PLH) this is the organisation that will be licensed to use the HfH process			
	Project Licence Holder's (PLH) mailing address			
	Project Community Name and mailing address			
	Project Community contact person and contact details			
	Possible Commencement date of Survey / Fix 1 (SF1) if project approved			Consider possible access issues and time for the set up of the project after approval of the Feasibiltiy Report
	Total project budget as at Feasibility Report Stage			This should include ALL wages and fix component monies
	HH Accredited Manager for this project (also may be known as an Area Manager) :	1	2	Name here
	Has the PLH computer equipment to run the project database at the project site. This equipment MUST be dedicated to the HfH/FHBH project ONLY	1	2	Computer : laptop min 1ghz, 256RAM, USB ports, modem email facility, min 14 inch screen, separate full version keyboard with numeric pad, external mouse, power adaptor, the computer should have an integrated CD-RW ability, a backup computer on site would be desirable but not an essential requirement BACKUP: USB memory stick of at least 64Mb capacity,
	Has the PLH all additional equipment to run the project database at the project site.	1	2	SOFTWARE Microsoft Access 2000 or approved by HH more recent version, XL, Powerpoint, Word also winZIP and Acrobat (PDF) reader with all system software required for complete performance

		Has the PLH printing equipment to run the project database at the project site. (see detailed specification)	1 2	PRINTING: colour printer with at least 12ppm speed (for black and white) with spare ink cartridges
		Community housing management : office (could be part of a main office)	0 1 2	0= no office area 1= office area with working phone, fax and filing cabinet/records 2= office with no working equipment or current records
		Community housing management: activity	0 1 2	0 = no records of maintenance over the last 6 weeks 1= records of maintenance over the last 6 weeks 2= incomplete or scattered records of maintenance over the last 6 weeks
		Community housing management: trades	0 1 2	0= no trades contacts could be found at the meeting (plumbing and electrical) 1= trades details and contacts could be found at the meeting 2= some trades details and contacts could be found
		Community housing management: tenant reports	1 2	A system exists to report housing faults and allocate works to trades
		Summary: of the current state of community housing management	0 1 2	0 = no current structures exist to maintain existing houses 1= there are active management practices that are maintaining houses 2= there are management systems in place but no evidence of effective housing management
		HfH /FHBH Project office	1 2	Is there a suitable place for a HfH/FHBH office within the community (neutral ground, phone line available, central to the project, power OK, secure etc)
A		Community formal request for the project	1 2	Has a letter of support for the project from the Community Council, Housing organisation as appropriate been obtained (attach and circle the A in the left hand column)
		Availability of local workers	1 2	CDEP program workers to participate in all aspects of the project
		Lunches for team members can be made locally	1 2	Team lunches ensures workers stay together during the day, discuss the mornings work, discuss missing data and data checks with the teams.
		Transport for the workers provided	1 2	Is transport available to get work teams to houses if the scale of the project requires
		Is there a CDEP program in this project	1 2	Community Development Employment Program can assist in the employment and insuring of HfH /FHBH workers
		CDEP wages top-up set up and method of payment agreed	1 2	
A		If NO CDEP scheme exists have ways been discussed to ensure worker payment and insurances	1 2	Add attachment and circle A at lef if required

Project Staff

			Managers initials and	
			Date completed	
		Yes / No / Number		
A	Total estimated number of Indigenous staff		Include all Indigenous trades staff, consultants, survey, fix and liaison staff (attach list of names to this report and circle the A in left hand column)	
A	Total estimated number of Non-Indigenous staff		Do NOT include Non-Indigenous trades or project/data/finanacial manager/upgrade architect listed below (attach list of names to this report and circle the A in left hand column)	
	Data Manager, name and phone contact	0 1	name, and phone contact	
	Financial management name (organisation if applicable) and phone contact	0 1	name, and phone contact	
	Capital Upgrade Architect / building consultant name, (organisation if applicable) and phone contact	0 1	name, registration number and phone contact	
	Plumber 1	0 1	name, licence number and phone contact	
	Plumber 2	0 1	name, licence number and phone contact	
	Electrician 1	0 1	name, licence number and phone contact	
	Electrician 2	0 1	name, licence number and phone contact	
	Other trade 1	0 1	name, trade area, licence number and phone contact	
	Other trade 2	0 1	name, trade area, licence number and phone contact	

Community Meeting			Managers initials	
			and Date of Meeting	
		Yes No / Number		
	Housing organisation/s responsible for the delivery and maintenance of housing: name, person to contact and phone number	0 1 2	0= no housing organisation, 1= a single housing organisation, 2= 2 or mare housing organisations involved in this project Describe here the organization/s that may influence the community or project	
	Housing organisation: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way	
	Key Regional organisation: name of organisation, person to contact and phone number	0 1	0= no key regional organization 1= key REGIONAL organization identified Describe here the organization that may influence the community or project and give contact name and number	
	Key Regional organisation: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way	
	Local Government (if applicable): name, person to contact and phone number	0 1	0= no key LG organization 1= key LG organization identified Describe here the LG that influences the community or project and give contact name and number	
	Local Government organisation: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way	
	Health organizations present (if applicable): type of organisation, name, person to contact and phone number	0 1 2 3	0= no health organization with local presence 1= CC/AMS health service present, 2= State run health system with local presence, 3= Private health services ONLY available within 10km of the project Note here the Community Controlled Aboriginal Medical Services, State Health services, Private health services available within 10km of the project	
	Health organisation: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way	

	CDEP program present	1 2	1= yes 2= no
	Is there a local community building team	1 2	1= yes 2= no
	If it exists, does the local community building team do maintenance on houses	1 2	1= yes 2= no
	Local community Building Team key contact	1 2	Contact name, licence number (if applicable) and phone contact
	Available community plumber OR electrician		Name, licence number and phone contact
	Available community plumber OR electrician: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way
	Is there a local Essential Services Officer	1 2	Name, and phone contact
	Essential Services Officer: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way
	Environmental Health Officer.	1 2	Name and all contact details
	Environmental Health Officer.: participation	1 2	The contact person has agreed to participate in Survey Fix 1 &/or 2, or be involved in the project in a specific way
	Environmental Health Conditions. Are there any existing reports?	1 2	1= yes (Attach details of reports / dates etc and circle A in the left hand column) 2= no existing reports

	Other projects currently in this community related to housing, infrastructure or health	0 1 2 3	Note here or attach details of any new housing projects planned, housing demolitions, infrastructure projects (power, water , waste, roads), special health projects etc
	Population:		Number of people living in the project community likely to be affected by the HfH/FHBH project May only be available from local data
	Population Range: Mimimum expected, seasonal variations etc		Give possible reasons for variation here
	Population Range: Maximum expected, seasonal variations etc		Give possible reasons for variation here
	Possible disruptions to work:	0 2	0= no predicted disruptions, 2 = predicted disruptions as detailed below Note here the community pay days, and any other possible disruptions to Survey/ fix work times?

	Common housing problems as reported at meeting. Use the list at right as a prompt for the meeting.		**Score 1 point for each of the following perceived as a problem and note the total number at left (out of a possible 25)** electrical: electric shocks, no lights, faulty power points, faulty switches (max 4 points) water: pressure OK, drinkable {potable), colour OK (Max 3 points) Waste: toilet problems, septic tank problems, drains generally (Max 3 points) Structural: moving foundations, roof leaks, walls cracked, white ants (max 4) hot water : no hot water, lack of enough hot water no, poor pressure (Max 3 points) plumbing problems: any problems with taps, pipe leaks, smells, (max 3 points) cold in winter and or hot in summer (2 points) Insects (mozzies and flys) , mice / rats, cockroaches (max 3 points)
A	Are there any current housing assessments available?	0 1 2	0= none available 1= yes available and ATTACHED (circle the A in left column) 2= yes assessments exist but are not available to view and not attached
A	Health issues reported in meeting (indicate perceived problem on the right and circle the number of problems)		**Score 1 point for each of the following perceived as a problem and note that number at left (out of a possible 6)** seasonal illnesses Eye problems Skin problems Ear problems Respiratory problems Asthma problems Note: IF there are details ATTACHED circle A in left column

	Electric appliances in houses	0 1 2 3 4	Stove (cooktop and or oven) HW system (include electrically boosted solar systems) heating (include freestanding heaters) cooling (include fans, freestanding coolers etc) Note that if 4 or more appliances circle 4	
	House numbers as from State / Regional data		Habitable houses only not derelict houses, un-serviced houses, temporary shelters etc **Write 0 if data not available from this source**	
	House numbers as from Community data		Habitable houses only not derelict houses, un-serviced houses, temporary shelters etc **Write 0 if data not available from this source**	
A	House numbers as from Community map		Habitable houses only not derelict houses, un-serviced houses, temporary shelters etc Write 0 if data not available from this source, **attach map if available and circle A in left hand column**	
	House numbers as from drive/walk around the community with local community staff		Habitable houses only not derelict houses, un-serviced houses, temporary shelters etc	
	Number of Houses FINAL ESTIMATE		**This should be the number of houses proposed to be surveyed and fixed under the housing for health/ fixing houses for better health licence agreement**	
	Meeting total number in attendance and names		Names below and **total number** left 1 2 3 4 5	 6 7 8 9 10

Mains services information

			Managers initials	
			Project Name	
		Yes / No / Number		
	Water			
A	Water source	0 1 2 3 4	0= no reticulated water, local house rainwater tanks only 1= river water 2= local underground bore water 3= mains supply from outside project community control 4= other ADD NOTE TO EXPLAIN and **circle A in left column**	
	Storage	0 1 2	0= no local water storage, water supply managed reticulated from outside project area 1= local storage inspected and OK 2= local storage NOT inspected	
	Local water treatment	0 1 2	0 = no local treatment of water available 1= local treatment inspected at this visit and appears OK 2= local treatment confirmed locally as not working	
A	Tested Water quality	0 1 2	0= no information available about water quality from testing 1= regular water testing and results are **ATTACHED circle A in left hand column** 2= regular water testing BUT NO results are available or attached	
	Water meters	0 1 2	0= no water meters to any house 1= water meters to all houses 2= some water meters installed	
	Rainwater tanks present	0 1 2	0= no tanks to any house 1= tanks to all houses 2= some tanks installed	
	Water quality: community opinion /information	0 1 2 3	0= no opinion or information about water quality 1= water is thought to be of good quality all of the time 2= water is thought to be of poor quality **SOME** of the time (taste, smell, colour) 3= water is thought to be of poor quality **ALL** of the time (taste, smell, colour)	
	Water pressure to all houses in the project: as reported	1 2	1= OK 2= reported poor to any houses in the project	
	Likely number of houses disconnected from water as reported	0 1 2	0= none 1= less than 5 2= greater than 5	
	Is there a user pays system for water in operation?	1 2	1= yes 2= no	
	Water cost per quarter (estimated cost calculation if user pays system applies)		To calculate $ total : Add any standing quarterly charges and the costs if 126 kilo litres (126,000 litres) of water was used in the quarter	

	Water management (note at right the authority or organisation responsible for day to day maintenance of the water supply)		

		Power		
		Power source	0 1 2 3 4	0= no reticulated power household generators only 1= local community diesel generator 2= local community diesel / hybrid generator 3= mains supply outside project community control 4= other ADD NOTE TO EXPLAIN
		Off peak power available	0 1 2	0= not available 1= one off peak rate available 2= more than one off peak rate available
		Power meters	0 1 2	0= no meters to any house 1= meters to all houses 2= some meters installed
A		Tested power quality	0 1	0= no information available about water quality from testing 1= regular power testing and results are **ATTACHED**
		Community opinion of power supply quality	0 1 2 3	0= no opinion about power quality 1= power is thought to be of good quality with few supply disruptions 2= power is thought to be of OK quality with some supply disruptions 3= power is thought to be of poor quality with daily supply disruptions
		Likely number of houses disconnected from power	0 1 2	0= none 1= less than 5 2= greater than 5
		Safety switches	0 1 2	0= NO houses fitted with safety switches 1= ALL houses fitted with safety switches 2= SOME houses fitted with safety switches
		Is there a user pays system for power in operation?	1 2	1= yes 2= no
		Power cost per quarter (estimated)		Add any standing quarterly charges and the costs **if** 900 kilowatts of water was used in the quarter
		Power management (note at right the authority or organisation responsible for day to day maintenance of the power supply)		

		Gas		
		Gas available	0 1 2 3 4	0= no gas available **(LEAVE THE REST OF THIS SECTION)** 1= gas in some houses 2= gas in all houses 3= gas is bottled only 4= mains gas
		Gas appliances	1 2 3 4	1= stove 2= oven 3= Hot water system 4= heating
A		Tested gas quality	0 1	0= no information available about gas installation compliance 1= gas compliance testing completed and results are **ATTACHED**
		Community opinion of gas supply quality	0 1 2 3	0= no opinion about gas quality 1= gas supply thought to be good with no supply disruptions 2= gas supply thought to be OK with few supply disruptions 3= gas supply thought to be POOR with many supply disruptions
		Likely number of houses disconnected from gas due to costs of gas	0 1 2	0= none 1= less than 5 2= greater than 5
		Is there a user pays system for gas in operation?	1 2	1= yes 2= no
		Cost per quarter (estimated $/litre)		Per bottle delivered to the community project / by cylinder capacity or $ per litre bulk
		Gas management (note at right the authority or organisation responsible for day to day maintenance of the gas supply)		

	Waste		
	System type	0 1 2 3 4	0= no waste system in place OR no information available 1= deep sewer (NO septic tanks) 2= septic tanks at each house and common effluent drain(CED) 3= septic and local soakage/evaporation/transpiration trenches 4= other (dry toilet systems, aerobic treatment systems for each house) If there is a mix of systems within the project , indicate numbers of houses on each type below
	If septics, give approximate tank size		INSPECT and give approx size IF POSSIBLE
	If septics, is a pump out service available	0 1	0= no pump out service available 1= pump out service available
	Cost per septic pump out (If available)		Find the cost of septic tank pump outs, if locally available OR the cost to import the necessary equipment
	Waste management (note at right the authority or organisation responsible for day to day maintenance of the water borne waste system equipment)		
	Mains Services Notes		

Project Staff Calculation and Record sheet

Managers initials	
Date completed	

			SF 1	SF2
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		1 2 3 4 5	1 2 3 4 5
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		6 7 8 9 10	6 7 8 9 10
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		11 12 13 14 15	11 12 13 14 15
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		16 17 18 19 20	16 17 18 19 20
	Non-Indigenous staff : do NOT include Non Indigenous trades or project manager		1 2 3 4 5	1 2 3 4 5
	Non-Indigenous staff : do NOT include Non Indigenous trades or project manager		6 7 8 9 10	6 7 8 9 10

Annexure C

Healthabitat Licence Deed for Housing for Health *or* Fixing Houses for Better Health Projects

V010804

Deed between Healthabitat Pty Ltd ABN 96 087 592 489 (HH) and the party identified below as the Project Licence Holder (the PLH) for the use by the PLH under licence of HH's 'Healthabitat Survey / Fix Process' on houses at the Project.

	1. Project Code / name		The Project Code assigned by HH is to be used in ALL communication and documents to ensure confidentiality
	2. Grant of Licence	HH licences the Process to the PLH for use in relation to the Project. This licence will last until the Project is completed or until any earlier termination of it by HH in accordance with this agreement.	
	3. Intellectual property, copyright and related matters		
		a) In this document ' the Feasibility Report ' means the feasibility report prepared by the PLH in relation to the Project and delivered by the PLH to HH; and ' the Process' means the process for assessing and repairing house function developed by Paul Pholeros, Stephan Rainow and Paul Torzillo presently known as the 'Healthabitat Survey / Fix Program ,the methodology of which was first published in 1993 in 'Housing for Health' (ISBN 0646 17334 0) and has since been modified and the main elements of which are in a variety of forms described in this document; and 'the Project' means the house function survey/fix project details of which appear under the heading 'Project Details' below and which has been given the name appearing under the heading ' Project Name' above (on the right). b) The PLH acknowledges that in elements of the Process (including the survey forms, the computer software, job worklists and reports produced by the computer software) there is copyright which is owned by HH. c) The PLH must use the Process and the things supplied by HH under this Deed only for the purposes of the Project, and when the Project is finished (or this licence is terminated by HH) the PLH must return the computer disc and all unused survey forms to HH.	
		d) The PLH must not make (or allow others to make) copies of the survey forms except for purposes of the Project. e) The PLH must not copy the HH computer software except to the extent that copying is necessary to apply the Process to the Project. All copies must be destroyed when the Project is finished (or this licence is earlier terminated by HH).	

Annexure C

		f) The PLH must do nothing to detract from the integrity of the Process. The PLH must take all steps in the Process in the order and manner intended by HH as evidenced by the survey forms and the computer software or as indicated by HH when giving any back-up support pursuant to this document. g) The PLH must not state orally or in writing or otherwise represent that HH's role in relation to the Project has been anything other than to have licensed the Process to the PLH for use in relation to the Project. That means , among other things, that the PLH must make no representation that HH endorses the overall aims of the Project or the methodology or results of the Project.	
	4. Area Manager Supervisor (AM)	The AM is the person named as such in clause 6. The AM is contracted to manage the Project and the use of the Process in relation to the Project. The PLH acknowledges that the engagement of the named AM for those purposes was central to HH's willingness to grant this licence.	
	5. Items deliverable by HH to the PLH.	Under this licence Deed HH agrees to supply the following **Generally 1= yes / OK, 2 = no or not OK**	
	a) Survey Forms for each house in the nominated community		The survey forms incorporate the possibility of 2 x surveys. The version of Survey Forms that will be supplied is **indicated to the left**
	b) Computer software:		1 x copy of the HH's computer software on CD. **Version indicated to the left** The software file will have a data base file name (eg. XXX11.mdb). -The computer software allows for customised: - data entry - job sheets, automatically produced for plumber, electrician, stove repairer, pest contractor and general repairs on a house by house basis - summary reports, automatically produced, of all critical healthy living practices - summary reports, automatically produced, of all healthy living practices, houses completed, missing information - graph of the critical safety and health function of ALL houses in the community.) - financial summary reports
	c) Toolkit list and consumables		Specification for all testing and fix tools and basic consumables (tools and consumables to be supplied by the licence holder). **Version indicated to the left**
	d) Back up support required	1 2	training of field or management staff before survey / fix 1
		1 2	provide survey staff at SF 1 or 2
A		1 2	data analysis (scope to be defined in attached)
A		1 2	specialist monitoring of water, air temperature, hot water temperature, humidity, dust mites etc (scope to be defined in attached)
	e) Trade work sheets **Item deleted**		Data base now includes formerly separate 'Trade work list sheets' (3.21, 3.31, 3.32, 3.7, 3.8)
	f) Financial spreadsheet **Item deleted**		Data base includes or has as an adjunct a financial module replacing the previous 'Area Manager Supervisor (AM) Financial Reporting Spreadsheets (electronic version)'

	g) Final data, which will include:	Data base file: Microsoft Access 2000 data base files on CD for each community at the completion of each project with HH identification numbers only for each house. - 1 copy of the HH Final Report on each project to be forwarded to the PLH by HH and - 1 copy of the HH Final Report on each project to be forwarded to the AM by HH.	
	HH will supply the following reports for the following types of project:	1 2 3 4	1 Data by individual project - HH community and house identification numbers only, list of link between HH and actual house numbers held only by the project community. 2 Data by regional project with more than 1 participating community and a common regional licence holder - regional licence holder would hold linking list of community names and code numbers only,list of link between HH and actual house numbers held only by the project communities 3 Data by State (State with more than 1 participating community and a common state licence holder - state licence holder would hold linking list of community names and code numbers only, list of link between HH and actual house numbers held only by the project communities. 4 Data by National project (national common licence holder holds all community names, states have community identification numbers only for ALL OTHER participating States, BUT details of community names for their individual state, list of link between HH and actual house numbers held only by the project communities).
	h) On completion of the Project,	HH will deliver to the PLH a CD containing MS Access Database with All Data File. If the Project is one of a number being carried out concurrently by the PLH under separate licences from HH, HH will use reasonable endeavours to deliver aggregated data to the PLH when the last Project to be completed has been completed.	
	6. Project Details		
	Name of Project Licence Holder ('PLH'), being the organisation licenced to use the Process under this licence		
	Full PLH address for mailing		
	Project Community contact name and phone fax contact details:		
	Name and full mailing address of community to which project relates.		
	Name of Area Manager Supervisor ('AM') being the accredited HH Manager for this project.		
	Date of Feasibility Report		

Annexure C

	Total houses to be surveyed and fixed as identified by the Feasibility Report		
	Commencement date of the Initial Survey / Fix		
	TOTAL Proposed Project budget as submitted with the Feasibility Report		
	7. Project Staff	The PLH agrees that it will cause the key staff used on the Project to be as set out below and that none of the names or other particulars set out below will change unless and until the PLH has consulted HH about the change and has taken account of HH's views in relation to the change: 0= none identified 1= one person identified 2= 2 or more people identified for larger projects	
A	**Total expected number of Aboriginal staff**		including all trades, consultants, survey and liaison staff (as per list of names from Feasibility Report or attach updated list)
A	**Total expected number of NON-Aboriginal staff**		(as per list of names from Feasibility Report or attach updated list) do NOT include trades and Area Manager Supervisor (AM)
	Plumber name, licence number and contact	0 1 2	
	Electrician name, licence number and contact	0 1 2	
	Data manager name and contact	0 1 2	
	(if required) Capital Upgrade Architect / building consultant name, organisation if applicable and contact details	0 1 2	
	Other Technical staff	0 1 2	
	8. Particular rights and obligations of the PLH and the AM		

	a) Reporting back on survey fix results by the AM and the PLH.	1) facsimile copy of : - THE LAST USE AND HLP SUMMARY report from the main menu of the database (this includes total number of houses surveyed and total number of missing data items). to fx 02 99731316 within 3 days of the end of the survey / fix week at **both Survey Fix 1 and 2**
		2) A copy of data base information from Survey / Fix 1 and 2 at 3 specific stages (1= completed S/F1 **two weeks after** SF1 week, 2= **6 weeks after SF1** completion to indicate the trade works results, 3= completed S/F2 **two weeks after** SF2 week, 4=Fully completed data base, **3 months after SF2 week**) to be forwarded to HH by ONE of the following ways. - emailed to HH at the completion of each survey pp@s054.aone.net.au **Before emailing the data base should be 'COMPACTED' and then zipped (WinZip) before sending.** - compact discs forwarded by express package to HH PO Box 495, Newport Beach NSW 2106
		3) 1 copy of any final report completed by or for the Project Licence Holder to be forwarded to HH within 3 months of the completion of the 2nd Survey Fix week.
	b) Description of HH's Role on Documents.	An agreed statement clearly identifying the role of HH must be incorporated by the PLH into any Project documentation. An acceptable statement may be in this form: *"The PLH has been approved to use the housing survey/fix process developed by Healthabitat Pty Ltd to enable the assessment and repair of housing function in relation to the Project. Healthabitat Pty Ltd has not been involved in any other aspects of this project."*
	c) Confidentiality of data.	Each house to be surveyed must be coded with a discrete Housing for Health identifying number, distinctly different to any current community or street number. There must be no names of any residents on any documents.
	d) Survey and fix.	Tool kits must be made available by the PLH to all survey teams. Minor fix work by the survey teams MUST be encouraged by the PLH. (light bulbs, sink and basin plugs, toilet rolls etc should be provided by the PLH to all teams). An immediate fix component, commencing not more than one day after the first house has been surveyed, must be included by the PLH in any work undertaken. This requires a budget and suitable qualified staff (plumber and electrician).
	9. Some rights of HH	
	a) Termination because of failure to attend training session or failure to use training boards.	HH has the right to terminate this licence immediately if any of the representatives of the PLH nominated for the purpose the PLH after consultation with HH is absent from any part of the pre-Project information and training session which HH will stage or if during the Project the PLH fails to make appropriate use of the training boards prepared by HH.
	b) Termination because of Poor Data quality. HH has the right to terminate this licence immediately, without notice, if any of the following things happens:	
	1) many survey items missed	Greater than 100 items at any stage in a project as recorded in the Last Use and Summary window on the main menu page of the data base
	2) inaccurate data by the survey team	Lack of team leader checking at the house on completion of survey, Lack of regular attention to the Data Validity Check system found on the Main menu of the database by the Data Manager , poor initial team training or lack of team support by the Survey Manager.
	3) poor data entry	Lack of immediate survey data entry, leading to a delay in fix works commencing, entry mistakes or missing data unchecked by the Data Manager and /or Survey Manager. Slow or inaccurate entry of trade and or financial data throughout the project.

Annexure C

	4) consistently poor writing up of any Trade work list sheets by any trade electrician or plumber.	Original sheets not returned within 24hrs of issue, any categories not completed by the trades, inaccurate time calculations, poor costing calculations, lost sheets
	5) consistently poor writing up of the total project Financial information	Lack of continuous, regular updating of all financial details of the project including trade costs and invoicing, staff costs etc. Prompt payment all project expenses by the Financial Manager and the PLH as checked by the Survey Manager
	6) the PLH breaches clause 1 or paragraph (c) of clause 8.	
	c) Termination because of Survey process quality. HH has the right to terminate this licence immediately, without notice, if any of the following things happens:	
	1) poor consultation with the project householders	The residents of houses in the project were not adequately informed of the survey fix schedule, process, and the general project aims, limitations and methods
	2) low daily access rates to the project houses for survey	The residents of houses in the project were not generally informed or accepting of the HfH/FHBH project and houses were not available for Survey Fix or the process of gaining permission to enter houses was poorly coordinated and slow
	3) low local community project staff numbers	Minimum of 2 local staff on each survey fix team and an overall rate of over 65% of staff to be local community people including survey fix staff, data entry staff, liaison staff, trades assistants
	4) low levels of survey team fix work, (where the fix work exists)	As indicated by the Items Fixed by the Survey Teams (Report 3.6) on the Trade Worklists Menu
	5) insufficient tool kits or inadequate tool kits for testing and fixing	As a guide at least 1 tool kit + 1 kit for every 20 houses(or part) in the project up to 100 houses (ie. 35 houses would require a minimum of 1 + 2 kits = total of 3 tool kits)
	6) low levels of trade fix work during the survey, (where the fix work exists)	As indicated by the All Work Done (Report 3.4) on the Trade Worklists Menu
	7) poor priority of fix work ie NOT targeted to safety and health	As indicated by the All Work Done (Report 3.4) on the Trade Worklists Menu
	8) any delay in trade fix work	As indicated by the All Work Done (Report 3.4) on the Trade Worklists Menu
	9) failure of trades to commence returning trade work list sheets within 24 hours of starting work	As indicated by the All Work Done (Report 3.4) on the Trade Worklists Menu
	10) poor data entry, computer and printing equipment	Office equipment not as per HH minimum specification
	d) Termination because of change of the AM	HH has the right to terminate this licence immediately, without notice, if without HH's written consent the AM named in this Deed is replaced with another person.
	e) No right to compensation	The PLH shall not have any right to compensation in the event that HH terminates this licence under paragraph (e),(f) or (g) above.
	f) Disclaimer by HH	HH believes that the survey forms, if completed accurately, will identify matters which are relevant to the health and safety of housing, but does not warrant that they identify all such matters.

	g) HH has no responsibility for acts or omissions of others	HH has no responsibility for the acts or omissions of the AM or the members of the survey teams (all such persons being contracted for the Project to a party other than HH and none of them having, in relation to the Project, any legal relationship with HH).
	10. Computer equipment must meet standards set by HH	During the information and training session referred to in paragraph (a) of clause 9 HH will assess the adequacy of the computers and associated equipment which the PLH and the AM are proposing be used for the Project. The PLH and the AM must use only those parts of same deemed by HH to be adequate for the Project. The balance will be supplied by HH. For what HH selects from the PLH's and AM's equipment HH will pay to the PLH a usage fee to be agreed upon by HH and the PLH at the information and training session.
	11. Retention and Use of Project Data by HH	After completion of the Project, HH will retain all data collected from the Project (including a set of the data delivered to the PLH pursuant to clause 5 (h)) and will have the right to use that data (and the right to allow the PLH to use that data) for any purpose related to improving the living conditions of Aboriginal or Torres Strait Islander people anywhere in Australia or the Torres Strait Islands. No such use of the data will name householders, house numbers, house addresses or community names. Instead of house numbers and addresses the HH House Code Numbers will be used, and instead of community names the HH Community Code Numbers will be used. HH will also have the right to use the data for any purpose, other than the purpose referred to above, but only with the consent of the participating community and PLH.

Annexure C

	12. Fees	The PLH agrees to pay to HH immediately on signing this Deed a fee calculated as indicated below. Fees ensure the ongoing developmentand improvement of the Housing for Health process, the supply of all parts of the process to the project, quality assurance and optional additional services.	
	TAX INVOICE to	PLH Name and address:	
	Healthabitat Pty Ltd ABN 96 087 592 489, PO Box 495 Newport Beach, NSW. 2106 Phone (02) 9973 1316, Fax (02) 9973 1316		
	1) Development Fee:	$0 / house	A per house amount (indicated at left) for each house to be surveyed and fixed for the preparation of all survey forms, software and all parts of the survey fix process;
	Total houses to be surveyed and fixed		(as indicated in the Feasibility Report)
	Total Development Fee =	$0	
	2) OPTIONAL Requested Additional Project Staff		
A	**a) Training of survey-fix staff or project management staff**		Detail staff here
A	**b) data entry or data manager staff**		Detail staff here
A	**c) general survey- fix work**		Detail staff here
A	**d) specialist monitoring (temperature, water, power)**		Detail staff here
	Total Requested Additional staff	$0	
	3) On site monitoring		**monitoring the quality of survey information produced as required by the licence**
	Labour		1 day per 40 houses or part thereof)*$800/day,- min 1 day / max 2 days.
	Travel		Economy Travel at cost (air/road)
	Accommodation		1 night per 40 houses or part thereof)*$180/night
	Total On Site Quality Monitoring	$0	
A	**4) OPTIONAL All other services**		Time required ONLY IF REQUESTED to attend special meetings, presentations to boards, detailed data analysis, Data support above and beyond 2.5hrs HH Data Manager support during any single project etc) @ $100/hr
	Total All other services =	$0	
	Total Project Fee	$0	
	GST		
	Total Project Fees	$0	**INCLUDING GST**

	11. Signatures to the Deed	
	Signed, sealed and delivered for and on behalf of **Healthabitat Pty Ltd** ABN 96 087 592 489	
	Full name of HH Director	
	Witnessed by	
	Signed, sealed and delivered for and on behalf of the **PLH (Licencee)**	
	Full name of the **PLH** Signatory or Director	
	Witnessed by	

	SPECIAL CONDITIONS			**(if there are any special conditions each is to be initialled by both parties signing the deed)**
		HH	**PLH**	Conditions
	Initials			1
	Initials			2
	Initials			3

	General Contact for HH	02 99731316 ph, 02 99731316 fx email: pp@s054.aone.net.au postal: Healthabitat P/L, PO Box 495 Newport Beach NSW, 2106
	For all data issues contact Healthabitat Data Systems Manager Tim Sowerbutts	02 95172747 ph, 02 95501529 fx email sbutts@qsrc.com.au

Housing for Health / Fixing Houses for Better Health: Survey Fix 1 Sheets

COVER SHEET	S/ F **1** Date and **FULL** Team initials	House ID Number	

Checklist to be completed by Survey Fix Team Leaders BEFORE leaving the house

SF1		Notes
☐	**Ensure toolbox is out of the easy reach of children**	.....
☐	**All questions answered**	.....
☐	**All initials on sheets filled in**	.....
☐	**All sheets in order (check number bottom right hand corner)**	.....
☐	**All tools collected from the house**	.....
☐	**Householders informed of faults**	.....
☐	**All fix work has been recorded on sheets**	.....
☐	**Fridges / freezers checked ON**	.....

Data entry checklist to be completed by data entry worker

SF1		Notes
☐	**Preliminary data entered**	.....
☐	**Additional information needed (note Q's at right)**	.....
☐	**Additional information OK**	.....
☐	**All data checked, entered & OK**	.....

Community ID			Cover Sheet of 15 sheets

House Summary (1)

Survey / Fix 1
Team initials
Date

House ID Number

		Survey 1	Talking with the householder
1.1	People living in the house		Record the number of people using the house at and around time of survey. All children to be included
1.45	Disabled and frail aged access	0 1 2	Ask the residents if any disabled or frail aged person/s use the house. **0**= NO disabled or frail aged person using the house, no one has trouble using the house **1**= disabled or frail aged person IS using the house and access to ALL areas is OK, **2**= disabled or frail aged person IS using the house and access is POOR to SOME parts of the house.
	Pets, pests and animals		
1.29	Number of dogs at survey	0 1 2	Number of dogs in the house and yard. **0**= none, **1**= 1 - 4, **2**= 5 or more
1.30	Number of cats at survey	0 1 2	Number of cats in the house and yard **0**= none, **1**= 1 - 4, **2**= 5 or more
1.31	Mice or rats present	0 1 2	Any evidence of mice or rats ? **0**= none, **1**= some, **2**= many
1.33	Ants or cockroaches present	0 1 2	**0**= none, **1**= some (any type), **2**= many (any type)
1.34	Are there termites	0 2	Are there reports or evidence of termites / white ants? **0**= NO termites **2**= termites present or reported
1.36	Mosquitoes or flies present	0 1 2	Any reports or evidence of mosquitoes at ANY time of the year? **0**= none, **1**= some, **2**= many
1.38	Other pests	0 2	**0**= residents report no other pests present, **2**= other pests **ARE** present at survey (white tail spiders, redbacks, snakes, camels, crocodiles, ticks etc)
1.46	Rubbish bin - collection and disposal	1 2 3 4	Is there a kitchen bin and does rubbish get collected from a main house bin say once a week **1**= kitchen bin OK AND rubbish is collected from the house, **2**= kitchen bin OK BUT rubbish is NOT collected regularly from the house, **3**= NO kitchen bin, BUT rubbish is collected from the house, **4**= NO kitchen bin AND rubbish is NOT collected regularly from the house
1.48	Age of the house	1 2 3	House (or major upgrade works) **1**= less than 2 years old, **2**= 2 to 10 years old, **3**= more than 10 years

Service 1 : House Summary (continues over) **sheet 1 / 15**

House Summary (2)

Survey / Fix 1
Team initials
Date

House ID Number

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Survey 1	Outside the house
1.4	Approx. house area X		Give an approximate area of enclosed, lockable space NOT including verandahs. (sq.m).
1.5	Type of walls	1 2 3 4 5	**1**= SOLID : brick, concrete block, concrete or earth **2**= brick veneer, **3**= STEEL FRAME with fibro-cement, timber, or steel or timber cladding ,**4**= TIMBER FRAME with fibro-cement, or steel or timber cladding **5**= OTHER (insulated panel, logs etc)
1.3	Fenced yard area	0 1 2	**0** = no fence, if fenced find total yard area including house **1**= more than 900sqm, **2**= less than 900 sqm
1.6	Yard fence and gates OK	0 1 2	Is the fencing in good order with vehicle and people gates? **0**= no fence, **1**= fence and gates in good condition and able to close the yard area, **2**=fence / gates available in poor condition
1.7	Outside cooking areas	1 2	Any cooking fires, yard kitchens, drum ovens, BBQ's etc.?
1.8	Mosquito breeding areas	0 1 2	Number of places with still water (tyres, drums, puddles). **0**=no water, **1**=1-4, **2**=5 or more places
1.9	Working motor cars in yard	0 1 2 3	How many working cars near the house? **0**= none, **1**=1car, **2**=2cars, **3**= 3 or more cars
1.10	Shade planting	1 2	Do any trees or plants shade the house giving a cooler house or cool places to sit outside?
1.11	Food planting	1 2	Do any trees or plants provide food that can be used by the residents?
1.12	Windbreak planting	1 2	Do any trees or plants shelter the house or provide sheltered places to sit outside from cold winds?
1.14	Yard taps	0 1 2 3	How many taps are provided? **0**= no taps, **1**= 1 tap, **2**= 2 taps, **3**= 3 or more taps. **IF 0,THEN GO TO**
1.49	All yard taps OK?	1 2	**1**= all yard taps OK no leaks, **2** = any yard tap leaking or damaged in any way
1.20	Meter box OK (meter box may include switchboard)	1 2	**1**= main meter box OK? (visual inspection) or **2**= main meter box damaged or not available.
1.21	Power meter available ?	0 1 2	**0**= no meter, **1**= 1 meter, **2**= 2 meters. **IF 0,THEN GO TO**
1.50	Off peak power meter available?	1 2	**1**= yes , off peak power is available and connected to this house : **2** = no
1.51	All power meters OK ?	1 2	**1**= all power meters are OK **2**= any power meter is damaged or poorly mounted
1.23	Electrical earth connection	1 2	Is the earth connection able to be found, has a good connection, is undamaged and looks OK?

Comments .....

House Summary (3)

Survey / Fix 1
Team initials
Date

House ID Number

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Survey 1	Outside the house (continued)
1.24	Main water meter found & OK	0 1 2	Can you find a main water meter for the house (it may be near the front boundary and hard to find) **0**= no water meter found, **1**= found and OK, 2= not OK
1.25	Isolation valve (water stop tap) available and OK	0 1 2	Can you find an isolation valve, also called 'stop' or 'shut off' tap (it will usually be near the water meter)? **0**= not found, Turn valve fully OFF, open fully and if a tap type valve TURN BACK ONE turn. **0**= not found, **1**= found and working OK , **2** = 'frozen', jammed leaking or not working in any way
1.27	All waste water OK	1 2	No obvious smells, pools of waste water in the yard, or waste leaks?
1.28	Gas installation OK	0 1 2	**0**= no gas flowing,**1**= gas installation OK: (check all following) mains gas or bottled gas, gas bottles installed, pad for bottles OK, bottles secured OK, valves & pipework OK, current compliance plate fitted, **2**= mains gas or bottled gas installation NOT OK.
3.1	Air temperature		At time of survey record shaded temperature outside the house ° C. using the thermometer
1.43	Rainwater tank working	0 1 2	**0**= no rainwater tank, **1**= rainwater tank is available and working, **2** = rainwater tank is not OK
1.52	Are there gutters & downpipes	0 1 2	**0**=no gutters & downpipes, **1**= gutters & downpipes are present and OK, **2**= gutters & downpipes are present and not OK
1.44	Stairs and handrails are OK	0 1 2	**0**= the house is on ground and stairs / rails not essential, **1**= all stairs and balcony handrails are secure, **2**= all stairs and balcony handrails are **NOT** secure
	Grease trap		**If NO grease trap/sump answer Q 9.01 and then go to 9.10**
9.1	Grease trap available?	0 1	Many houses will NOT have grey water sumps / grease traps / arrestors. 0= not available
	Septic Tank		**If NO septic tanks answer Q 9.10 and then go to next sheet**
9.10	Septic tank available	0 1	If there is a common effluent drain or soakage trenches there WILL be a septic tank. 0= not available **IF IN DOUBT ASK.**
9.22	Number of Septic tanks	1 2	**1**=1 tank system (combined grey and black water), **2**= 2 tank systems (separate grey and black water)
	Soakage Trenches		
9.16	Soakage trench available and OK	0 1 2	**0**= NO soakage trenches installed, effluent from septic tank piped to common effluent line **1**= soakage trenches working well, no reported problems, **2**= soakage trench problems observed at survey (ie poor drainage from the house, smells, wet ground) OR resident reports of trenches NOT working

Comments

Service 1 : House Summary (continues over) **sheet 3 / 15**

House Summary (4)

Survey / Fix 1
Team initials
Date

House ID Number

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Survey 1	BY THE SURVEY TEAM LEADER
1.15	Electricity available	1 2	Is electric mains power or solar power connected and working at the time of survey?
1.54	Electrical switch board OK	1 2	Check the consumer switch board, it may be in the main meter /power box or separate inside the house, Check circuit breakers / fuses, dust cover over etc **1**= all OK , **2** any POSSIBLE faults
1.22	Safety switch OK	1 2	Safety switch is provided and tests OK? Press TEST button to test and check if power is disconnected
1.16	Water available	1 2	Is water connected and working at the time of survey?
1.17	Waste Water system type	0 1 2 3 4	**0**= none available, **1**= deep sewer system, **2**= septic tank and common effluent system, **3**= septic tank and soakage trenches, **4**= aerobic waste water treatment system IF IN DOUBT ASK
1.18	Type of gas supply, if any	0 1 2	**0**= no gas system, **1**= bottled gas allowed for, **2**= mains gas piped to the house
1.39	Carpets & dust mites	0 1 2 3	Dust mites may increase the risk of asthma and can breed in carpets. Check for carpet in house **0**= no carpet or rugs, **1**= rugs only, **2**= some carpeted rooms, **3**= carpet to all rooms
1.2	Wet area services Shw/Ldy/toilet	1 2 3	**1**= fully separated Sh/Ldy/toilet, **2**= partly combined toilet- (Ldy/Sh), **3**=all in one room.
1.40	How many showers	0 1 2	Note the number of showers in/near the house. Survey the shower residents nominate as the main shower. **0**= no shower, **1**= this house has one shower only, **2**= more than one shower
1.42	How many hand basins	0 1 2	Note the number of hand basins in/near the house. Survey the hand basin residents nominate as the main hand basin. DO NOT INCLUDE THE LAUNDRY TUB. **0**= no hand basin, **1**= this house has one hand basin only, **2**= more than one hand basin
6.1	How many bath tubs are available	0 1 2	Note the number of bath tubs in/near the house. Survey the bath tub residents nominate as the main bath tub. **0**= no bath tub, **1**= this house has one bath tub only, **2**= more than one bath tub
1.41	How many flush toilets	0 1 2	Note the number of toilets in/near the house Survey the toilet residents nominate as main WC. **0= no toilet , 1**= this house has one toilet only, **2**= more than one toilet
1.53	How many kitchens are available	0 1 2	Note the number of kitchens in/near the house. Survey the kitchens residents nominate as the main kitchen. **0**= no kitchens, **1**= this house has one kitchen only, **2**= more than one kitchen
1.55	How many laundries	0 1 2	Note the number of laundries in/near the house. **0**= no laundry, **1**= 1 laundry , **2**= more than 1 laundry
1.47	Number of bedrooms		Record number of bedrooms in the house.
11.31	Datalogger installed in fridge	0 1 2 3	**0**= no data logger, **1**= logger placed this visit **2** = logger downloaded and removed this visit **3**= logger downloaded and replaced this visit)

SF1 Electrical Worksheet, to be placed after Sheet 5/15

Power points : Use the tester in the toolbox. If you can plug the tester in it counts as 1 power point. Check if all points test OK, are well secured to wall, not loose and undamaged & not cracked

	1	2	3	4	5	6	7	8	9	10	**Total**	Total **NOT** OK
All bedrooms												
All common living areas including halls												
Wet areas (basin, shower, toilet, bath & laundry)												
All outside ar ea including garages, verandahs,												
Kitchen												
Power points - record these totals in the main survey sheet 5												
											2.5	**2.6**

Lights Each light will have a switch, fitting and globe: Count fittings with many globes as **1** light only. Check the fitting is secure and not damaged, light switches are not pushed in, secure, undamaged, globes are OK

	1	2	3	4	5	6	7	8	9	10	**Total**	Total Lights **NOT** OK	total switches **NOT** OK	total fittings **NOT** OK	Total globes **NOT** OK
All bedrooms															
All common living areas including halls															
Wet areas (basin, shower, toilet, bath & laundry)															
All outside ar ea including garages, verandahs,															
Kitchen															
Lights- record these totals in the main survey sheet 5															
											2.7	2.8	2.9	2.10	2.11

Ceiling Fans: A fan is OK if all parts of the fan are working. Test all fans and make sure the fan, blades and control switch are working

	1	2	3	4	5	6	7	8	9	10	**Total fans**	Total blades or fan NOT OK	total control switch NOT OK	**Total fans NOT OK**
All bedrooms														
All common living areas including halls														
Wet areas (basin, shower, toilet, bath & laundry)														
All outside ar ea including garages, verandahs,														
Kitchen														
Ceiling Fans – record these totals in the main survey sheet 7														
											3.16			3.17

House Fabric (1)

Team initials
Survey / Fix 1
Date

House ID Number

		House Linings (NOT wet areas such as shower, laundry, toilet)	Survey 1	CHECK CAREFULLY WALLS OF ROOMS THAT ADJOIN SHOWERS, BATHS AND LAUNDRIES AS LEAKS THROUGH THEE WALLS MAY CAUSE DAMP AND MOULD
	2.1	Walls: inside condition	1 2 3	**1=** good (all OK), **2=** fair (mould present, minor cracks), **3=** poor (holes, cracks, water stains, mould)
	2.2	Walls: outside condition	1 2 3	**1=** good (all OK), **2=** fair (minor cracking, repair needed), **3=** poor (holes, large cracks or gaps)
	2.3	Ceilings: condition	1 2 3	**1=** good (all OK), **2=** fair (mould present), **3=** poor (holes, cracks, water stains, mould)
	2.4	Floor: finish & condition	1 2 3	**1=** good (all floors OK), **2=** fair (NOT unsafe but poor finish), **3=** poor (holes, unsafe)
		Power points NOTE: GPO = general power outlet = power point. Each point that the tester can be plugged into = 1 power point.		
	2.5	Power points – total number in the house		Tester in the toolbox. If you can plug the tester in it counts as 1 power point. Check if all points test OK, are well secured to wall, not loose and undamaged & not cracked. Use the **Electrical WORKSHEET**
	2.6	Power points- number tested **NOT OK**		Power points that do NOT test OK using the tester or are NOT secure or are damaged. Use the **Electrical WORKSHEET** TO HELP KEEP COUNT
	2.7	Lights - total number		Count fittings with many globes as **1** light only. Use the **Electrical WORKSHEET** TO HELP KEEP COUNT
	2.8	Lights - total number **NOT** OK		Count fittings with many globes as **1** light only. If ANY globe works the light **IS** working OK. Use the **Electrical WORKSHEET** TO HELP KEEP COUNT
	2.9	Light switches - number **NOT** OK		Count the number of light switches not working (pushed in, not secure, damaged). Use the **Electrical WORKSHEET**
	2.10	Light fittings **- number NOT** OK		Count the number of light fittings damaged or not secure. Use the **Electrical WORKSHEET**
fixed	2.11	Light globes / tubes- **NOT** working		Count the number of light fittings with no globes or with the globe or tube burnt out. Use the **Electrical WORKSHEET**
	2.12	Type of lights, globes/tubes	1 2 3	Are MOST lights either **1=** bulbs/ globes, **2=** tubes (fluoro), **3=** energy saving lights
		Windows and Doors		
	2.13	Windows 0- total number		Count all windows including fixed glass panels. USE THE WORKSHEET ON SHEET 6
fixed	2.14	Windows - total NOT OK		Check easy to open, lock, glass or glazing material OK. USE THE WORKSHEET ON SHEET 6
	2.15	Inside doors - total number		Count doors inside the house between rooms and halls etc. USE THE WORKSHEET ON SHEET 6
	2.16	Outside doors - total number		Count doors between the inside and outside of the house. USE THE WORKSHEET ON SHEET 6
fixed	2.17	Inside and Outside doors – total number NOT OK		Check how many doors are damaged or not working well, check handles and hinges: (NOTE below which doors ARE damaged). USE THE WORKSHEET ON SHEET 6

Other Items Fixed

House Fabric (2)

Team initials Survey / Fix 1	**House ID Number**
Date	

	Insect Screening	Survey 1	
2.18	Outside openings total no.		ADD all opening windows & all outside doors (that could let in insects if not screened).
2.19	Openings NOT screened - total no.		Count the number of opening windows and outside doors that are NOT effectively screened. Check carefully for tears, rips or gaps.
2.20	Smoke detectors- number fitted	0 1 2 3	Count number of smoke detectors fitted. **0**= no smoke detectors fitted, **1**= 1 smoke detector fitted, **2**= 2 smoke detectors fitted, **3** = 3 or more fitted.
2.21	Smoke detectors- number NOT testing OK	0 1 2 3	Test number of smoke detectors working OK. **0**= ALL working, **1**= 1 is NOT working, **2**= 2 are NOT working, **3**= 3 or more are NOT working
2.22	Escape from fire is possible	1 2 3	Is escape from fire possible from **1**= ALL outside doors and ALL windows, **2**= ALL outside doors and SOME windows, **3** = outside doors ONLY.

Work area **To help keep track of all the doors, windows etc record number of items in the house with a ✓ and then record the items not working with ✘ or/and a letter as indicated. Then count the results and enter the numbers as needed on this sheet**

Windows ✓= 1 OK ✘ = 1 not OK					Doors ✓= 1 OK ✘ = 1 not OK			Screens ✓=1 OK ✘ = 1 not OK			Smoke detectors ✓= 1 OK ✘ = 1 not OK
opening			fixed glass		Inside		Outside				
1	6	11	1	6	1	6	1	1	6	11	1
2	7	12	2	7	2	7	2	2	7	12	2
3	8	13	3	8	3	8	3	3	8	13	3
4	9	14	4	9	4	9	4	4	9	14	4
5	10	15	5	10	5	10	5	5	10	15	5

General comments :write brief, clear notes

House Heating and Cooling	Team initials Survey / Fix 1	House ID Number	
	Date		

	Climate	Survey 1	
3.2	Air temperature-inside house		At time of survey record temperature in the main living room of the house ° C.
3.4	Weather	1 2 3	**At the time of survey / fix 1**= sunny and fine, **2**= cloudy and or rain, , **3**= strong wind
	Heating		
3.5	Minimum winter temperature	1 2 3	Ask locals about minimum winter temperature ° C. **1=** less than 0° C, **2=** 0 to 10° C, **3=** 10° C+
3.7	Is any roof insulation installed	1 2	**1**= insulation fitted, **2**= NOT known if insulation has been fitted or definitely NOT fitted
3.8	Is any wall insulation installed	1 2	**1**= insulation fitted, **2**= NOT known if insulation has been fitted or definitely NOT fitted.
3.9	Type of heating system installed	0 1 2 3 4 5 6 7	**0**= no heating system, **1**= reverse cycle ducted, **2**= reverse cycle NOT ducted, **3**= open fire, **4**= wood combustion heater, **5**= ducted gas heating, **6**= NON ducted gas heating, **7**= plug in electric,
3.10	Heating system OK	1 2	If heating is available, run for at least 5 minutes **OR** ask the residents **1=** OK, **2=** not working
3.11	Max. summer temperature	1 2 3	Ask locals about maximum summer temperature. **1=** less than 25 °C, **2=** 25 to 40°C, **3=** 40+ °C
3.12	Windows sun protected	1 2	Are the north, west and east windows protected by an awning or verandah from the sun ?
3.13	Are there covered verandahs	0 1 2 3 4	Note on how many sides of the house have covered verandahs. **0=** none, **1**= 1 side, **2**= 2 sides, **3**= 3 sides, **4**= 4 sides
3.14	Type of cooling system installed	0 1 2 3 4 5	**0**= no cooling system, **1**= Air conditioning ducted, **2**= Air conditioning NOT ducted, **3**= evap. cooling ducted, **4**= evap cooling NOT ducted, **5**= ceiling fans.
3.15	Cooling system OK	1 2	If cooling system available, run for at least 5 minutes **OR** ask the residents.**1**= OK, **2**= not working
3.16	IF Ceiling fans: total number		Use the **Electrical WORKSHEET** to count all fans, checking the fan unit on the ceiling and the control switches
3.17	IF Ceiling fans: total number NOT **OK**		A fan is OK if all parts of the fan are working. Use the check box ON **Electrical WORKSHEET** to inspect all fans and switches.

General comments :write brief, clear notes

CIRCLE if **fixed** at survey	**Shower**	Team initials Survey / Fix 1 Date	**House ID Number**	

		Shower Test	Survey 1	IF NO SHOWER IS AVAILABLE LEAVE THIS SHEET
	4.1	Shower water in: hot OK	1 2	Leave running for 1 minute and check water flow & pressure OK. **1**= pass, **2**= fail
	4.2	Shower water in: cold OK	1 2	Leave running for 5 minutes and check water flow & pressure OK. **1**= pass, **2**= fail
	4.3	Hot water: temperature OK	1 2	Run for 1 minute &.use thermometer. **1**= temp.greater than 44 °C **2**= temp. less than 45 °C
	4.4	Shower taps: hot OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
	4.5	Shower taps: cold OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
Fixed	4.6	Shower rose OK	1 2	Check it is secure and not leaking at the joints and water is flowing OK.
Fixed	4.7	Shower drainage OK	1 2	Check after cold water has been flowing for at least 5 minutes. **1**= pass, **2**= fail
	4.8	Size of shower drain OK	1 2	Use tape to record size in millimeters. **1**= 100 or greater **2**= less than 100
		Shower Area		
Fixed	4.9	Door & lock (inside only) OK	1 2	Can you have privacy in this area?
	4.10	Shower Walls OK	1 2	No holes, rust, surface not going to decay due to water etc. CHECK OTHER SIDE OF WALL
Fixed	4.11	Floor: floor waste OK	0 1 2	Use plastic tube & nearby tap run water min. 3 minutes through floor waste to test OK. **0**= floor waste not present, **1**= floor waste OK, **2**= floor waste is not OK.
	4.12	Floor: finish OK	1 2	Check finish: **1**= easy to clean and non slip.
	4.13	Floor: grade or slope to drain water OK	1 2	Use ball in toolbox to check grade: **1**= water on the floor would flow to a floor waste and the floor has enough fall to prevent pooling of water.
	4.14	Fixed ventilation OK	1 2	Can you get fresh air into room by using an openable window (with evidence of it being used) /, a vent or extractor
	4.15	Shampoo/soap holder OK	1 2	**1**= Shampoo/soap holder IS available.
Fixed	4.16	Clothes hook/s OK	1 2	**1**= hook/s provided and secure (no hooks increases chance of clothes blocking drains).
Fixed	4.17	Towel rails/ racks OK	1 2	**1**= rails provided & secure(no rails increases chance of towels blocking drains). CHECK fixing to wall.
Fixed	4.18	Shelves OK	1 2	**1**= shelves provided and secure (no shelves increases chance of towels/clothes blocking drains).
Fixed	4.19	Shower light/s working OK	0 1 2	**0**= light not available, **1**= 1 or more lights working, **2**= no lights working

General comments :write brief, clear notes

Other Items Fixed .....

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Service 4 : Shower sheet 8 / 15

CIRCLE **if fixed** at survey

Hand basin

(usually located in the bathroom, may be outside)

Team initials
Survey / Fix 1
Date

House ID Number

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Hand Basin test	Survey 1	IF NO HAND BASIN IS AVAILABLE LEAVE THIS SHEET
	5.1	Basin size OK	1 2	Could you use this basin to wash a small child ? **1**= yes **2**= no
	5.2	Basin hot water available	1 2	Leave running for 1 minute and use thermometer to check temp is over 44 °C.
	5.3	Basin cold water available	1 2	Leave running for 3 minutes minimum. **1**= pass, **2**= fail
	5.4	Basin tap: Hot OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
	5.5	Basin tap: Cold OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
	5.6	Basin tap/s shared ?	1 2	**1**= taps used for basin only , **2**= taps shared.
Fixed	5.7	Basin plug OK	1 2	Is a plug available ?
	5.8	Basin spout check OK	1 2	Is it secure and not leaking?
Fixed	5.9	Basin drainage OK	1 2	Fill basin to top, pull plug and allow to drain within one minute to test OK.
	5.10	Basin secure OK	1 2	Is the basin secure. ALSO check if there is a cupboard under if it is OK.
Fixed	5.11	Basin area door and lock OK	1 2	Can you have privacy in this area? **1**= door and lock OK, **2**= door and / or lock not OK
	5.12	Walls OK	1 2	No holes, surface not going to decay due to water etc.
Fixed	5.13	Floor: floor waste OK	0 1 2	Use plastic tube & nearby tap run water min. 3 minutes through floor waste to test OK. **0**= floor waste not present, **1**= floor waste OK, **2**= floor waste is not OK.
	5.14	Floor: finish OK	1 2	Check finish: **1**= easy to clean & non slip surface.
	5.15	Floor: grade to drain water OK	1 2	Use ball in toolbox to check grade: **1**= water on the floor would flow to a floor waste and the floor has enough fall to prevent pooling of water.
	5.16	Basin area ventilation OK	1 2	Can you get fresh air into room by using an openable window (with evidence of it being used) /, a vent or extractor
	5.17	Soap holder OK	1 2	**1**= Soap holder IS available.
Fixed	5.18	Shelf OK	1 2	**1**= shelf provided (no shelves increases chance of towels/ clothes blocking drains).
Fixed	5.19	Clothes hook/s OK	1 2	**1**= hook/s provided (no hooks increases chance of clothes blocking drains).
Fixed	5.20	Towel rail / racks OK	1 2	**1**= rail/s provided and securely fixed to wall (no rails increases chance of towels blocking drains).
Fixed	5.21	Basin area light/s working OK	0 1 2	**0**= light not available, **1**= 1 or more lights working, **2**= no lights working

General comments: write brief, clear notes

Other Items Fixed

Service 5 : Hand Basin **sheet 9/ 15**

CIRCLE if fixed at survey	Bath Tub	Team initials Survey / Fix 1 Date	House ID Number	

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Bath Test	Survey 1	IF NO BATH IS AVAILABLE LEAVE THIS SHEET
	6.2	Are bath / shower combined	1 2	This includes full baths and hip baths etc.
	6.3	Bath hot water available	1 2	Leave running for 1 min. and use thermometer to check temp. is over 44 °C. **1**= pass, **2**= fail
	6.4	Bath cold water available	1 2	Leave running for 3 minutes and check pressure.
	6.5	Bath taps : Hot OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
	6.6	Bath taps : Cold OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
Fixed	6.7	Bath plug OK	1 2	Is a plug available and secure? **1**= pass, **2**= fail
	6.8	Bath spout check OK	1 2	Is it secure and not leaking? **1**= pass, **2**= fail
Fixed	6.9	Bath drainage OK	1 2	Half fill the bath, pull plug and allow to drain, it should drain within 3 minutes. **1**= pass, **2**= fail
	6.11	Bath secure OK	1 2	Is the bath secure and OK? If metal/fibreglass/acrylic, check it is well secured and no holes. If tiled bath, check all tiles OK and waterproofing OK to bathroom and other adjoining rooms **1**=pass **2**= fail
		Bath Area		
Fixed	6.12	Door & lock (inside only) OK	1 2	Can you have privacy in this area? **1**= door and lock OK, **2**= door and / or lock not OK
	6.13	Walls OK	1 2	No holes, surface not going to decay due to water etc. CHECK WALL IN ROOM BEHIND BATH
Fixed	6.14	Floor: floor waste OK	0 1 2	Use plastic tube & nearby tap run water min. 3 minutes through floor waste to test OK. **0**= floor waste not present, **1**= floor waste OK, **2**= floor waste is not OK.
	6.15	Floor: finish OK	1 2	Check finish: **1**= easy to clean and non-slip surface.
	6.16	Floor: grade to drain water OK	1 2	Use ball in toolbox to check grade: **1**= water on the floor would flow to a floor waste and the floor has enough fall to prevent pooling of water.
	6.17	Ventilation OK	1 2	Can you get fresh air into room by using an openable window (with evidence of it being used) /, a vent or extractor
	6.18	Shampoo/Soap holder OK	1 2	**1**= Shampoo/soap holder is available.
Fixed	6.19	Shelf OK	1 2	**1**= shelf provided (no shelves increases chance of towels/ clothes blocking drains).
Fixed	6.20	Clothes hook/s OK	1 2	**1**= hook/s provided (no hooks increases chance of towels/clothes blocking drains).
Fixed	6.21	Towel rail / racks OK	1 2	**1**= rails provided and securely fixed to wall (no rails increases chance of towels blocking drains).
Fixed	6.22	Bath area light/s working OK	0 1 2	**0**= light not available, **1**= 1 or more lights working, **2**= no lights working

General comments :write brief, clear notes

Other Items Fixed

Service 6 : Bath Tub sheet 10 / 15

CIRCLE if **fixed** at survey

Flush Toilet

Team initials
Survey / Fix 1
Date

House ID Number

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Flush toilet test	Survey 1	IF NO TOILET IS AVAILABLE LEAVE THIS SHEET
	7.1	Flush type (1 or 2 buttons)	1 2	**1=** single flush (1 button), **2=** dual flush (2 buttons) cistern
	7.2	Full flush test OK	1 2	Use 3 strips of toilet paper, each 1.8 metres long. Drop 1 in bowl, the other two are crushed up & also placed in bowl. They must all be flushed away to pass the test. **1=** pass, **2=** fail
Fixed	7.3	Refill time OK	1 2	After flushing cistern use watch to time refill. **1=** pass (must refill in less than 3 minutes).
Fixed	7.4	Cistern stop cock (tap) OK	1 2	Can you turn the stop cock off? (if OK open fully and then back one turn) **1=** pass, **2=** fail
Fixed	7.5	Cistern (on the wall) OK	1 2	**1=** lid OK, no other damage, and the cistern does not "run on" / leak after refill.
	7.6	Pan/bowl (on the floor) is OK	1 2	Check junction between pan and cistern. **1=** toilet bowl is OK and fixed to ground securely. **2=** Not OK could be loose, cracked or damaged
		Toilet area		
Fixed	7.7	Door & lock (inside only) OK	1 2	Can you have privacy in this area?
	7.8	Walls OK	1 2	No holes, surface not going to decay due to water etc.
Fixed	7.9	Floor: waste OK	0 1 2	Use plastic tube & nearby tap, run water min. 3 minutes through floor waste to test OK. **0=**NO floor waste present,**1=** there is a working floor waste in this area **OR** it is possible to wash the area and direct the water outside the house or to an adjoining room with a working floor waste, **2= NOT** able to direct water outside the house OR to another working floor waste.
	7.10	Floor: finish OK	1 2	Check finish: **1=** easy to clean & non slip surface.
	7.11	Floor: grade to drain water OK	1 2	Use ball in toolbox to check grade: **1=** water on the floor would flow to a floor waste ok and the floor has enough fall to prevent pooling of water.
	7.12	Ventilation OK	1 2	Can you get fresh air into room by using an openable window (with evidence of it being used) /, a vent or extractor
Fixed	7.13	Shelf OK	1 2	**1=** shelf or place for storing toilet rolls is ABOVE child height (minimum 1500mm from the floor).
Fixed	7.14	Toilet roll holder OK	1 2	**1=** there is a sturdy toilet roll holder fitting, well secured to the wall.
Fixed	7.15	Toilet light/s working OK	0 1 2	**0=** light not available, **1=** 1 or more lights working, **2=** no lights working
Fixed	7.16	Toilet seat OK	1 2	**1=** toilet seat is well attached and working, **2=** no toilet seat or not functioning

General comments :write brief, clear notes

Other Items Fixed

CIRCLE if fixed at survey	Laundry	Team initials Survey / Fix 1		House ID Number	
		Date			

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

		Washing Machine (W/M) Services	Survey 1	IF NO LAUNDRY IN THE HOUSE GO TO SHEET 13
	8.1	W /machine space available	1 2	**1**= there is enough space (minimum 900mm wide x 700mm deep).
	8.2	W/M Taps: Hot OK	1 2	Turn on & off at least 3 times check handle secure & no drips at hose connections **1**= pass, **2**= fail
	8.3	W/M Taps: Cold OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
	8.4	Taps for w/machine only	1 2	Are separate threaded taps provided for the washing machine ONLY(ie not shared)? **1**= yes, **2**= no
	8.5	Separate drainage for washing machine provided	1 2	Drainage of the washing machine is NOT via a laundry tub UNLESS there is a special washing machine drainage diverter on the edge of the tub.
	8.6	W / machine available	1 2	Washing machine available and working at time of survey? ASK THE HOUSE RESIDENTS
Fixed	8.7	W / machine drainage OK	1 2	Let water flow for 3 minutes down the w/machine waste drain point (use plastic tube if needed)
Fixed	8.8	Floor: floor waste OK	0 1 2	Use plastic tube & nearby tap run water min. 3 minutes through floor waste to test OK. **0**= floor waste not present, **1**= floor waste OK, **2**= floor waste is not OK.
	8.9	Floor: finish OK	1 2	Check finish: **1**= easy to clean & non slip surface.
	8.10	Floor: grade to drain water OK	1 2	Use ball in toolbox to check grade: **1**= water on the floor would flow to a floor waste and the floor has enough fall to prevent pooling of water.
Fixed	8.11	Shelf OK	1 2	**1**= shelf for storing laundry products is ABOVE child height (min.1500mm from the floor).
	8.12	W / M power point test OK	0 1 2	Near washing machine. Use power point tester. 0= NOT available, **1**= pass, **2**= fail
	8.13	Location of power point OK	1 2	Min.1200mm above floor, NOT over tub and NOT below taps **IF IN ANY DOUBT** circle **2.**
	8.14	Weather / dust resistant power point	1 2	Is a special power point (designed to be water and dust resistant) fitted? **1**= pass, **2**= fail
Fixed	8.15	Laundry light/s working OK	0 1 2	**0**= light not available, **1**= 1 or more lights working, **2**= no lights working
		Laundry Tub		
	8.16	Laundry tub available	1 2	**1**= a laundry tub available, **2**= no laundry tub available
	8.17	Laundry tub secure OK	1 2	Is the tub & well secured to the wall **OR** on a secure cabinet? Is it rusted or leaking? **1**= pass, **2**= fail
	8.18	Laundry tub taps: Hot OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
	8.19	Laundry tub taps: Cold OK	1 2	Turn on and off at least 3 times check handle secure and no drips. **1**= pass, **2**= fail
Fixed	8.20	Laundry tub drainage OK	1 2	Half fill tub, pull plug and allow to drain, it should drain within 3 minutes. **1**= pass, **2**= fail
	8.21	Laundry tub spout OK	1 2	Spout well secured and not leaking **1**= pass, **2**= fail
Fixed	8.22	Laundry tub plug OK	1 2	Plug available and secured **1**= pass, **2**= fail

General comments: write brief, clear notes

Other Items Fixed

Hot Water System
(HWS)

Team initials
Survey / Fix 1
Date

House ID Number

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

	Description of HWS	Survey 1	IF NO HWS IS AVAILABLE answer Q 10.01 and GO TO SHEET 14 AND QUESTION 11.01
10.1	HWS power type	0 1 2 3 4 5	**0**= NO HWS , **1**=solar (with collectors on the roof may have electric booster), **2**= electric (only), **3**= gas (any type), **4**= heat pump (may have metal panels on the roof or be on ground), **5**= wood or fuel
10.5	Where is the HWS unit located	1 2 3	**1**= inside the house on the floor or wall **2**= outside to house on ground or wall, **3**= any part of unit located on the roof OR in the ceiling space. **IF ANY PART OF THE HWS IS ON ROOF OR IN THE CEILING SPACE, TO QUESTION 10.6**
10.2	HWS capacity in litres		Capacity of HWS in litres, look for manufacture plate. 0= If capacity not located. IF there is an instantaneous hot water system record capacity as 500 litre.
10.3	Age (Look for manufacture plate)	0 1 2 3	**0**= unknown or not found, **1**= less than 2 yrs. old, **2**= 2 -5 yrs. old, **3**= more than 5 yrs. old
10.4	Electric element size (capacity) if applicable	0 1 2 3 4	**0**= no element (ie gas system OR non boosted solar /heat pump type system / solid fuel), **1**= electric element less than or = 1800 watts, **2**= 1800-2400 watts, **3**= greater than 2400 watts, **4** = no information found on the HWS
	HWS Test		
10.6	Time of HWS test	00	Use the closest hour in a 24 hour clock. e.g. **9:10 AM** = **09**00 OR **3:25** PM =**15**00
10.9	Initial temp. of hot water ° C		Use hot water relief valve OR nearest HW tap, leave running max 1 minute & test. Use thermometer ° C
10.10	ONLY If hot water temp. is less than 45C, re-test in 30 minutes	0 1 2	**IF THE WATER TESTED ABOVE 45C THEN CIRCLE 0 = no re-test required** If hot water temp is BELOW 45C, wait 30 minutes then ..... run water for 1 minute, then record hot water temperature and turn off, **1**= water **DID** re-test above 44°C, **2** = water **DID NOT** re-test above 44°C
	Check During Survey		
10.11	Solar collector panels (if it is a solar system)	0 1 2	Check north orientation, angle of collectors and protection of panels from damage. **0**= not applicable, **1**= orientation to north, not shaded & not damaged, **2**= east, west, south orientation, shaded and / or damaged IF NORTH DIRECTION IS IN DOUBT ASK the Survey / fix Team leader
10.17	Solar HWS boost element	0 1 2	**0**= solar HWS boost element not available, **1**= available and on at time of survey, **2**= available and off at time of survey
10.12	HWS gas supply OK (if it is a gas system)	0 1 2	Gas only: Check number of bottles, securing of bottles and connecting plumbing. **0** = not applicable, **1**= gas available and flowing, **2**= no gas flowing
10.14	Hot water pressure release / relief valve OK (on ALL systems if more than 1 HWS)	1 2	RELEASE the HWS hot water relief valve, check water flows and then shuts off without any leaks. If there is more than one HWS in the house test the release / relief valves on ALL systems. **1**= 1 or more valves test OK, **2**= one or more valves do not test OK, or required valves not fitted.
10.15	ALL other HWS valves OK	1 2	Check cold water pressure relief (if fitted) is not leaking. Check the HWS shut-off valve can be turned off .....turn fully off then open fully and back one turn. **1**= all valves are OK.
10.16	Drainage from HWS OK	1 2	Check the hot water relief valve drains hot water to a safe point near the ground.

General comments: write brief, clear notes

Fixed		Kitchen	Survey / Fix 1 Team	House ID No.	
		Kitchen bench/ Storage	**Survey 1**	**Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question**	
	11.1	Bench material	0 1 2	Is this material strong, well sealed at the edges and easy to clean? **0** = no bench available **1**= OK	
Fixed	11.2	Bench splash back OK	1 2	Does the area behind the sink prevent water damaging the wall or cupboards? Check behind sink.	
	11.3	Storage area: including bench area and all above bench	1 2	Area of shelves/cupboards **ABOVE** bench level **& INCLUDE area of the bench**. **1**= greater than 5sqm, **2**= less than 5sqm.	
	11.24	Condition of cupboards OK	0 1 2	Are the cupboards secure, in good condition, doors OK, handles OK **0**= no cupboards, **1**= OK, **2**= poor	
	11.25	Floor: finish OK	1 2	Check finish: **1**= easy to clean & non slip surface. **2**= poor , hard to keep clean or unsafe	
	11.5	Sink available and length	0 1 2 3 4	Length: measure total length of sink including drainers (mm). **0**= no sink available, **1**= Less than 900 long, **2**= 900 to 1200 long, **3**= 1200 to 1500 long, **4**= greater than 1500 long	
	11.7	Sink Hot water and tap OK	1 2 3 4	Turn on & off 3 times check hot water above 44C, handle secure & no drips. **1**= All OK, **2**= No hot water and tap NOT OK, **3**= Tap NOT OK but hot water OK, **4**= Tap OK but hot water supply NOT OK.	
	11.8	Sink Cold water and tap OK	1 2 3 4	Turn on & off 3 times check water pressure, handle secure & no drips. **1**= All OK, **2**= No cold water and tap NOT OK, **3**= Tap NOT OK but cold water OK, **4**= Tap OK but cold water supply NOT OK.	
	11.9	Kitchen sink spout check OK	1 2	Is spout secure and not leaking? **1**= pass, **2**= fail	
Fixed	11.10	Kitchen sink plug/s	1 2	Are sink plug/s available ? **1**= plugs are available	
Fixed	11.11	Kitchen sink Drainage OK	1 2	Fill a sink bowl to the top, pull plug & allow to drain. **1**= pass if sink drains in less than **1 minute**.	
	11.12	Cook top provided	0 1 2 3	**0 =** none available, **1**= electric, **2**= gas, **3**= wood / oil burning fuel cook top	
Fixed	11.14	**ALL** plates & knobs working OK	1 2	Test all cooking hot plates and control knobs **1**= pass if all parts work, **2**= fail if any part is not working	
	11.26	Is there an oven provided?	1 2	Check there is an oven in the kitchen	
	11.15	Oven working OK	1 2	Test by turning on and leaving 3 minutes. **1**= pass, **2**= fail (includes microwave oven)	
	11. 27	Any other ways to cook	1 2	In the kitchen check for microwave oven or electric fry pans etc	
	11.28	Ventilation OK	1 2	Air into the room using an openable window (with evidence of it being used) /, a vent or extractor	
		Fridge / Freezer	**IF NO FRIDGE, GO TO QUESTION 11.21**		
	11.16	Fridge/Freezer available	0 1 2 3	Is a fridge or freezer available at time of survey? **0**= no fridge or freezer available, **1**= combined fridge/freezer, **2**= fridge only, **3**= freezer only	
	11.17	Size of combined fridge / freezer	0 1 2 3	This is usually on the manufacturer's label/plate. **0**= no information found on the fridge, **1**= up to 250 litres , **2**= 250 to 350 litres, **3**= larger than 350 litres	
	11.29	Is there ice and frost?	1 2	Ice and frost make fridges work poorly **1**= all OK little ice and frost, **2**= thick ice and frost	
	11.30	Is the door seal OK	1 2	**1**= door closes and seal easily, **2**= door does not close or seals damaged, door not self closing.	
	11.19	Freezer temperature OK	1 2	Use thermometer . **1**= -9° C (or colder, e.g. -10,-11), **2**= warmer than –9°C (e.g. -8,-7,-6)	
	11.20	Fridge temperature OK	1 2	Use thermometer **1**= 4° C (or colder, e.g. 3, 2,1), **2**= warmer than 4°C (e.g. 5,6,7)	
	11.21	Additional freezer available	1 2	**1**= there is an additional freezer available in the house.	
	11.22	Additional freezer temp. OK	1 2	Use thermometer **1**= -9° C (or colder, e.g. -10,-11), **2**= warmer than –9°C (eg. -8,-7,-6)	
Fixed	11.23	Kitchen light OK	0 1 2	**0**= light not available, **1**= 1 or more lights working, **2**= no lights working	

Notes

NOT FOR USE BY SURVEY FIX TEAMS

To be completed from information recorded by the Plumber on the Trade Work sheet . When the Trade Work sheet is brought to the HfH office the information should be copied onto THIS SHEET before entering into the data base. Ensure the plumbers initials and the HfH House ID number are recorded on this sheet

Drainage	**Plumber Initials** Survey / Fix 1	**House ID Number**	
	Date		

Note: Circle 1 for YES it is OK, or circle 2 for NO it is not OK or as directed by the question

	Grease Trap/Sump	**Survey 1**	
9.2	Sump dimensions: length		Measure with tape (measurement in mm).
9.3	Sump dimensions: breadth		Measure with tape (measurement in mm).
9.4	Sump depth (lid to base)		Use dipstick and then measure with tape (measurement in mm).
9.21	Grease trap sump OK	1 2	TEST : use a dipstick to measure from sump base to water level, after allowing at least 50 litres of water (or a good inlet flow for 5 minutes) check the level again 1= LESS than 25mm difference in level, 2= MORE than 25mm difference in level
	Septic Tank (some septic systems may have more than 1 tank)		
9.11	Volume of the tank/s	0 1 2 3	**0**= no tank/s located, **1**= TOTAL OF ALL TANKS less than 2500 litres, **2**= 2500-3500, **3**= greater than 3500 (litres= volume in cubic meters x 1000)
9.12	TOTAL volume of retained water in the tank/s	0 1 2 3	**0**= no tank/s located, **1**= less than 2500 litres, **2**= 2500-3500, **3**= greater than 3500 (litres= volume in cubic meters x 1000)
9.13	Septic tank lid/s OK	0 1 2	All OK, not cracked or damaged, all access covers secure and well sealed. **0**= no tank located **1**= pass, **2**= fail
9.14	Pump out truck access to septic tank/s OK	0 1 2	Access is possible for pump out truck and general maintenance. **0**= no tank/s located **1**= pass, **2**= fail)
9.15	Septic tank lid/s protected from damage	0 1 2	Ensure the tank/s is/are protected from vehicle damage (by siting, posts, large rocks, fencing etc.). **0**= no tank/s located **1**= pass, **2**= fail
	Tank Dimensions (**Ø** x **L**(ength) (mm), orientation **H**(orizontal) or **V**(ertical)		tank 1 (**Ø** X **L** ,), tank 2 (**Ø** X **L** ,), tank 3 (**Ø** X **L** ,)
	Total Effluent depth (mm)		tank 1 ( ), tank 2 ( ), tank 3 ( )
	Crust thickness (mm)		tank 1 ( ), tank 2 ( ), tank 3 ( )
	Sludge thickness (mm)		tank 1 ( ), tank 2 ( ), tank 3 ( )

General comments :write brief, clear notes

Other Items Fixed

Service 9 Drainage **sheet 15 of 15**

Housing for Health / Fixing Houses for Better Health:

Survey Progress Report

Project Name		Date this report was completed		Cover Sheet 1 of 8 sheets
		Report completed by		

Checklist to be completed before returning to Healthabitat

		Notes if required
☐	**All questions answered**	……
☐	**All sheets in order** (check number bottom right hand corner)	……
☐	**All attachments have been included**	……

☐ **Project is fulfilling the HfH/FHBH project licence conditions** ……..

OR

☐ **The Project is NOT fulfilling the HfH/FHBH project licence conditions. The following would need to be revised/changed/ improved or included before the Project Licence Holder would be given any future licence (summary below and attached additional information as required)**

OR

☐ **The Project is NOT fulfilling the HfH/FHBH project licence conditions. Unless the following are corrected and confirmed immediately the licence will be terminated.(Issues and relevant Licence conditions attached)**

……

……

Checklist for HH use only		Notes if required
☐	Preliminary SPR ALL OK (received & data entered date right)	……
☐	Lic ? Additional information needed (note what and date requested at right)	……
☐	Lic X Additional information (note what and date requested at right)	……

Project Details

Initials

Project

	From the Licence Agreement		
	1. Project Code		
	Project Code		This code is assigned by HH and is to be used in ALL communication and documents to ensure confidentiality
	4. Area Manager Supervisor (AM)		
	5. Items deliverable by HH to the PLH.		
	a) Survey Forms for each house in the nominated community	1 2	**Received OK from HH**
	b) Computer software:	1 2	**Received OK from HH**
	c) Toolkit list and consumables	1 2	**Received OK from HH**
	d) Back up support required as nominated in the Feasibility Report	0 1 2	**0= none required 1= yes training delivered 2= training rrequested BUT not delivered** **Note type and extent of training here**
	6. Project Details		**1= confirmed as per licence agreement** **2= changed and change noted as required below**
	Name of Project Licence Holder ('PLH'), being the organisation licenced to use the Process under this licence	1 2	
	Full PLH address for mailing	1 2	
	Name of Area Manager Supervisor ('AM') being the accredited HH Manager for this project.	1 2	
	Project Community contact name and phone fax contact details:	1 2	
	Name and full mailing address of community to which project relates.	1 2	
	Date of Feasibility Report	1 2	
	Total houses to be surveyed and fixed as identified by the Feasibility Report	1 2	
	Commencement date of the Initial Survey /	1 2	

	Fix		
	Commencement date of any upgrade works (if proposed)	1 2	
	Commencement date of Survey / Fix 2	1 2	
	TOTAL Proposed Project budget as submitted with the Feasibility Report	1 2	
	7. Project Staff		
	Plumber name, licence number and contact	1 2	
	Electrician name, licence number and contact	1 2	
	Data manager name	1 2	
	(if required) Capital Upgrade Architect / building consultant name, organisation if applicable and contact details	1 2	
	Other Technical staff	1 2	
	Total expected number of Aboriginal staff including all trades, consultants, survey and liaison staff (as per list of names from Feasibility Report or attach updated list)	1 2	
	Total expected number of NON-Aboriginal staff (as per list of names from Feasibility Report or attach updated list) do NOT include trades and Area Manager Supervisor (AM)	1 2	
	Trade work details		
	Note date here:	/ /	
	Note time here:	am/pm	
	The plumber has been on site and has been given work sheet/s	1 2	
	The plumber has commenced work	1 2	
	The plumber has completed some work and returned the work sheets.	1 2	
	Plumber number of houses completed ie worksheets returned =		
	The plumber has received INSTRUCTIONS & is completing TRADE WORK SHEETS	1 2	
	The Electrician has been on site and has	1 2	

	been given work sheet/s		
	The Electrician has commenced work	1 2	
	The Electrician has completed some work and returned the work sheets.	1 2	
	Electrician number of houses completed ie worksheets returned =		
	The Electrician has received INSTRUCTIONS & is completing TRADE WORK SHEETS	1 2	
	Toolkits, Survey & Fix work		
	Are there sufficient tool kits per survey team (approx. 1 kit/ 10 houses)	1 2	
	Survey team fix work being carried out	1 2	
	Survey team fix work encouraged by the PM	1 2	
	Adequate survey fix items are provided (light bulbs, basin/tub plugs, toilet rolls)	1 2	
	The tool kits are adequate	1 2	IF 2 please insert required tools below
	More/additional tools are required /suggested	1 2	Required tools 1 …… 2 …… 3 …… 4 ……
	Survey Sheets		
	Are all survey items and questions on the sheets clear.	1 2	If 2 please insert required changes below
	Changes or additions to survey sheets /suggested	1 2	Required changes in questions 1 …… 2 …… 3 …… 4 ……
	Survey Sheet Data Quality		
	All survey items recorded (max. permissible items missed is defined in the Licence)	1 2	
	Survey sheets are checked for completeness at the end of each house survey	1 2	
	Survey 'fixed' items have been recorded consistently	1 2	
	Survey data appears to be entered accurately	1 2	

		/ consistently		
		The survey data entry is well managed, forms returned, trades receiving worksheets	1 2	
		Notes or comments		
		Survey process quality		
		There is good / helpful community involvement	1 2	
		There has been active involvement from:		**If YES give details below:**
		Other 'non-listed' community staff	1 2	
		Other local government staff	1 2	
		Other regional staff	1 2	
		Any other staff	1 2	
		Good access to community houses with few delays	1 2	
		At least 1 community member present to assist the project: access, house by house	1 2	
		At least 2 community staff per survey / fix team	1 2	
		There is a positive acceptance of survey / fix teams	1 2	
		Each house has a unique HH identifying number	1 2	
A		Each house is identified on a community map		
		Confidentiality of data is OK (no names of residents on any documents)	1 2	
A		Has the survey fix team been given an OH&S safety briefing (append handout)	1 2	
		There was staff training before commencing survey / fix work	1 2	
		Training demonstration boards were on site during the staff training	1 2	

	Has any attempt to contact HH been made about ANY aspect of the project	1 2	If YES=1 give details here
	Has the HH data specialist been contacted	1 2	If YES=1 give details here
	Is any detailed environmental monitoring being carried out (water, temp, HW temp, humidity, dust mites).	1 2	If YES=1 give details here
	Computer data entry quality and information management		
	All computer equipment is working well (includes computer, printer, backup, etc)	1 2	If NO=2 give details here 1 …… 2 …… 3 ……
	When is data entered	1 2	1= during the survey fix work day 2= after the survey fix day ONLY
	Is the office area where data is entered adequate for the project	1 2	
	Missing data is being checked and corrected	1 2	
	Data validity checks are being checked and corrected	1 2	Check number of DVC item current and the log of data check items
	Action has been taken to correct the causes of data problems with the survey fix teams	1 2	Survey manager and data manager
	Trade work sheets are being produced regularly	1 2	Note dates of printing on worklist priority menu
A	All other reports can be produced OK	1 2	If yes print and attach Last use and update, HLP scores, All missing data, Data validity checks If NO=2 give details here 1 ……

			2 …… 3 ……
	Summary and Comments		
	Date this report was completed		
	Report Completed during Survey Fix 1 or Survey Fix 2		
	House audit : HH number (and ID numbers right) of houses audited during this Progress Report visit (ie H23, H13, H1)	1 2 3 4 5 6 7 8 9	Note HfH ID Numbers below ……
	Survey Sheet Audit: HH number (and ID numbers right) of houses' survey sheets audited (ie H23, H13, H1)	1 2 3 4 5 6 7 8 9	Note HfH ID Numbers below ……
	Report completed by		
	Checked and approved by HH		

Project Staff Record sheet

			initials	
			Date completed	
			SF 1	SF2
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		1 2 3 4 5	1 2 3 4 5
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		6 7 8 9 10	6 7 8 9 10
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		11 12 13 14 15	11 12 13 14 15
	Indigenous staff including all Indigenous trades staff, consultants, survey, fix and liaison staff		16 17 18 19 20	16 17 18 19 20
	Non-Indigenous staff: do NOT include Non Indigenous trades or project manager		1 2 3 4 5	1 2 3 4 5
	Non-Indigenous staff: do NOT include Non Indigenous trades or project manager		6 7 8 9 10	6 7 8 9 10

Appendix C — Evaluation framework

Draft Evaluation Framework			
FHBH Evaluation			
Key Program Objectives	**Key Evaluation Questions**	**Data Sources**	**Performance Measures**
1. To improve the safety and functioning of housing within the Indigenous communities where FHBH has been implemented, and in a cost-effective way	1.1 What was the state of Indigenous housing prior to FHBH? What problems were present?	* Data from Healthabitat * Analysis by Consultant Team	Problems in Indigenous Housing prior to FHBH
	1.2 What was the state of housing after FHBH occurred? What problems were fixed?	* Data from Healthabitat * Analysis by Consultant Team	Problems rectified in Indigenous Housing after FHBH & their level of seriousness
Section 1 of the framework addresses the following outcomes as stated at A2 of the Consultancy Contract: A comprehensive analysis of the implementation and management phase of FHBH projects, with particular emphasis on client community involvement, sustainability and the development of housing maintenance management capacity within target communities. A thorough cost/benefit and/or cost-effectiveness analysis of the FHBH projects.	1.3 What has been the effect of the passage of time on the outcomes of FHBH? Have improvements been sustained? Why or why not?	* Consultation with communities	FHBH improvements have been successfully built upon by the community
	1.4 Do the residents feel that their houses are safer and healthier since FHBH?	* Consultation with communities * Information from Healthabitat	Level of perceived safety of residents
	1.5 What are the remaining problems within housing in Indigenous communities?	* Data from Healthabitat * Analysis by Consultant Team * Consultation with communities	Remaining problems & their level of seriousness
	1.6 What have been the budgets for the FHBH projects?	Consultation with: * Healthabitat * FaCS	Budget information
	1.7 On what items has the money been spent? What are the most expensive items? Is there room to achieve further efficiencies?	* Data from Healthabitat * Consultants to complete an analysis of the cost components	Cost structure of monies spent
	1.8 Approximately what proportion of problems (routine, damage, faulty) (essential, urgent, routine) within communities are being fixed through the budgets?	Consultation with & data from: * Healthabitat * FaCS	Percentage of problems being fixed

	1.9 Are the most serious problems being fixed? Does this differ between communities?	Consultation with & data from: * Healthabitat * FaCS * Communities	Improvements in overall ratings of houses
	1.10 What is the sensitivity of the level of money spent? That is, if we allocated 50 to 100 per cent more or 50 per cent less, what is the likely increase/decrease in the number of problems that will be fixed?	Analysis by Consultant Team	The practical effects of marginal increases / decreases in per house funds on improving the quality of houses
2. To transfer housing maintenance systems, skills and employment to the Indigenous communities (and ICHOs) in which FHBH has operated	2.1 What level of community/ICHO involvement in employment, training and project management opportunities occured through FHBH? Has this been an appropriate level? Did communities want to be involved?	* Data from Healthabitat * Analysis by Consultant Team * Consultation with communities	No. of community/ICHO (Indigenous / non-Indigenous) members involved in the FHBH projects Community/ICHO perceptions regarding level of involvement - enough, not enough, too much?
	2.2 What housing maintenance systems and skills are communities/ICHOs and individual participants left with after FHBH? What did they have before? Is there new employment as a result of FHBH?	* Data from Healthabitat * Consultation with communities	Increased and/or improved systems/skills/employment transferred to the community/ ICHO/community members

Section 2 of the framework addresses the following Outcomes as stated at A2 of the Consultancy Contract: A comprehensive analysis of the implementation and management phase of FHBH projects, with particular emphasis on client community involvement, sustainability and the development of housing maintenance management capacity within target communities.	2.3 Have the systems and skills that have been learnt through FHBH been used by communities/ ICHOs towards housing maintenance? If so, where and under what circumstances? Have these systems and skills been used in other ways in the community?	* Consultation with communities	Re-use of skills gained through FHBH - for housing maintenance / in other ways
	2.4 Do the communities/ICHOs and community members who were involved in FHBH feel confident that they could maintain housing better now that they have obtained systems and skills through FHBH (or would they require further support applying these)? Do they use/prefer other systems and skills and if so why?	* Consultation with communities	Level of community/ ICHO/community member confidence and success in applying FHBH systems and skills for housing maintenance
3. To encourage states and territories to adopt housing assessment and maintenance programs in their asset management systems	3.1 Has any state or territory adopted the FHBH assessment (or something similar)? Why/why not?	Consultation with: * FaCS * State Depts * ICHOs	State or territory implementation of FHBH framework
Section 3 of the framework addresses the following Outcomes as stated at A2 of the Consultancy Contract: An assessment of the interrelationships between the FHBH projects and State and Territory Indigenous housing policy and program settings, including a description of how these interactions have impacted on the implementation of FHBH projects.	3.2 Do the states & territories have a clearer understanding of maintenance requirements of Indigenous Housing as a result of FHBH? Has this understanding translated into improvements to documented (and budgeted) maintenance programs?	Consultation with: * FaCS * State Depts * ICHOs	Clearer understanding of maintenance requirements Presence of maintenance schedules
	3.3 Has FHBH influenced the allocation of state & territory funds with regard to maintaining Indigenous Housing? Have FHBH funds been used to leverage better outcomes?	Consultation with: * FaCS * State Depts * ICHOs	State and territory funding changes due to FHBH

4. To provide a point-in-time analysis of the quality of housing stock in Indigenous communities (to determine progress on BBF outcomes)	4.1 Has a baseline understanding and framework for that understanding been developed that assesses the quality of housing stock in Indigenous communities before and after FHBH? How does this relate to NRF/CHINS/census analysis?	Consultation with: * Healthabitat * FaCS * State Depts * Geoff Gook (census analysis)	Existence of a baseline understanding and framework As good as or better than other frameworks / understandings
Section 4 of the framework addresses the following Outcomes as stated at A2 of the Consultancy Contract: An assessment of the historical, socioeconomic and political environment in which the FHBH projects were introduced and in which FHBH projects continue to operate, with a focus on how these conditions have advantaged and/or disadvantaged FHBH projects. An assessment of the development and design processes for FHBH projects, including how these processes have been influenced by governance factors, the behaviour of participants and the circumstances of client communities. A comprehensive analysis of the implementation and management phase of FHBH projects, with particular emphasis on client community involvement, sustainability and the development of housing maintenance management capacity within target communities.	4.2 Has this framework allowed an 'any-point-in-time' analysis of the quality of the housing stock?	* Data from Healthabitat * Analysis by Consultant Team	Useful analysis of housing in Indigenous communities
	4.3 What proportion of Indigenous housing stock is analysed / assessed as part of FHBH? Is this adequate and effective? (see also program objective 5)	Consultation with: * Healthabitat - Consultation and data * FaCS * State Depts	Percentage of stock analysed
	4.4 How (and why) has this framework changed over time?	Consultation with: * Healthabitat * FaCS * State Depts	Documentation only (no performance measures)
	4.5 Is the current framework still considered to be a useful measure of quality of housing in Indigenous communities?	Consultation with: * Communities * State Dept * FaCS * Healthabitat	All serious problems within houses in Indigenous communities are being identified
	4.6 Has the framework assisted the Government and Indigenous communities to understand/ scope the capacity and context of Indigenous communities , and to undertake and systemise the maintenance requirements for Indigenous housing with regard to capacity and context? (see also program objective 4)	Consultation with: * Communities * State Dept * FaCS * Healthabitat	Presence of maintenance schedules

List of shortened forms

AHA (SA)	Aboriginal Housing Authority of South Australia
AIHW	Australian Institute of Health and Welfare
ARHP	Aboriginal Rental Housing Program
ATSIC	Aboriginal and Torres Strait Islander Commission
ATSIS	Aboriginal and Torres Strait Islander Services
BBF	*Building a Better Future—Indigenous Housing to 2010*
CDEP	Community Development Employment Projects
CHINS	Community Housing and Infrastructure Needs Survey
CHIP	Community Housing and Infrastructure Programme
COAG	Council of Australian Governments
CSHA	Commonwealth–State Housing Agreement
DHW (WA)	Department of Housing and Works, Western Australia
FaCS	Australian Government Department of Family and Community Services
FHBH	Fixing Houses for Better Health
HIPP	Health Infrastructure Priority Projects
HLP	Healthy Living Practice
ICHO	Indigenous Community Housing Organisation
IHANT	Indigenous Housing Authority of the Northern Territory
IHMS	Indigenous Housing Management System [of the DHW (WA)]
MHBH	Maintaining Houses for Better Health
NAHS	National Aboriginal Health Strategy
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NRF	National Reporting Framework

Endnotes

1 This table has been developed by SGS as an update of a table that first appeared in Thomson, N (ed.) 2003, *The Health of Indigenous Australians* Oxford University Press, South Melbourne.

2 ABS 2002; AIHW 2004.

3 Based on Read (ed.) 2000.

4 The latest available funding data for Indigenous housing are for the fiscal year 2003–04 and predate the transfer of ATSIC programs to mainstream agencies.

5 The bilateral agreements are designed to provide better coordination and parity for the funding of Indigenous housing.

6 Source: SGS 2004.

7 Dr Fred Hollows is credited as the main proponent of this philosophy of combining research with service. See Hollows, F and Corris, P 1991 *Fred Hollows: an autobiography (with Peter Corris*), Kerr Publishing, Richmond, Victoria.

8 Department of Family and Community Services. Departmental correspondence.

9 Department of Family and Community Services. Departmental correspondence.

10 This study also highlighted that unique operational contexts require housing assessment and maintenance systems to be adapted to suit the unique context, when the 'preferred operational environment' is lacking.

11 Names of individuals are not provided in the Appendix to protect confidentiality.

12 These criteria are explained in more detail in Section 2.

13 It is noted that this may not be strictly correct arithmetically—the averages referred to here assumes that all HLPs are as critical as one another, and thus no weighting on HLPs has taken place. This is considered appropriate for the analysis as only a summary of data is being provided. This analysis has been consistently applied between Survey 1 and Survey 2.

14 ABS 2001.

15 According to the Office of Indigenous Policy Coordination website, using data extrapolated from the 2001 ABS Census and the Community A Housing Office population register <http://www.icc.gov.au>.

16 See <http://www.icc.gov.au>.

17 See <http://www.facs.gov.au/internet/facsinternet.nsf/indigenous>.

18 ABS data 2001.

19 ABS 2001.

20 Based upon an estimated population of 500 people occupying 55 houses.

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Occasional Papers

1. Income support and related statistics: a ten-year compendium, 1989–99
   Kim Bond and Jie Wang (January 2001)
2. Low fertility: a discussion paper
   Alison Barnes (February 2001)
3. The identification and analysis of indicators of community strength and outcomes
   Alan Black and Phillip Hughes (June 2001)
4. Hardship in Australia: an analysis of financial stress indicators in the 1998–99 Australian Bureau of Statistics Household Expenditure Survey
   J Rob Bray (December 2001)
5. Welfare Reform Pilots: characteristics and participation patterns of three disadvantaged groups
   Chris Carlile, Michael Fuery, Carole Heyworth, Mary Ivec, Kerry Marshall and Marie Newey (June 2002)
6. The Australian system of social protection–an overview (second edition)
   Peter Whiteford and Gregory Angenent (June 2002)
7. Income support customers: a statistical overview 2001
   Corporate Information and Mapping Services, Strategic Policy and Knowledge Branch, Family and Community Services (March 2003)
8. Inquiry into long-term strategies to address the ageing of the Australian population over the next 40 years
   Commonwealth Department of Family and Community Services submission to the 2003 House of Representatives Standing Committee on Ageing (October 2003)
9. Inquiry into poverty and financial hardship
   Commonwealth Department of Family and Community Services submission to the Senate Community Affairs References Committee (October 2003)
10. Families of prisoners: literature review on issues and difficulties
    Rosemary Woodward (September 2003)
11. Inquiries into retirement and superannuation
    Australian Government Department of Family and Community Services submissions to the Senate Select Committee on Superannuation (December 2003)
12. A compendium of legislative changes in social security 1908–1982
    (June 2006)
13. A compendium of legislative changes in social security 1983–2000
    Bob Daprè (June 2006)