Commonwealth Grants Commission

Indigenous Funding Inquiry

Submission

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SUBMISSION TO THE COMMONWEALTH GRANTS COMMISSION INDIGENOUS FUNDING INQUIRY*

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Introduction

This submission primarily responds to the Terms of Reference, which require the Commission to

> 1. ... inquire into and develop a method that can be used to determine the needs of groups of indigenous Australians relative to one another across government and government-type works and services provided or funded by the Commonwealth, or by the States, Territories or local government with Commonwealth Assistance through specific purpose payments.
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> 4. (ii) derive indexes of relative need that could be used to determine distributions of resources across function areas, geographic regions, States and Territories based on its assessments of relative need.

The submission takes account of the issues raised in Term of Reference 3 which show that the objective is not simply to assist in the allocation of Commonwealth specific purpose funds, but to do so in relation to funds provided from different sources to meet those needs, and how those other funds are allocated. To this purpose, the inquiry is to examine all sources of funding, including self-funding by Indigenous people: a tall order.

Notwithstanding the ambiguous use of the phrase 'determine needs . . .' or 'distribution of resources across these functional areas' the Commission believes that it is not required to assess the needs for one function relative to another (Attachment B, Information Paper No 1). I agree with that interpretation and have prepared my submission on that assumption.

The issues raised in this submission concentrate on methods, especially those raised in Attachment B, 'Issues to be Considered During the Inquiry', of Information Paper No 1 of the Inquiry, February 2000. The submission is based on two pieces of research in which the author has been involved in the recent past. The first (Jones, R. et al 1998) is a study commissioned by the then Department of Social Security on the methods of measuring the need for Indigenous housing in Australia. The methods developed in that paper were used, to the extent the data permitted, to produce various measures of Indigenous housing need (Jones, R. 1998, 1999), and those results have been summarised and interpreted in a draft paper which is attached as part of this submission (Neutze et al, 2000). The great majority of the data used in those studies are from the censuses and therefore are available for ATSIC and other regions.

The second is a study of the level of public expenditure on services for Indigenous Australians which, with the exception of infrastructure, covered the same range of functions as spelled out in the Terms of Reference for this Inquiry (Neutze et al, 1999). That study compared levels of public expenditure on Indigenous with those on non-Indigenous Australians. It drew heavily on a detailed study of health costs (Deeble et al 1998).

As a general comment, it appears that the terms of reference of the Inquiry require it to answer questions that are require political judgements rather than technical judgements of the kind that can be answered by an expert body such as the Grants Commission. In particular, questions about how the available funds are to be allocated

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* I am grateful for comments by Will Sanders, Centre for Aboriginal Economic Policy Research on a draft of this submission. It has been prepared in some haste as a result of the short notice given of when submissions were required.

once measures of relative need in different regions have been established (Attachment B Para 1 (vii)), essentially require political decision.

1. The functions to be covered

The criterion of need for services or functions fits well with the chosen services. It does not fit so well with the other main areas of Commonwealth Indigenous-specific services and no additional services are recommended for inclusion. Neutze et al (1999, App. B) discussed two of these services—land, culture and recreation, and law and order—and concluded that neither was suitable for estimates of expenditure on Indigenous compared with non-indigenous Australians. They seem inappropriate also for this study primarily because the criterion of need is either inappropriate or has a different meaning from its meaning for other studies. Commonwealth expenditure on Indigenous land is seen mainly as a means of maintaining remaining Indigenous interests in land and restoration of some parts of the land from which they were dispossessed at European settlement. Restoration occurred first through the *Aboriginal Land Rights (Northern Territory) Act 1976.* Subsequently the High Court's *Mabo No 2* 1992 decision recognised and the subsequent *Native Title Act 1993* formalised those rights.

Taking a long-term point of view, the seizure under state protection of Indigenous-owned land and water rights provided immense benefits to non-Indigenous Australians at far below market value. It would be an abuse of language for either the original seizure or recent moves towards partial restoration to claim that they are or should be related to need.

The same point of view could be taken towards cultural expenditure. Recreational expenditure could be more legitimately related to need. I am not sufficiently familiar with either program to make a judgement about whether it should be included. They are much less costly than the programs that are included.

Indigenous-specific law order and public safety is primarily a state and territory function with Commonwealth expenditures mainly directed at the Indigenous legal aid service. Allocation of funds under this program should take account of the numbers of Indigenous people being charged and coming before the court. Any full assessment would require the inclusion of the services provided by state and territory governments. Whether Indigenous need is a useful concept for considering the allocation of funds in this field depends on whether the funds are spent for the benefit of Indigenous people. It is arguable that, although many of the expenditures are for the protection of Indigenous people, overall they are mainly for the protection of the non-Indigenous community from threats to their property and amenity resulting from activities of Indigenous people.

Industry assistance and development expenditures would be expected to be allocated according to opportunity for development rather than to need. It may be that special assistance would be seen as less necessary in urban areas where support for the development of business and industry is better than in smaller centres and remote areas. Nevertheless the likelihood that funds will be used effectively will be a necessary if not a sufficient condition for the allocation of funds.

2. How to measure need for a service.

(a) Objective rather than felt need

Although it is important to know whether or not Indigenous groups are satisfied with the level of public services they receive, measures of satisfaction are not an appropriate measure of need for allocation of funds. Satisfaction is determined by differences in expectations as well as differences in the actual standards of services, and expectations are affected by experience and information about standards in other locations. The NATSIS survey (ABS, 1996) showed many instances of areas where satisfaction with housing and other services did not vary between location in line with the known differences in service quality.
Particularly if measures of need are used in fund allocations, respondents to surveys of satisfaction will soon learn that expressing dissatisfaction is a way to increase the funds available to their group. Objective measures are essential.

(b) Standards derived from the dominant society

We took the view in relation to housing that standards should be those that are accepted in the dominant society. Politically, Indigenous people will accept nothing less and the dominant society nothing more. In many areas such standards are well accepted. In other areas the standard will need to be set at some agreed percentile in the distribution achieved in the dominant society. The same percentage of Indigenous people will be expected to reach those standards, or those standards may be expected to be met by everyone. Need is then defined as the extent to which any group falls short of meeting those needs. This method should be used for all functions.

(c) Relative and not absolute need

The Terms of Reference direct the Commission to assess relative need rather than absolute need, relative between different groups of Indigenous people, not between Indigenous and non- Indigenous, and especially relative between Indigenous people living in different places. This simplifies the problems, but there are still very considerable problems in making comparisons of need between groups of Indigenous people living in very different conditions. Generally the closer the measures of relative need are to measures of absolute need the better they cope with such large differences. This matter is taken up below.

(d) Measures of need have to deal with the depth of need, not just frequency.

A common measure of need is the number (sometimes the proportion) of eligible recipients whose service does not reach some acceptable level, for example the number or proportion of people or households where water quality reaches WHO standards, the number or proportion of people living in homes that are overcrowded or otherwise inadequate. But this is inadequate because it ignores the depth of need, for example how many additional bedrooms would be needed to overcome overcrowding, how far or how frequently do water quality standards fall short of the chosen standard. The ideal measure of need is how much it would cost to bring service levels up to the chosen acceptable level. It is ideal in that it relates directly to the funding decisions. Its great disadvantages is that such cost information is rarely readily available and is expensive to collect.

Intensity or depth of need may be taken into account, along with the number of people experiencing that need at different intensity, in allocating funds between groups of people. Allocation criteria that place the greatest weight on equity usually aim to relieve the most intense needs first, though that is a more acceptable criterion to use for individuals within groups than between groups: groups whose average need is low always include some individuals whose needs are greater than the least needy in groups whose average need is greater.

(e) Need for outcome rather than output or input measures.

Just as it is accepted wisdom that performance of public services should be measured by how closely its outcomes accord with the objectives of providing the service, so the need for a service should be measured by how closely it meets the needs for outcomes rather than how closely levels of inputs or outputs come to some accepted standard. Thus, ideally we need to know how the health of Indigenous people compares with expectations, not whether expenditure on health meets some standards or even whether the number of dialyses carried out per person with kidney failure accords with some norm. Ideally needs should be measured by levels of mortality and morbidity from different causes.

There is a serious problem with such a prescription since the objectives of measuring needs is to allocate funds available in a more appropriate way between different groups of Indigenous people, and funds are spent on inputs. Eventually needs have to be expressed in sums of money: how much would it cost to meet the unmet need for a service in a State or region? The rate at which inputs are converted to outputs or outcomes may vary between regions with geographic circumstances and with the efficiency with which the inputs are used by the providers of services. The rate of conversion is likely to be difficult to measure and the rate may vary between regions both with external circumstances—location, climate, size of settlements, education of the people—and also with the effectiveness of effort made to use resources provided to achieve the agreed outcome goals.

Fortunately, the Commission is asked only to measure relative needs between groups of Indigenous people, rather than absolute need. In many circumstances it may be acceptable to assume that the outcome needs of different groups give an acceptable relative measure of their need for funds. Certainly a good deal of research is needed before the effectiveness of use of resources in different regions can be estimated and the factors affecting it assessed.

If it is difficult to predict the effects of expenditure on services in meeting needs for that service it is even more difficult to assess the effect of expenditure, for example, on housing on meeting the needs for better education and health (Section (ii) Attachment B, Information Paper No 1.). Intuitively it is clear that there will be positive relationships but the large number and wide variations in external factors affecting the size of the effect make it difficult and costly to assess its size.

This problem raises the question as to whether needs, considered alone, are an appropriate criterion for allocation of funds, or whether the efficiency of use of funds should not also be taken into account. Eventually, needs based allocation penalises rather than encourages those who use resources more efficiently (Neutze et al, 2000, Conclusion).

(f) When needs and costs vary between regions

Needs themselves may vary between regions for climatic and, more controversially, for cultural and historic reasons. Houses need to be heated in southern and cooled, or at least insulated from the heat in northern Australia. Both may be needed in the central deserts. Indigenous people frequently live around as well as in their housing in the tropical areas, and the evidence of overcrowding being much higher in some parts of northern Australia than elsewhere may indicate that internal bedroom space at the standards designated may not be the most important feature of housing adequacy for Indigenous people living in these areas. Other features such as access to water and electricity and access to living areas at relatively low cost may be more important. Some of these differences in expectation arise for cultural and historical reasons and do not provide politically acceptable reasons for assessing their needs differently. These differences are frequently very large and require different measures of housing need to capture the differences in their relative importance between different parts of the country.

A different kind of variation in needs occurs between Indigenous people living in urban areas and those outside urban areas. In the urban areas certain standards of housing and infrastructure services are required, and often provided, as a condition of living in those areas. The same is true to some extent in relation to physical access to education, health and training services in urban areas, though in these cases the Indigenous population may not get full access for cultural and other reasons. As a result some Indigenous groups experience lower participation rates in later years of school and post-school education and in the use of some health services. Lower participation rates are evidence of need, and indeed may be one of the main criteria for assessing the need for Indigenous-specific as distinct from generally available services.

The costs of providing some services in smaller settlements and rural areas is so much higher than in the larger urban areas that meeting the needs at the same level in those places is simply not practical. Economies of scale in the provision of many training, health and education services are so great that they can be provided only in larger settlements, and those who live in smaller settlements must be serviced by making it possible for them to travel to get access to services available in larger centres. Compromises of this kind result in needs being met in different ways for people living in smaller and more remote settlements, usually at higher cost, and commonly at a lower level.

Getting access to cheaper housing and infrastructure services in larger settlements requires residents in rural and remote areas to change where they live. There are options for using more appropriate, lower cost technologies to provide infrastructure in smaller settlements but their cost is generally higher and standards often lower. Costs of building, operating and maintaining housing are higher in remote locations also, though the margins are not as great as for infrastructure.

Provision of roads, air services, water supply, waste water removal, postal and telecommunication services and energy supplies in smaller and more remote Indigenous settlements is one of the financial and equity challenges faced in Australia because we broadly accept the right of people to live where they choose. The cost is relatively high, but the standards of services remain lower than elsewhere, in many places unacceptably low. And this occurs not because needs are lower but because costs are so much higher.[1] The question about taking account of cost differences in fund allocation is taken up in Section 8 below.

3. Measuring unmet needs and in what other ways needs are being met.

Of the issues raised in the terms of reference and in Attachment B of Information Paper No. 1, the most difficult are those raised in Section (vi) dealing with the relationships between the allocation of Commonwealth Funds and the funds allocated by state and local governments to meeting the needs of Indigenous people in the nominated function areas. The issues are made more complex because Commonwealth funds for Indigenous people are made available: first, directly by the Commonwealth to Indigenous organisations and individuals; second, through special purpose grants to state and local governments; and third, through general purpose grants including those recommended by the Commission itself to states and through state grants commissions to local governments, both of which frequently include numbers of Indigenous people among the criteria used in assessing the level of general purpose grants. In addition state and local governments provide funds from their own revenues for services in the functional areas. As far as I know, with the exception of health (Deeble et al 1998), there has been no detailed study of the expenditure by state and local governments from these sources on Indigenous people across the functions being covered in the Inquiry.

Measures of need must be confined to needs that are not being met from sources other than the programs being considered. Unless the measures developed by the Commission are confined to unmet needs, they will be measuring the costs of providing adequately for the full educational, health, housing, infrastructure, employment and training needs of groups of Indigenous people. These are unlikely to be good measures of the needs that specific Commonwealth programs are designed to satisfy. The fullest studies of expenditure on these services, especially that by Deeble and his colleagues (1998) for the health services, and Neutze et al (1999) covering all the Inquiry functions except infrastructure, show that the vast majority of expenditure on these services are provided not through specific services for Indigenous people but through services that are available to all Australians, either through the market or through the public sector. This occurs largely because the great majority of Indigenous people live in urban areas rather than in discrete Indigenous communities.

From the Commonwealth's point of view there is an important distinction between services specific to Indigenous people that it funds directly—including community housing and infrastructure, the Aboriginal Rental Housing Program (ARHP), the Aboriginal Health Services (AHS), various training and employment services, ABSTUDY and specific Indigenous education programs—and those supplied by State and Local Governments, often funded in part or totally by the Commonwealth. It is very desirable that any needs-based formulae for the allocation of Commonwealth funding of specific services for Indigenous people should not provide incentives for other levels of government to reduce their own levels of funding. It is also desirable that funding of the Indigenous-specific services should not encourage Indigenous users to switch from general to specific services. Indigenous-specific services should be chosen mainly for locational and cultural reasons.

There are very considerable differences between state and local governments in the extent to which they meet the needs for these services from their own resources through either general or specific services (Section (vi,b) Attachment B, Information Paper No. 1). Should any needs-based formula developed by the Commission take those differences into account or ignore them? This is partly a moral question: should the unmet needs of

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[1] It is instructive that non-Indigenous settlements of similar size exist in similarly remote locations, for example in mining communities, and their infrastructure costs are similarly high. But they are generally established only if they produce incomes that are high enough to provide adequate services for their residents. Indigenous incomes are seldom high enough for that.

Indigenous people in some places be ignored or discounted because they are responsibilities of state and local governments that have the fiscal capacity to meet them? It is also a political question.

My answer would be that they should be ignored, especially since the affected Indigenous people seldom have much political influence on the allocation of state and local government funds, and should not suffer further loss of funds in addition to discrimination against them by their state or local government. It can be argued in such circumstances that grants for Indigenous-specific services are best distributed as earmarked grants in proportion to need—and other factors such as effectiveness of use of grant funds: see Neutze et al (2000, Conclusion). General-purpose funding through grants commissions is more suitable for general-access services that are accessible by Indigenous people, which meet the large proportion of Indigenous needs, and which are less prone to (though not immune from) discrimination.

In some of the functional areas under consideration in this Inquiry there are not likely to be great transfers between different sources of funding as a result of the allocation of direct Commonwealth funds. It is worth looking at the possibilities for each functional area.

Private funding is very important in the general community for owner occupied and privately rented housing (including much associated infrastructure), private health expenditure, including that which is funded through private health insurance, private education, and employment and training services provided by and within places of employment. Each function should be examined for switching incentives, but for the most part there is limited scope for Indigenous people to rely less on private funding and more on specific programs. Private funding is generally more costly, which rules out the many Indigenous people whose incomes are relatively low. Also, most Indigenous-specific programs are provided in places and to people who have little access to services they can buy in the market. Private funding raises the possibility of another kind of need, affordability, that is considered below; it arises from the fact that reliance on the market for services such as housing may leave Indigenous people with insufficient residual income to cover their other needs. This has been well recognised and documented in the case of housing (Jones, R. et al, 1998).

Publicly, or partly publicly, funded services that are generally available include most education services, public housing, public health, public hospitals, Medicare, PBS, some infrastructure in established urban areas, and generally available employment and training services. Indigenous people make a great deal of use of these services. Notwithstanding their availability, Indigenous-specific services have been developed because the general services were found not able to serve the needs of Indigenous people (Neutze et al, 1999, 3), generally because they were not well designed to meet their needs, often for locational or cultural reasons.

One particularly important and unusual case of this is the Indigenous-specific Community Development Employment Program (CDEP) which cost $314.6m in 1995-6, of which $198.5m was funded from the unemployment benefits that would otherwise have been received by the participating Indigenous people in the communities concerned. The remainder of the cost is specific funding to cover the cost of management and the capital required to permit these funds to be used effectively in the communities concerned. Among the purposes for which CDEP funds are used is the maintenance of community housing and infrastructure. The Program also has training and business development objectives. The need for it depends partly on the number of unemployed Indigenous people living in distinct communities and partly on the unfilled need for the provision of community services where they live. At the margin it is readily substituted for general income maintenance for the unemployed, and less readily for community housing and infrastructure funds.

Controversial and opaque area in which practice varies between and within states and territories and between different kinds of infrastructure (Neutze et al, 1999, 65-69). Infrastructure services are funded by Commonwealth, State and local governments in Australia as well as by the market. The purpose of this submission is to indicate the extent of variation rather than to document service responsibilities in detail. To achieve the latter would require a very detailed inquiry by the CGC since many of the arrangements are *ad hoc* and informal.

Postal and telecommunications services and airports are the main areas of direct responsibility of the Commonwealth. As far as I know there are no Indigenous-specific programs. Indigenous communities are, however, significant beneficiaries of Community Service Obligations (CSOs) of Australia Post and Telstra. Small and remote Indigenous communities nevertheless frequently have poorer quality services in all of these areas.

Energy is provided primarily by state and territory governments, though a great deal of the production and some of the transmission, distribution and retailing are now either privatised or the responsibility of corporatised public authorities. CSOs of varying kinds no doubt benefit some Indigenous communities but, for reasons of cost, the quality of services varies greatly, especially dependent on whether mains service or local generation is the source of electricity. One or more of local, state/territory, or Commonwealth generation (through ATSIC's CHIP) may fund local generation. Some maintenance of these services may be carried out in Indigenous communities using CDEP workers and funding, or using royalty funds of Indigenous royalty associations.

Responsibility for non-national roads is generally divided between states and local governments, both funded by user charges, the most important of which is fuel excise. Substantial contributions come through the market, as developers are required to provide roads in new urban subdivisions. CHIP, CDEP and royalty funds are used to build and maintain roads in some discrete Indigenous communities.

Funding of water and sewerage services is probably the most varied. In NSW and Queensland, outside the major urban areas, local governments are primarily responsible, though often with state subsidies, and state governments in other states and territories. Developers are required to provide initial services in new urban subdivision, but rarely in Indigenous communities. As in the case of roads, CHIP, CDEP and royalty funds are used in some communities. A range of funding sources may be used in individual communities, and standards of service vary dramatically, to the extent that public health is sometimes compromised.

Local governments are less involved in funding of urban infrastructure services in discrete Indigenous communities than in non-Indigenous communities in similar locations, and partly as a result the quality of services is commonly lower in the former (Deloitte Touche Tomatsu, 1996). One of the main reasons appears to be that local governments receive most of their revenue from rates on property. Because of low incomes and the fact that many are located on crown or Aboriginal land that is unrated, most discrete Indigenous communities yield little if any rate revenue. While decisions by councils to not provide services are understandable they conveniently ignore their responsibility to provide services to all their residents and that local grants commissions in each state and territory distribute Commonwealth funds under the *Local Government (Financial Assistance) Act 1995* to local governments partly on the basis of the number or proportion of Indigenous residents.

In principle ATSIC does not provide funding for infrastructure services that are the responsibility of state, territory or local governments, but they do respond to need and there is some evidence, especially in the case of maintenance expenditures, that ATSIC's funds some could be substituting for state and local government funds.

4. Multiple measures of need for particular services

One of the main conclusions of our detailed study of measures of housing need (Jones et al, 1998, Neutze et al 2000) is that single measures of need are inadequate. In the case of housing there is a fundamental division, which applies to all services for which there is a significant cost to users, between adequacy measures and affordability measures. This is particular evident in the case of housing where almost everyone pays something for their housing and there is a choice for many Indigenous people between living in adequate housing that they cannot afford, and living in housing that they can afford but is inadequate.

The adequacy measure itself has several dimensions including occupancy standards (degree of overcrowding), homelessness, services available, housing condition, security of tenure, and cultural appropriateness. Of these we were able to measure only needs arising from homelessness and from overcrowding for the whole Indigenous population of Australia. We found significant differences between locations within Australia in the relative important of those two measures and affordability, and found that they had moved in different direction in particular locations and in total between 1991 and 1996. We made some estimates of the aggregate of individual measures by calculating the cost of relieving the need after annualising the cost of needs for capital expenditure.

Measures of infrastructure needs, services available in the housing and housing condition in discrete Indigenous communities were collected in 1992 by the ABS in a survey commissioned and published by ATSIC (1993). Jones (1998) used its findings together with those from the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) (ABS, 1995, 1996) and the Western Australian Environmental Health Needs Survey 1997 (WAEHNS) to produce experimental estimates of the housing quality and service needs for those sectors for which data are available. A second and improved survey (CHINS) was conducted by ABS for ATSIC in 1999 (ATSIC, 1997) but the results have not yet been published. It is understandable that surveys of infrastructure available should be restricted to discrete communities: in other urban areas they have the same infrastructure services as their non-Indigenous neighbours. But no data have been collected from rural and remote areas, which have poorer services and housing and where many Indigenous people live.

The restriction of the survey to discrete communities also results in there being no data about condition of, and services in, housing of the great majority of Indigenous people living outside the discrete communities. Although most Community Housing is in discrete communities, most publicly and privately rented and owner occupied housing is elsewhere, and given their low incomes, it can be expected that many Indigenous people will live in poorly maintained housing which may lack some services.

It seems clear that multiple measures will be found appropriate for other services. Needs for health services require mortality and morbidity measures, probably disaggregated by cause. In addition a measures of physical access to health services is likely to be useful. Physical access to schools, colleges and universities, level of achievement of those enrolled, participation rates and literacy and numeracy achievement levels are obvious measures of need in education. Employment levels following the end of formal education are a further measure. Employment service need must include measures of level of employment and unemployment, workforce participation and access to employment services. Infrastructure services need requires measures of access, quality including reliability, health and environmental outcomes and, where residents pay for services through user charges or rates, affordability. Frequently much of the cost of infrastructure services is included in the cost of housing through its capital cost, rents or rates.

Our approach to combining the measures for housing by estimating the cost of removal of the need will be much more difficult if not impossible to apply to some or all of the measures of need for other services. Thus it may be possible to estimate the additional operating and capital cost of providing for the additional enrolments that would bring education participation rates up to acceptable levels, but additional expenditure to offset the educational disadvantages of the particular group may be needed achieve the desired rise. And the cost of raising numeracy and literacy rates to acceptable levels would be very difficult to estimate. Similar problems are likely to occur across the range of health needs measures. Nevertheless the “cost of removal or remedy” appears conceptually the best way of combining different measures and may be the best approach even if it based on quite crude cost measures.

5. Level of detail within each function for measuring need.
(Information Paper No.1, Attachment B, Section (ii)

Whether needs should be measured at a detailed or broad level depends on the how the results of measures of need are to be used in making decision about the level of expenditure on different components of a function.

If the Commonwealth has an allocation of funds for diabetes control and wishes to allocate those according to need, the distribution of need should be measured at the detailed level of the need for diabetes prevention and treatment. If, at the other extreme, the Commonwealth allocated all of its funds for Indigenous-specific health programs to the ATSIC Region, the needs should be assessed for all such programs together. Of course, an aggregate measure may be best produced from detailed measures. The use of the needs measures has to be decided before the level of disaggregation can be determined. In the case of housing, for example, separate funds are allocated through the states for public rental housing, both through ARHP and through general public housing programs, and directly by the Commonwealth for Community Housing. In addition, minor funds are provided to assist Indigenous people to become home owners, and to provide for short term housing needs in Aboriginal Hostels. Given that these programs meet different kinds of needs, it might be appropriate to estimate the needs separately. Indigenous-specific educational funding, the great majority of which goes through the state and territory departments of education, could be allocated as a single amount for each region.

In general it would be desirable for the funds to be allocated to Indigenous communities at the greatest level of aggregation to permit them the greatest level of autonomy to allocate their funds in accordance with their priorities (Coombs, 1994). In reality the best that could be achieved is to provide funds in each of the separate functional areas listed in the terms of reference, including housing and (community) infrastructure as a single category. This implies that, despite the fact that the functional areas are by no means independent, they should be treated as a whole rather than in small and discrete sub-areas.

In addition to maximising the autonomy of Indigenous communities[2] allocating funds across broad functional areas facilitates expenditure on programs that have general benefits for Indigenous health, education, housing and infrastructure, and employment. This is better than having funds confined to narrowly defined programs of improvement in individual areas such as primary level literacy; better to provide funds for broad public health measures than measures to prevent or treat specific causes of ill health.

6. Need for both capital and operating funding
(Information Paper No. 1, Attachment B, Sections (v), (via))

There is a wide range among the function areas in the relative proportions of capital cost and operating costs. At one extreme, housing and infrastructure need is frequently thought of as being entirely a need for capital expenditure, whereas employment and training and to a lesser extent education and health require primarily operating expenditure. The view that housing and infrastructure costs are primarily capital costs has led to major problems in programs designed to meet those needs. It is well established in the economics of building and other areas of construction that ‘lifetime cost’ which adds amortised capital cost to operating cost is the appropriate measure of cost.

Operating costs are particularly important components of the cost of provision of housing and infrastructure services for Indigenous people, and especially those living in remote areas. Many studies, such as those by Healthhabitat (Pholeros et al, 1993), have shown that giving insufficient attention to the choice of building materials, designs and methods and poor supervision of the quality of construction have resulted in breakdowns of housing services and high costs of repairs and replacements during the lives of the assets. These problems are exacerbated in isolated areas where neither skilled maintenance workers nor materials are available locally.

Traditionally the needs for capital as distinction from operating expenditure have been met by having separate expenditure programs in the two areas. The inadequacy of this approach for housing has had to be recognised in the case of the CHIP program by using capital funds for overcoming backlog maintenance as this is seen as the best way to use capital funds in providing additional housing/infrastructure services. A more satisfactory approach is to recognise that both capital and operating cost needs are likely to be continuing, and to provide annual funds that can be used for either through programs designed to meet broadly or narrowly defined needs.

[2] It is important that the difficulties of decision making by the Indigenous people in local communities, let alone the many and diverse groups found in some ATSIC regions be recognised. Allocations of funds within ATSIC regions are not, I assume, a matter for the current Inquiry. Rowse (2000, Ch. 7) has a valuable account of debates on the extent of localism in Aboriginal decision making.

The same arguments apply to both education and health needs and to employment; as is recognised in the CDEP scheme, needs that can be met with operating funds frequently require complementary capital funds and vice versa.

7. Interaction between different measures of need.

Jones et al (1998) and Neutze et al (2000) have shown that different kinds of housing needs interact in different ways. From the point of view of the occupants of housing there is a clear trade off between which kinds of needs they "choose" to experience. As described above, a family or household frequently has a choice between a house that is adequate for their needs and one they can afford. A different aspect of this relationship shows itself up in measures of need as described in the Conclusion of Neutze et al (2000). Programs such as ARHP and CHIP which provide additional housing to relieve overcrowding result in there being fewer occupants per dwelling to contribute to paying the rent, and a consequent increase in the affordability deficit.

Measures to improve affordability, on the other hand are unlikely to have adverse effects on overcrowding: on the contrary they will permit a family or household to meet their housing costs more readily without overcrowding. It is clear from this that affordability is the underlying problem of housing need: in a society in which occupants are expected to pay much or all of the costs of their housing, housing need is an important and relatively distinct dimension of poverty.

Part, but perhaps a major part, of the needs for health services also results directly from poverty. If all Indigenous people could afford to pay for GP, specialist, private hospital and private insurance their unmet needs for health services would be much smaller and for many would disappear. As pointed out elsewhere, some Indigenous people have special requirements in all of the function areas being studied because of their different location and the cultural differences that result in their needs being different from those of the dominant culture. Some of those needs will be best met through specific services.

Only a minor proportion of Indigenous needs in education are directly due to poverty, though poverty may result in poor living conditions that make it difficult to study at home and for Indigenous children to participate in discretionary aspects of education programs. Private schools vary in quality relative to public schools. Those private schools that Indigenous students frequently attend are not necessarily better than public schools, though some church schools with many Indigenous students are oriented to their special needs.

Employment needs are not a measure of poverty, though poverty results in part from their low level of employment which in turn derives from poorer education.

As noted elsewhere in this submission, and in the Information Paper, meeting the needs in some function areas will contribute to the meeting of needs in others. Most obviously better housing and infrastructure will improve health and education outcomes; better education will contribute to better health and employment outcomes; better health to better employment outcomes; and better employment incomes to greater affordability of housing.

These relationships are understood in principle but their parameters are poorly estimated. Until the effects can be better measured the best way to take them into account in using needs measures to distribute funds to reassess needs frequently so that positive effects between function areas can be incorporated in updated needs measures.

8. Allocation funds in accord with measures of need

Reasons have bee given above for not allocating funds solely in relation to need, if only because of the adverse incentive effects they provide to users to improve the effectiveness with which the funds are used. Nevertheless Section (vii) of Attachment B legitimately asks how measures of relative need should be taken into account in allocating funds. While equity may be paramount, effectiveness cannot be ignored in allocation of funds.

If measures of need were to be individual rather than for groups, there is a strong case in equity[3] (Rawls, 1971) to allocate all funds first to those with the greatest unmet needs. But where the measures are, as in this case, for groups of Indigenous people that no longer holds because there will be some individuals with great needs within groups whose average needs are small, and some with small needs among groups whose average need is great. In this case allocation between all groups in proportion to need is a more defensible policy. In addition it is more likely to be politically acceptable. The Rawlsian prescription is valid for allocation to individuals within groups, which is not the concern of this Inquiry.

Section (viii) of Attachment B raises the question about whether cost differences between groups should be taken into account in allocating funds according to need. If, as is argued above, needs are measured as the cost of removal of the need, cost differentials are automatically taken into account in the measure, and will be automatically taken into account in any needs-based the distribution. Even where the cost of removal of needs is difficult to estimate it should used to the extent possible. Uncosted needs, where costs vary between groups, do not provide a satisfactory basis for fund allocations.

Nevertheless, differences in the cost of meeting needs should be taken into account in allocation of funds. As argued above especially in relation to groups living in different locations, some of the additional costs should be borne by people who choose to live in such locations either by contributing to the additional cost or by accepting poorer services (continuing unmet needs). One reason for this is to provide an incentive for individuals to move to locations where needs can be met at lower cost. It should be noted that this argument applies not only in relation to meeting needs of different Indigenous groups, but also the needs of non-Indigenous Australians living "in the bush" whose needs may be partly met through Community Service Obligations (CSOs). The extent to which relative per-capita cost should be used to vary a simple cost-based needs allocation is a political question rather than a technical one. The answer will depend on the importance that people in Australia place on individuals being able to live where they choose without suffering great disadvantages from poor quality or high cost of services.

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[3] This argument is supported by John Rawls' (1971) analysis based on the thought experiment which assumes that the individuals making the decision about funds allocation do not know what their position in the distribution of needs will be: the so-called "veil of ignorance".

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Attachment 1

DRAFT

Estimating Indigenous housing need for public funding allocation: a multi-measure approach.

Max Neutze, Will Sanders and Roger Jones.

Introduction

The idea that public expenditure on housing, or any other function, should be allocated between geographic areas or programs on the basis of need is a common and unexceptional one. Indeed it is difficult to see how one could take issue with such an idea. However, need is not a simple concept. It is, in many ways, both socially and culturally constructed, and relating it to the desirable allocation of public funds between different geographic areas or programs is no simple task.

These were the challenges which faced us in 1998 when we were asked to provide an analysis of Indigenous housing need which might guide the allocation of public funds in Indigenous housing between states and territories, and possibly also between intra-state regions and different housing programs. Previous analysis of Indigenous housing need had been undertaken by one of us based on 1991 census data (Jones1994), while another had written on some of the inadequacies of earlier attempts to measure Indigenous housing need (Sanders 1989, 1993).

The first part of this paper elaborates a little more on the policy context and describes the methods we used in making a multi-measure assessment of housing need among Indigenous Australians. The second part reports the distribution of the measures of need between different geographic parts of Australia and, in the light of this distribution, makes some further comments in defense of a multi-measure approach. The third part of the paper reports the distribution of each measure across the various housing tenures and makes some suggestions for what this may mean for the distribution of funds between programs. The fourth part of the paper makes some comparisons between levels of housing need among Indigenous and non-Indigenous Australians, while the fifth looks at changes in Indigenous housing need from 1991 to 1996. The sixth and final part of the paper contains some broader critical reflections on the limits and limitations of the idea of allocating public funds according to need in Indigenous housing.

Context and Method

The challenge of measuring Indigenous housing need for public funding allocation had many facets, which we argued to and fro in 1998. Should we attempt to derive some specifically-Indigenous standards and measures of housing need? Should we try to distinguish between Indigenous people in different circumstances in different parts of the

Australian continent and apply different standards and measures to each? We decided that these were untenable approaches. Despite differences, both from non-Indigenous Australians and among themselves, Indigenous people would not, we believed, accept either being treated differently among themselves or set apart from non-Indigenous Australians in any housing needs analysis. Our solution was to adopt an Australia-wide multi-measure approach to housing need. This would take its standards of need from the dominant non-Indigenous community and circumstances in Australia. But it would look at several measures, in the anticipation that these may reveal different aspects of Indigenous housing need in different geographic circumstances.

Jones' (1994) Indigenous housing need analysis had already been based on a multi-measure approach, providing homelessness, overcrowding and affordability measures. However, only a combination of the homelessness and overcrowding measures had been taken up by allocating authorities. This was perhaps because only these measures, and not the affordability measure, could be directly costed using Jones' results. This time we decided that we would try to come up with more than just three measures and that we would also try to quantify the cost of meeting all of the measures estimated on some comparable basis. This required us to develop a way of measuring the depth of unmet affordability deficit.[4]

The combined homelessness and overcrowding measure taken up by allocating authorities as a result of Jones' earlier analysis showed that much Indigenous housing need was in rural and remote areas. This evoked some response from Indigenous people in urban areas who felt that their housing needs were not being captured by this measure.[5] Our improved, costable affordability measure was partly intended to pick up on this uncaptured housing need perceived by Indigenous people in urban areas. And, as we shall see later, it did indeed do just that.

What follows is a brief summary of estimates of Indigenous housing need which derive from three reports produced in 1998/99 (Jones, Neutze and Sanders 1998; Jones, 1998; 1999). We initially identified four dimensions of housing need: adequacy, affordability, cultural appropriateness and security of tenure, which could be applied to both Indigenous and non-Indigenous housing, Australia-wide. Adequacy was disaggregated into overcrowding, homelessness, services in the housing and housing condition, giving seven dimensions in which need could be measured.

The methods and data required to derive estimates of these measures of need are discussed in Jones, Neutze and Sanders (1998). Jones (1998) develops experimental estimates of the measures of homelessness, overcrowding, affordability of all housing and of the condition/services deficit of private rental housing from analyses of the 1996

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[4] We also made estimates of the extent to which rent rebates and rent allowance were relieving those affordability deficits, but they are not reported here.

[5] A paper prepared by Aboriginal Affairs Victoria for the meeting of the Ministerial Council for Aboriginal and Torres Strait Islander Affairs held in Perth on 15 August 1997 summarised these concerns.

Census. It also develops measures of services and stock condition of community housing using data from the 1992 Housing and Community Infrastructure Needs Survey (HCINS) and the 1997 Western Australian Environmental Health Needs Survey (WAEHNS), with supporting analyses from the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS). The recently completed Community Housing and Infrastructure Needs Survey (CHINS) is expected to provide much better and more comprehensive data on the service needs and condition of Indigenous community housing.

In this paper we limit discussion to just three dimensions of unmet need: homelessness, overcrowding and affordability. Measures in all three dimensions were constructed from information available from the 1996 census, which allowed comparability both across Australia and between Indigenous and non-Indigenous Australians.

The homelessness measures identified the needs of people living in improvised dwellings and people living in hostels for the homeless, night shelters and refuges in the 1996 census.[6] The need was measured as the capital cost of three and four bedroom houses, to be either purchased or constructed, and supplied to groups of homeless people in accordance with the adopted occupancy standard.

The overcrowding measure compared numbers of people in dwellings with numbers of bedrooms according to the following occupancy standard: one bedroom for each couple and for each single, non-dependent adult, with dependent children sharing bedrooms at a maximum of two per bedroom. These standards are one-room lower for two classes of household than the Council of Australian Government (COAG) standards, and will produce slightly lower estimates of need than if those standards had been used.[7]

The cost of meeting this overcrowding need was estimated as the capital cost of moving a household from its current dwelling to one that is large enough for the household. It used Australian Valuation Office (AVO) data on the cost of houses of different size in different parts of Australia to calculate the additional estimated capital cost of an adequate dwelling compared with their current dwelling.[8]

The affordability measure looked at income left for housing after other basic needs had been met in accordance with the Henderson poverty line. Some households have no income left for housing after other basic needs have been met, and so their "housing affordability deficit" equals the total cost of renting an adequate house in their location for their size of household. Others however, can afford to pay part of the cost of their housing, which leaves an affordability deficit which equates to only part of the cost of

6 Only about a third of all homeless people identified by a special ABS(1999) study were in these two categories. Many of the other two thirds will be identified as living in overcrowded dwellings in our estimates.

7 Under both standards, since using census definitions no dwelling can have less than one bedroom, single person households cannot be overcrowded.

8 Alternative methods discussed by Jones (1998, Ch. 2) would all give higher estimates.

renting an adequate house. The estimate includes only the affordability of a dwelling that is adequate for each household[9].

This multi-measure approach to Indigenous housing need is in line with recent developments in the measurement of housing needs more generally. The Australian Institute of Health and Welfare has recently developed an approach which measures the financial/ affordability and non-financial/ adequacy aspects of housing need (AIHW, 1995). Our approach builds on and is coherent with this approach.

[9] To measure the affordability deficit of a household (Jones, Neutze and Sanders 1998, paras 5.40-5.49; Jones 1998, ch. 5) we define "norm-rent" as the rent needed to pay for a dwelling of adequate quality and size according to our occupancy standards. If the dwelling occupied is smaller than the standard, the norm rent for that size is used. The inadequacy of its size shows a need to remove overcrowding rather than an affordability deficit and will be included in the overcrowding measure. The affordability deficit is the additional income the household would need to pay its norm-rent and also meet its non-housing needs as shown in the Henderson Poverty Line.

Needs in Different Parts of Australia

Homelessness

The estimates of need arising from homelessness are shown in Tables 1 and 2. Table 1 shows the number of bedrooms needed in different parts of Australia to provide homeless Indigenous families with adequate housing. The measure is given both as total bedroom need and as bedroom need per 100 family households in the geographic areas concerned—a measure of the intensity or depth of need. The 5799 additional bedrooms needed Australia-wide equates to 7.47 bedroom per 100 Indigenous family households. Most of these additional bedrooms, 5087, are needed in rural areas, where the need per 100 Indigenous family households is 30.44 bedrooms, or four times the national average. In Northern Territory rural areas, where improvised dwellings are still quite common, the need arising from Indigenous family homelessness was 124.60 bedrooms per 100 Indigenous family households, or 17 times the national average.

Table 1. Bedrooms Needed to House Homeless Indigenous Families, per 100 Family Households*.

	Major Urban	Other Urban	Rural	TOTAL	TOTAL B'room need
New South Wales	0.07	0.11	3.09	0.55	140
Victoria	0.00	0.00	0.50	0.07	4
Queensland	0.00	2.52	15.71	4.57	964
South Australia	0.00	1.23	14.71	2.86	123
Western Australia	0.00	2.01	26.95	7.54	752
Tasmania	0.00	0.00	0.42	0.14	6
Northern Territory		10.57	124.60	63.48	3810
ACT	0.00		0.00	0.00	0
TOTAL	0.03	2.05	30.44	7.47	5799
Total Bedroom Need	7	705	508 7	579 9	

* Households living in improvised dwellings are excluded from the denominator for these ratios.

Source: Jones (1999) Tables 2.2, 3.4.

Table 2 shows the number of bedrooms needed in different parts of Australia to house single adults who reported in the census living in temporary accommodation such as hostels and refuges. This is again given as total bedrooms needed and also as bedrooms needed per 100 Indigenous single adults living in lone-person or group housing in the geographic areas concerned. There were 1218 additional bedrooms needed Australia-wide to house these single adult Indigenous people, which is a rate of 6.35 bedrooms per 100 single Indigenous adults. This need is much more evenly spread across urban and rural areas than the need arising from Indigenous family homelessness, shown in Table 1. However, the need in rural areas nationally per 100 single Indigenous adults (13.02) is still twice the overall national average and that in Northern Territory rural areas (41.64) more than six times.

Table 2. Bedrooms Needed to House Homeless Indigenous Single Adults, per 100 Indigenous Persons in Group and Lone Person Households.

	Major Urban	Other Urban	Rural	TOTAL	TOTAL B'room Need
New South Wales	4.84	3.52	3.02	4.13	274
Victoria	3.30	3.58	2.02	3.25	60
Queensland	4.32	4.93	9.81	5.46	273
South Australia	3.02	4.28	10.43	4.28	58
Western Australia	6.98	16.18	28.63	14.76	317
Tasmania	1.92	3.06	1.54	2.41	22
Northern Territory		10.01	41.64	19.92	194
ACT	6.73		0.00	6.54	20
TOTAL	4.57	5.82	13.02	6.35	1218
Total Bedroom Needs	405	428	385	1218	

Source: Jones (1999) Tables 2.3, 6.9, 6.10, 6.15.

Overcrowding

Given the occupancy standard used, lone person households, cannot be overcrowded. There is no equivalent in this section, therefore, to the measures in Table 2 under homelessness. There are only measures relating to group and family Indigenous households. Table 3 shows numbers and percentages of these households in different parts of Australia which are overcrowded. A total of 14,858 or 17.8 per cent of Indigenous family and group households were overcrowded nationally, with a range from 64.0 per cent in NT rural areas to 5.6 per cent in Tasmanian urban areas. Of the national total, 3385 (or 23 per cent) of the overcrowded Indigenous households were in major urban areas, 6264 (or 42 per cent) were in other urban areas and 5216 (or 35 percent) were in rural areas.

Table 3. Number and Percentage of Family and Group Indigenous Households Overcrowded by Location.

	Major Urban	Other Urban	Rural	TOTAL	TOTAL O'crowd H'holds
New South Wales	10.7	12.5	16.1	12.3	3425
Victoria	10.2	9.9	11.1	10.2	625
Queensland	12.7	21.4	27.7	19.9	4537
South Australia	11.0	16.7	23.9	14.9	692
Western Australia	14.0	19.8	41.8	23.1	2442
Tasmania	5.6	5.6	6.0	5.7	263
Northern Territory		29.5	64.0	45.1	2815
ACT	6.5		21.3	7.3	66
TOTAL	11.3	17.2	30.1	17.8	14865
TotalOvercrowdedH'holds	3385	6264	5216	14865	

Source: Jones, (1999) Tables 3.4, 3.5.

Table 4 shows the extent of this overcrowding in Indigenous family and group households in terms of additional bedrooms needed to satisfy the occupancy standard outlined above. An additional 28,580 bedrooms were needed Australia-wide, or 0.34 bedrooms per Indigenous family and group household. The range in different parts of Australia was from a high of 2.18 additional bedrooms needed per Indigenous group and family household in rural areas of the NT to 0.06 in the major urban areas of Tasmania. This measure shows major need in rural areas, with 13,452 or almost half of the additional bedrooms being needed in these areas. The rate of need in rural areas is also higher, at 0.78 additional bedroom per Indigenous family or group household, or more than twice the national average of 0.34. However it is also notable that there is substantial need in urban areas, with 4384 additional bedrooms required in major urban areas at a rate of 0.15 bedrooms per Indigenous family and group household and 10,744 bedrooms needed in other urban areas at a rate of 0.29 bedrooms per Indigenous family and group household.

Table 4. Bedrooms Needed to EliminateOvercrowding per Indigenous Family and Group Household.

	Major Urban	Other Urban	Rural	TOTAL	TOTAL B'room Needs
New South Wales	0.13	0.17	0.22	0.16	4492
Victoria	0.12	0.13	0.15	0.13	791
Queensland	0.17	0.37	0.61	0.36	8108
South Australia	0.15	0.25	0.62	0.26	1184
Western Australia	0.20	0.31	1.11	0.46	4903
Tasmania	0.06	0.07	0.07	0.07	309
Northern Territory		0.75	2.18	1.40	8715
ACT & Other Terr's*	0.08		0.25	0.09	78
TOTAL	0.15	0.29	0.78	0.34	28580
TotalBedroomNeeds	4384	10744	13452	28580	

Source: Jones, (1999) Tables 3.4, 4.1, 4.2

* The Major Urban and Rural distribution is estimated from Jones (1999)Tables 4.4 and 4.5

The last rows of Tables 1, 2 and 4 could be added together to give a measure of additional bedrooms needed against the adopted occupancy standard to overcome both overcrowding and homelessness. Comparing these rows it is evident that four times the additional bedrooms are required to overcome overcrowding as to overcome homelessness; 28,541 compared to 7017.

Affordability

Table 5 shows the affordability deficit measured in dollars per year per Indigenous household and in million dollars per year for all Indigenous households. The first notable feature of the estimates is that, compared with overcrowding and homelessness, the affordability deficit measure does show far greater urban levels of need. Only $10.38m (or 15 per cent) of the total affordability deficit of $69.13m Australia-wide was in rural areas. Even on a per household basis, rural affordability need ($538 per year nationally) was lower than major urban and other urban affordability need ($745 and $794 per year respectively). Among the states and territories, the Northern Territory had the lowest affordability deficit per Indigenous household ($484 per year) and the second lowest total affordability deficit for Indigenous households ($3.30m above Tasmania's $2.60m). New South Wales ($25.55m) and Queensland ($19.38m), on the other hand, account together for nearly two thirds of the total affordability deficit and also have the highest affordability deficits per Indigenous household ($799 and $754 per year respectively). These results are in stark contrast to those for overcrowding need. They justify the concerns of Indigenous people in urban areas who were worried about using only the combined measure of homelessness and overcrowding in the allocation of housing funds. They also more broadly vindicate the idea of a multi-measure approach, as if one measure can be so differently distributed than another, reliance on any one measure may be unwise.

Table 5. Affordability deficit in $ per year per Indigenous household and $m per year for all Indigenous households.

	Major Urban $ per year	Other Urban $ per year	Rural $ per year	TOTAL $ per year	TOTAL $m per year
New South Wales	767	890	628	799	25.55
Victoria	632	7 99	514	678	4.90
Queensland	782	806	590	754	19.38
South Australia	765	778	533	733	4.07
Western Australia	753	790	622	737	8.75
Tasmania	638	557	321	499	2.60
Northern Territory		579	363	484	3.30
ACT	555			526	0.57
TOTAL	745	794	538	724	69.13
Total $m per year	26.03	32.72	10.38	69.13	

Source: Jones (1999) tables 3.1, 8.6

Costing Measures to Compare Cumulative Needs

While we adopted a multi-measure approach in the anticipation that it would indeed show different geographic distributions of different dimensions of housing need, we were cognisant also of the desire of the public authorities to bring measures together in some common or comparable way. Expressing all measures of need in terms of the cost of overcoming the need provided the only way to make them comparable. Given that some of our measures were couched in capital cost and others in annual cost, either the annual affordability deficit had to be capitalised, or the capital cost of providing additional space to remove homelessness and overcrowding measure had to be annualised.

We chose the latter, using an assumption about the ratio between the capital value of a house (to relieve overcrowding or homelessness) and its rental (to reduce the affordability deficit). Such ratios can be observed in the housing market and private rents usually run around 6 to 7 per cent of capital value, depending on the anticipated rate of inflation and the rate of interest. In the low interest/inflation rate environment at the end of the twentieth century we added 6 per cent of the capital cost of providing additional bedrooms to the annual cost of removing the affordability deficit. Seven per cent would give a slightly higher weight to the overcrowding and homelessness parts of the measure.

Table 6 indicates that cumulative Indigenous housing need captured in our three measures was costed in absolute terms at $161.74m per annum. Cost per annum to cater for these estimated needs was fairly evenly spread across urban and rural areas: $56.48m in rural, $65.16m in other urban and $40.10m in major urban areas. The spread across states and territories was less even, ranging from $44.44m for Queensland, $42.51m for New South Wales and $32.56m for the Northern Territory to $3.13 for Tasmania and $0.87 for the Australian Capital Territory.

If these absolute cost figures are converted to dollars per Indigenous household or person, differences between rural and urban areas become more marked, while those between the states and territories become less so, apart from the NT. Rural need is $2954 per household and $586 per person, compared to major urban need of $1154 per household and $375 per person, with other urban being in between but closer to major urban than rural. NSW, Victoria, Qld, SA and WA all have needs costed in the range of $1,000-$2,000 per household, or $340 -$470 per capita, with ACT and Tasmania having slightly lower need and NT much higher need $4815 per household and $704 per capita.

Considering the component parts of this need costing, however, reinforces once again the value of a multi-measure approach. Of the total need of $40.10m in major urban areas, $26.03m (or 65%) comes from the affordability measure. In rural areas, by contrast, of the total need of $56.48 m only $10.38m (or 18%) comes from affordability and $32.30m (or 57%) comes from overcrowding.

Table 6. Geographic Distribution of Three Costed Measures of Annual Indigenous Housing Need.

	Cost of eliminating		Affordability	Total	Total per	Total per
	Home-lessness	Over-crowding	deficit	Needs	Household	Person
	Sm	$m	Sm	$m	$m	$
			Major Urban			
New South Wales	0.60	5.39	10.50	16.49	1212	407
Victoria	0.12	1.17	2.23	3.52	1004	349
Queensland	0.26	3.42	6.66	10.33	1218	389
South Australia	0.06	0.68	2.20	2.94	1032	325
WesternAustralia	0.18	1.80	3.19	5.18	1231	346
Tasmania	0.01	0.08	0.69	0.78	725	274
ACT	0.07	0.23	0.57	0.87	848	304
TOTAL	1.30	12.77	26.03	40.10	1154	375
			Other urban			
New South Wales	0.34	7.27	12.11	19.72	1457	439
Victoria	0.06	0.99	2.16	3.21	1199	378
Queensland	1.22	10.27	9.61	21.09	1777	468
South Australia	0.11	0.91	1.42	2.44	1338	
WesternAustralia	0.46	3.68	3.81	7.96	1660	416
Tasmania	0.03	0.24	1.40	1.67	663	247
Northern Territory	1.22	5.64	2.21	9.08	2400	495
TOTAL	3.44	29.00	32.72	65.16	1590	437
			Rural			
New South Wales	0.46	2.90	2.95	6.31	1356	395
Victoria	0.03	0.37	0.51	0.91	929	316
Queensland	2.36	7.55	3.11	13.02	2488	547
South Australia	0.28	0.88	0.46	1.62	1874	333
WesternAustralia	2.11	6.59	1.75	10.46	3740	627
Tasmania	0.02	0.16	0.52	0.70	433	164
Northern Territory	8.54	13.85	1.09	23.48	7878	841
TOTAL	13.80	32.30	10.38	56.48	2954	586

			Total			
New South Wales	1.40	15.56	25.55	42.51	1337	419
Victoria	0.21	2.53	4.90	7.64	1067	356
Queensland	3.83	21.24	19.38	44.44	1737	465
South Australia	0.44	2.48	4.08	6.99	1264	342
Western Australia	2.76	12.08	8.75	23.59	2000	465
Tasmania	0.06	0.47	2.60	3.13	602	226
NorthernTerritory	9.76	19.50	3.30	32.56	4815	704
ACT	0.07	0.23	0.57	0.87	848	301
TOTAL	18.54	74.08	69.13	161.74	1705	459

Source: Column 1 and 2: Jones (1998) Tables 1.3, 2.2 annualised at6per cent
Column 3: Jones (1998) Table 5.4
Column 5 and 6: Column 4 and Jones (1999) Table 7.5; ABS(1998)Table 1.4

The multi-measure approach suggests that Indigenous housing need of quite different kinds and different magnitudes is found in all geographic areas. This vindicates the multi-measure approach and further suggests that component measures need to be debated, added to and refined, and not just accepted as given.

Needs in different housing tenures

Public expenditure on Indigenous housing is delivered through programs which are specific to particular tenures. The two programs whose funding allocations were in question in our research were the Aboriginal Rental Housing Program (ARHP) run by the Commonwealth housing portfolio in conjunction with the state and territory housing authorities and the Community Housing and Infrastructure Program (CHIP) run by the Aboriginal and Torres Strait Islander Commission in conjunction with Community-based Indigenous housing organisations. In the past, funds from these programs have been primarily spent on the provision of new housing stock either in the community or public rental sectors, or major renovations in the community rental sector. There are, however, other housing assistance programs available to Indigenous people in these and other tenures, the allocation of funds from which was not under question in our research. Thus Rent Assistance is available to people renting from private landlords and community housing organisations who are in receipt of social security payments, rent rebates are available to state and territory housing tenants and home purchase assistance and various tax and social security advantages are available to owner occupants (Neutze, Sanders and Jones 1999).

Because housing program expenditures are delivered to housing in particular tenures, it is important to have some idea of the extent of need in each tenure. This does not lead in any easy prescriptive way to suggestions about through which programs and on which tenures funding ought to be spent. But it does at least inform debate about the different 'tenure incidences' of need.

Because homeless people do not have a housing tenure - they could be housed in any tenure - they are not included in the first part of this analysis. Table 7 shows indicators of the intensity of the other two measures of need, overcrowding and affordability, in housing in each tenure class. The measures again provide strikingly different assessments. Overcrowding is far more common and severe in community housing than in any other tenure, and is remarkably low in owner occupied and privately rented housing: nearly half the overcrowded dwellings are in the community sector and nearly half of its dwellings are overcrowded. The next largest number is in the public sector where about a fifth of dwellings are overcrowded.

By contrast, while over a third of community housing residents cannot afford their costs, the average deficit per dwelling is relatively low. One of the main reasons for the provision of community and public rental housing is to provide affordable housing for those who cannot afford to rent or buy in the private sector. It is surprising then to find that 42 per cent of public tenants cannot afford their rents. This result arises mainly because public rents are set as a percentage of income rather than at a level the occupants can afford after paying their estimated non-housing living costs - the standard we have adopted, which looks at residual income after other basic non-housing costs have been met.[10]

Table 7. Measures of Housing Need in Different Tenures

	Owned/ Buying*	Private Rental	Public Rental	Community Rental	Other	TOTAL
Overcrowding						
Per cent overcrowded	7.68	14.42	19.07	47.86	22.84	17.76
Total bedroom needs	3071	3906	5976	12846	2782	28581
Bedroom needs per h'hold	0.11	0.18	0.30	1.37	0.44	0.34
Affordability						
Dwellings not affordable	2445	7724	9409	3694	1324	24596
Per cent of total	14.3	30.0	42.1	36.6	18.1	25.9
Afford. deficit $ pa/dwell.	488	1028	1078	721	403	729

[10] Two-thirds of the 'Other' category in this table are those renting from other landlords, including some who live rent free. Smaller numbers have not stated their tenure, or are in other tenures. It is not surprising that the average overcrowding is relatively high, but affordability deficits relatively low in this group.

* The affordability rows of this column apply only to buying households.

Sources: Overcrowding, Jones (1999, Tables 3.4, 3.5, 4.3)
Affordability, Jones (1999, Tables 3.3, 8.5, 8.6)

The three measures of housing need are costed and compared for each tenure in Table 8, in the same way as they are for different geographic areas in Table 6. In line with their high incidence and level of overcrowding, community rental housing dominates measures of the cost of removing overcrowding, accounting for about 45 per cent of the total. But community rental housing is responsible for only about a tenth of the affordability deficit, most of which comes almost equally from the public and private rental sectors. It follows that an examination of the rebate policies of the public sector and the rental allowances available to Indigenous people in the private rental sector appear to be the priority measures to deal with affordability. Overcrowding requires more resources to be devoted to, or used more effectively in, the provision and maintenance of housing in the community rental sector. The three rental tenures, public, community and private, are roughly equal contributors to total unmet Indigenous housing needs, with much smaller contributions coming from homelessness and unmet needs among owners, buyers and households in other tenures.

Table 8. Tenure Distribution of Three Costed Measures of Annual Indigenous Housing Need.

	Costof eliminating		Affordability	Total	Need per
	Home-lessness	Over-crowding*	deficit	Needs**	Household**
	$m	$m	$m	$m	$
Outright owner		4.53	0.0	4.53	370
Buyer		3.43	8.35	11.77	688
Private rental		10.12	26.48	36.69	1421
Public rental		15.49	24.07	39.56	1771
Community rental		33.30	7.29	40.59	4016
Other tenures		7.21	2.95	10.16	1391
TOTAL	18.54	74.08	69.13	161.74	1705

* This column was estimated on the assumption of a uniform cost per additional bedroom.
** Only the total row in these columns include the cost of dealing with homelessness. Without that cost the total need is $143.21m per year and the average cost per household is $1510..
Sources: Jones, (1999, Tables 4.3, 7.5, 8.6), Table 6, above.

Non-indigenous comparison

It will come as no surprise that Indigenous housing is more overcrowded than non-Indigenous housing. But the size of the differences may surprise. Table 9 shows that the proportion of overcrowded Indigenous households is nearly five times as great (17.8 per cent compared to 3.8 per cent), while the elimination of overcrowding in Indigenous housing requires nearly eight times as many additional bedrooms per 100 existing dwellings as non-Indigenous (34.1 compared to 4.4). Using the latter measure, non-Indigenous overcrowding is more common in the major urban areas than in other urban or rural areas (4.9 compared to 3.2 and 4.0). This is in stark contrast with the concentration of Indigenous overcrowding in the rural areas; 77.5 additional bedrooms needed per 100 Indigenous households compared to 29.4 in other urban and 14.6 in major urban). This Indigenous overcrowding is particularly concentrated in the rural areas of sparsely settled remote Australia (for example 217 additional bedrooms needed per 100 Indigneous households in the rural areas of the Northern Territory compared to 12.1 for non-Indigenous households in these areas). Rural and remote parts of Australia still show very stark differences between the housing conditions of the colonised Indigenous population and the colonising non-Indigenous.

Unfortunately, because Indigenous—non-Indigenous comparisons were not a part of the original brief, estimates do not include affordability deficits for the non-Indigenous population.[11] According to more basic uncostable measures, differences in affordability are somewhat smaller than for overcrowding: the proportion of Indigenous households who cannot afford their housing is a little over four times as high as for non-Indigenous- (25.9 percent compared to 6.1 per cent). Lack of affordability is also much less variable between geographic areas for both the Indigenous and the non-Indigenous – all areas having between 16.1 and 31.7 per cent of Indigenous households who cannot afford their dwelling and between 3.1 and 7.4 per cent of non-Indigenous households.

Table 9 OvercrowdingandAffordability of Indigenous and non-Indigenous Housing

	Overcrowding				Affordability	
	%ofHouseholds Overcrowded		Bedroom Need per 100 Households		% of Households Cannot Afford their Housing	
	Indigenous	Non-Indig	Indigenous	non-Indig	Indigenous	Non-Indig.
			Major Urban			
New South Wales	10.7	5.9	13.2	6.9	24.2	6.3
Victoria	10.3	4.4	12.3	5.2	19.7	5.1
Queensland	12.7	3.0	17.2	3.4	24.6	6.3
South Australia	11.0	2.5	14.7	2.9	27.7	6.6
Western Australia	14.0	2.1	19.9	2.4	27.1	5.7
Tasmania	5.6	2.9	6.0	3.4	22.3	6.2
ACT	6.5	1.7	7.4	1.9	21.7	5.4
TOTAL	11.3	4.2	14.6	4.9	24.4	5.9
			Other Urban			
New SouthWales	12.5	2.7	16.9	3.1	31.0	7.2
Victoria	10.0	2.7	13.0	3.0	28.9	7.0
Queensland	21.4	3.1	37.1	3.5	26.8	7.2
South Australia	16.7	1.9	24.7	2.2	31.7	7.1
Western Australia	19.8	2.3	31.1	2.7	27.2	6.2
Tasmania	5.6	2.6	6.8	2.9	21.9	7.4
Northern Territory	29.5	5.9	75.4	7.0	20.5	4.9
TOTAL	17.2	2.8	29.4	3.2	27.7	7.0

[11] The data are available from the census but the cost of the computer runs necessary to make the estimates for geographical areas is very high.

RURAL			**Rural**			
New South Wales	16.1	3.9	22.3	4.6	23.0	5.0
Victoria	11.2	2.9	14.8	3.3	18.9	4.6
Queensland	27.7	3.7	60.7	4.4	24.0	5.6
South Australia	23.9	2.5	61.7	2.9	26.7	4.6
Western Australia	41.8	2.6	110.7	3.1	29.9	4.0
Tasmania	6.0	3.0	7.1	3.4	16.1	5.0
Northern Territory	64.0	9.3	217.5	12.1	31.6	3.1
TOTAL	30.0	3.4	77.5	4.0	25.0	4.9
			Total			
NewSouth Wales	12.3	5.0	16.1	5.8	26.9	6.4
Victoria	10.3	3.9	13.0	4.5	23.0	5.4
Queensland	19.9	3.1	35.6	3.6	25.5	6.4
South Australia	14.9	2.4	25.5	2.7	28.8	6.4
Western Australia	23.1	2.2	46.4	2.5	27.8	5.6
Tasmania	5.7	2.8	6.7	3.2	20.2	6.5
NorthernTerritory	45.1	6.3	139.8	7.5	25.4	4.7
ACT	6.2	1.7	7.0	1.9	21.7	5.4
TOTAL	17.8	3.8	34.1	4.4	25.9	6.1

Source: Jones (1999) Col.1 Tables 3.4, 3.5;Col.2Tables 9.2, 9.3; Col.3 Table 4.2; Col.4 Tables 9.2, 9.5; Col.5 Tables7.5,8.5; Col. 6 Tables 9.9, 9.10.

Indigenous Housing Need in 1991 and 1996

Between 1991 and 1996 there was a considerable increase in the extent of Indigenous identification. Research has shown, however, that there were not great economic and social differences between those that identified in the two censuses (Taylor 1997, Hunter 1998). It is, therefore, useful to compare, where possible, the level of Indigenous overcrowding and affordability at the two dates. Different methods were used to assess both overcrowding and affordability in the exercises following the 1991 and 1996 censuses. Table 10 compares housing need at the two dates using the approaches used after 1991, in order to make the results comparable. Overcrowding in the 1991 estimates was relieved in a way that kept families together rather than based solely on household size and composition, and the 1991estimate of affordability did not take account of the fact that some households were living in housing that exceeded what they are assessed as needing under the adopted occupancy standards (Jones, 1994).

The results are nonetheless interesting. Whether assessed on the basis of bedrooms needed per person or bedrooms per household, the level of overcrowding appears to have fallen significantly between the two dates. The fall occurred in each state and territory except that, in the Northern Territory where needs are high and the ACT where they are low, there was no significant change. There was a larger fall in major urban (35 per cent per person and 32 per cent per household) than in rural areas (16 and 18 per cent respectively) with other urban between the two. The results were different for various tenure groups where the bedroom needs fell for owner occupied and for private and other (including community) rental, but not for public rental.

Affordability changed in a quite different way. First the proportion who could not afford their housing rose modestly in most parts of Australia, with the exception of WA. The largest rise (2.6 per cent) was in the major urban areas, which also experienced the largest fall in level of overcrowding. Again the changes were more varied across tenures. Proportions of Indigenous outright owners who could not afford their dwelling actually decreased, but home buyers had the biggest increase in not being able to afford their dwelling, while renters were closer to the national average in change in affordability.[12]

These results again justify the use of the multi-measure approach. Not only are the various measures of need different in different locations and different tenures, but they change in different directions over time. It has not been possible to calculate the measures on comparable (dollar) values over time, but it is clear that affordability became more significant relative to overcrowding during the first half of the decade, and that the decrease in affordability, like the decrease in overcrowding, was largest in the major urban areas and smallest in rural areas.

[12] The other not stated tenure group significantly increased in overcrowding,but decreased in affordability. Not much should be made of this as it couldbe as much to do with the changing make up of this residual tenure categoryas anything else.

Table 10. Indigenous Overcrowding and Affordability: 1991 and 1996

	Overcrowding				Affordability	
	Bedrooms Needed per Person		Bedrooms Needed per Household		% of Households cannot Afford their Housing	
	1991	1996	1991	1996	1991	1996
New South Wales	0.068	0.044	0.22	0.14	28.4	30.8
Victoria	0.052	0.033	0.15	0.10	26.0	27.9
Queensland	0.141	0.094	0.55	0.35	27.0	29.2
South Australia	0.115	0.065	0.43	0.24	27.8	32.2
Western Australia	0.148	0.116	0.67	0.50	30.8	30.4
Tasmania	0.030	0.020	0.08	0.05	21.1	24.2
Northern Territory	0.285	0.276	1.83	1.89	26.2	28.4
ACT & other Terr.	0.036	0.031	0.09	0.09	16.4	23.2
TOTAL	0.133	0.098	0.51	0.36	27.5	29.6
Major Urban	0.058	0.038	0.17	0.12	25.1	27.7
OtherUrban	0.101	0.077	0.38	0.28	28.8	31.1
Rural	0.235	0.197	1.22	0.99	28.4	29.6
Fully Owned			0.27	0.14	8.1	7.6
Buying			0.12	0.07	14.2	19.4
Public rental			0.26	0.27	38.0	42.5
Other andNS rental			0.75	0.44	30.9	33.6
Otherand NS tenure			1.45	4.60	25.7	17.1

Source: Jones (1999) Tables 5.3, 5.4, 5.8, 7.11;ABS(1998) Table 1.4

Critical Reflections: some limits and limitations of allocating funding according to need

We began by noting that allocating public funds in housing, or any other function, on the basis of need between areas or programs is a common and unexceptional idea. However, having tried to provide some measures of need from which such an allocation might proceed, we are conscious of the limits and limitations of such an exercise.

One limit is our inability to estimate the extent and distribution of housing needs that arise from poor condition, absence of services, cultural inappropriateness and in security of tenure across all tenures and geographic areas. Further research and data collection could add to the measures used in this paper.

A second limit is that the standards we have used are drawn from the non-Indigenous world. Indigenous Australians may not all aspire to or value housing in quite the way implied in these standards. And it is difficult, if not impossible, to know to what extent differences in housing conditions are a result of these different aspirations and values, as opposed to differences in opportunity and capacity to pay.

One further consequence of measuring Indigenous housing need against non-Indigenous standards is that it tends to result in very large estimates of need, often conceived of a large capital supply backlog. Although superficially attractive, this can be a rather unhelpful way of defining need (see Sanders 1990). We have partly dealt with this problem by annualising, rather than capitalising, the costs of our need measures. The figures don't sound so large and, despite the fact that they still give inadequate attention to the operating and maintenance cost of housing, they do draw attention to the fact that housing need is not simply a capital supply backlog.

Indeed it is possible and likely that Indigenous housing need, as we have measured it, will continue at much same level for many years to come – even given existing program efforts. Our estimates for 1996 compared with 1991 are consistent with such a view. While overcrowding has gone down in this period, affordability need has gone up. As the supply of housing has increased, lessening overcrowding measures of need, the annual affordability deficit of those occupying that increased supply has gone up. We are faced, therefore, with the policy paradox that program success in reducing one measure of need may in fact increase another measure of need (Stone 1988). This is a reflection of the general principle in housing that one way to overcome affordability problems is to live in overcrowded conditions, with many people contributing to housing and other costs. If the overcrowding is reduced through policy interventions, affordability need may increase.

Another limitation is that allocating funding purely on the basis of need may, over time, penalise those geographic areas or programs which are making the best efforts to overcome that need. If needs measures go down in these areas/ programs over time, they would on a strict needs funding allocation basis lose funds. Perversely, the recipients of those funds would be those areas/ programs which were not doing well at eliminating need and whose needs measures were rising. Some countervailing principle of public funding allocation on the basis of 'capacity to deliver' is required, if this conundrum arising from purely needs based funding allocation over time is to be avoided.

Allocating public funds for programs such as housing between areas or programs on the basis of need is not, therefore, as unexceptional an idea as it first appears, even with a multi-measure approach. Estimating need is no substitute for good open public policy debate. Estimates of need should be used to promote and enhance such debate, not to stifle or end it. Indigenous people in urban areas were rightly worried about the simple single reliance on a combined homelessness and overcrowding measure in allocating Indigenous housing funds and were right to encourage public policy debate around the issue. We hope that our results provide material which can encourage and enhance such debate.

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Attachment 2

Distribution of Three Costed Measures of Annual Indigenous Housing Need by ATSIC Region

ATSIC Region	Homelessness $m	Over-crowding $m	Affordability Deficit $m	Total Needs $m	Total per Household $	Total per Person $
Queanbeyan	0.11	1.15	2.87	4.12	458	1375
Bourke	0.43	1.59	1.35	3.36	440	1846
Coffs Harbour	0.22	3.87	9.01	13.11	524	1627
Sydney	0.52	4.72	10.38	15.61	454	1356
Tamworth	0.06	1.91	3.12	5.09	473	1622
Wagga Wagga	0.14	2.52	5.59	8.25	464	1492
Wangaratta	0.08	1.14	3.12	4.34	418	1184
Ballarat	0.14	1.38	3.32	4.84	435	1360
Brisbane	0.23	2.81	9.53	12.57	453	1362
Cairns	0.66	3.90	3.48	8.04	545	2217
Mt Isa	0.26	2.30	0.98	3.53	604	2372
Cooktown	0.39	3.09	0.46	3.94	724	4383
Rockhampton	0.15	1.89	3.05	5.09	451	1561
Roma	0.08	1.57	2.50	4.14	471	1626
Torres Strait Area	1.52	1.99	0.44	3.94	565	4168
Townsville	0.51	3.69	3.52	7.72	532	2073
Adelaide	0.10	0.96	3.62	4.69	372	1160
Ceduna	0.15	0.48	0.29	0.92	492	2143
Port Augusta	0.18	1.04	0.95	2.17	364	1981
Perth	0.25	2.14	4.90	7.29	407	1449
Broome	0.54	0.93	0.60	2.06	620	2970
Kununurra	0.43	1.77	0.25	2.46	591	3821
Warburton	0.37	1.51	0.12	2.00	671	5261
Narrogin	0.07	1.05	1.42	2.54	404	1525
South Hedland	0.28	1.07	0.61	1.96	525	2110
Derby	0.53	1.77	0.55	2.86	715	4167
Kalgoorlie	0.24	0.72	0.53	1.50	448	2208
Geraldton	0.06	1.11	1.16	2.33	464	1977
Hobart	0.06	0.48	3.69	4.23	304	811
Alice Springs	0.38	1.14	0.58	2.10	560	2252
Jabiru	1.96	4.05	0.32	6.33	769	7062
Katherine	1.77	3.17	0.48	5.43	808	6031
Aputula	2.27	4.27	0.17	6.71	817	8369
Nhulunbuy	1.77	3.77	0.21	5.75	806	10246
Tennant Creek	0.94	1.65	0.19	2.78	798	5907
Darwin	0.67	1.44	1.65	3.76	426	1669
TOTAL	18.52	74.06	84.99	177.57	503	1860

Sources: Col. 1 and 2: Jones (1998) Tables 1.2 and 2.5 amortised at 6 per cent

Col. 3, Jones (1999) Table 8.4. Note that this measure does not exclude households who could afford to pay "norm rent".
Cols 5 and 6: Col. 3 plus Jones (1999) Table 3.6 and ABS, Population Issues, Indigenous Australians 1996, Catalogue No 4708.0, 1999, Table 2.5.