



COMMONWEALTH GRANTS COMMISSION

DISCUSSION PAPER CGC 2002/21

SOCIO-DEMOGRAPHIC COMPOSITION

Prepared for the Commission's Staff Conference
November 2002

JULY 2002

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INTRODUCTION

The 1999 Review Assessment Approach

1. The socio-demographic composition disability factor reflects the effects of differences in the characteristics of State populations on:

- (i) the demand for services; and
- (ii) the cost of each unit of service provided.

It is the basic recognition of the differences in the relative amount and unit cost of a service¹ that States must provide because of their population characteristics. In the 1999 Review, depending on the service being assessed, some or all of the following population characteristics were taken into account in assessing the demand and cost impacts of socio-demographic composition (SDC):

- age;
- sex;
- income status, or socio-economic background;
- English fluency²;
- regional location; and
- Indigeneity.

Most expenditure categories (and many components of them) assessed in the 1999 Review included a SDC factor.

Key Issues for the 2004 Review

2. We do not think the arguments made by States in their 2004 Review submissions and what has been observed in workplace discussions held to date suggest there is a need for substantial changes to the conceptual basis for, or the basic method of,

¹ In the rest of this paper, where cost differences or impacts are referred to, they should be assumed to be the result of both influences, unless the context indicates otherwise. Demand and unit cost both have an impact on total costs.

² The term *Non-English Speaking Background* was used in the 1999 Review to describe the disabilities associated with low English fluency. Although no changes were made to the methods of calculation, the Working Papers for the 2002 Update were revised to ensure consistency with new standards developed by the Commonwealth, and the term 'English fluency' was adopted.

assessing SDC disabilities developed in the 1999 Review. We think the 2004 Review should largely focus on refining the current method.

3. Nevertheless, there are a few key issues that need to be addressed to improve the assessment and transparency of SDC disabilities.

- (i) A key issue for a number of States seems to be the Commission's use of judgement and the apparent lack of transparency in the assessment of SDC disability factors. Thus, we think it beneficial to spell out why we propose to assess SDC disabilities and the evidence on which we would like to base our decisions. We propose some guidelines that might be used to supplement the more wide-ranging 'implementing HFE guidelines'³ we are developing. We intend to use them in explaining why and how we have arrived at our assessment decisions.
- (ii) Where more than one SDC characteristic was assessed in 1999, a joint factor approach was used whereby unintended interactions between characteristics were avoided and the accuracy of the assessment was improved. States have criticised the lack of information that this approach enabled us to provide about the separate influence of various aspects of SDC on State grants shares. We examine alternative ways of achieving the same level of accuracy and of making the impact of individual components of SDC more transparent.
- (iii) In the 1999 Review, differences in English fluency across States were considered to impact differentially on States' costs because of the need to provide interpreter services. A number of States have argued that we are not picking up all the costs imposed as a result of the English speaking background of their populations — for example, there are costs which result from different types of services being required by different non-English speaking background groups. The impact on costs depends on the size of the group being serviced. We examine the evidence on this issue.
- (iv) In the 1999 Review, the Commission concluded that Indigenous groups in different locations had different impacts on service provision costs. It felt that the self-identified Indigenous numbers from the Census needed to be subdivided in some way according to their cost impacts. It used location to differentiate between different Indigenous groups. It expressed the view, however, that it hoped to find a more relevant distinguishing characteristic. We examine the evidence from the Commission's Indigenous Funding Inquiry.

³ Commonwealth Grants Commission, *Discussion Paper 2002/5 Guidelines for Implementing HFE*, September 2002 (in preparation)

- (v) In the 1999 Review, the Commission considered that socio-economic status was an influence on both the demand for, and unit cost of, a range of services. It was measured with reference to income levels or pensioner status. A number of States have argued that this focus does not adequately capture all the relevant influences on costs. We examine the case for using broader measures such as the ABS SEIFA Indexes and whether to take into account the purchasing power of income in different States and whether an individual's income or the family income is more relevant to an assessment of cost of service provision.
- (vi) The location of people within a State was another characteristic of populations assessed in 1999 within the overall SDC factor. SDC assessments very largely focus on demand side influences of population location, unlike dispersion assessments which focus on cost side influences of where people live. The Commission will continue to ensure in the 2004 Review that there is no double-counting between dispersion, urbanisation and socio-demographic composition assessments. In the 1999 Review, location was captured in two ways — population groups living in remote areas, and those living in other areas. The *Rural Remote and Metropolitan Areas Classification*⁴ (RRMA) was generally used to obtain the standard classification of people by location. The Commission now has access to a more recent classification by location adopted by the Australian Bureau of Statistics (ABS) — the *Accessibility/Remoteness Index of Australia* (ARIA)⁵. We consider the advantages and disadvantages of using this classification and propose how it might be adjusted to better capture relevant cost differences.

4. This paper sets out our preliminary thoughts on these key issues, as well as other aspects of the SDC assessment for the 2004 Review.

5. States have raised many issues that relate to the SDC factors in specific categories, such as the broader use of health status as a measure of need and the impact of population mobility as another dimension of cost faced by States. These issues will be dealt with in the review of relevant categories.

⁴ Published by the then Departments of Primary Industries and Energy, and Human Services and Health, November 1994.

⁵ Based on the area index developed by the National Key Centre for Social Applications of Geographical Information Systems (GISCA) at the University of Adelaide, for the then Department of Health and Aged Care. More information is set out in the ABS 2001 Information Papers *ABS Views on Remoteness* Cat 1244.0 and *Outcomes of ABS Views on Remoteness Consultation, Australia* Cat 1244.0.00.001.

ASSESSMENT PRINCIPLES AND THE USE OF JUDGMENT

State Views

6. At the Priorities Issues Conference in October 2001, and in more recent submissions, some States were critical of the lack of transparency in the methods the Commission uses for assessing SDC disability factors. They were also critical of the use of judgement in assessments and of the complexity of assessment methods, although there was no uniform approach to how methods should be simplified. Other States supported the Commission's use of judgement.

7. Victoria asked the Commission to reassess the overall structure of its methods so that a broad understanding of what was being measured could be obtained. It asked the Commission to reassess the need for complexity and to ensure its assessments were sufficiently transparent to allow appropriate scrutiny and accountability.

8. Western Australia argued that improving transparency of the assessments should be a priority for the 2004 Review. It called on the Commission to fully explain its methods. This should include the alternatives considered, the merits and flaws of the alternatives and the rationale for the preferred method. It said the judgements behind calculations, weights, data and adjustments should be spelt out to improve confidence in the outcomes.

9. Queensland argued that there is a need to improve general and specific levels of awareness about principles and methods. It proposed an independent audit process be established to give the States greater confidence in the calculations. Nonetheless, it supported the Commission's use of judgement, contending that, over time, a number of the factor assessments, based on the Commission's judgement, have proved to be robust.

10. South Australia also commented on the importance of the Commission's use of judgement. It sought to give the Commission greater ability to use judgement, not only in Reviews but also in Updates, by allowing it to respond to new information or analysis as it became available.

Commission Views

11. In response to these views, we are developing a set of publishable guidelines to document how we will implement the HFE principle in this review. Inter alia, they will set out how we propose to approach the assessment of disability factors. The guidelines will build on those set out for the October 2001 Priorities Issues Conference in *Discussion Paper CGC 2001/9, Developing Simpler Assessments* and later in *Discussion Paper 2001/12, Scope and Structure of the Standard Budget*. This paper sets out how the guidelines will be used as far as the development of SDC factors are concerned.

12. We propose to use a number of principles to guide decisions about when a disability should be assessed. We will assess a disability when:

- (i) a conceptual basis for the existence of a SDC disability is established (That is, it has been established that States experience different demand and cost imposts as a result of the application of a standard policy); and
- (ii) either
 - (a) there is empirical evidence that differences in the SDC of States' populations have impacts on the costs of provision of State government services either through different levels of use by particular groups or different unit costs in providing services to particular groups; or
 - (b) there is incomplete evidence that additional use and/or costs are incurred due to SDC influences, but the 'in-principle' case is strong and we judge that sufficient evidence exists and that including the factor improves the equalisation outcome;
- (iii) the SDC disability is material; and
- (iv) the margin of error associated with the assessment of the disability is acceptably small.

13. After having used these principles in the development of an assessment, we will apply reality checks to the results.

14. There is general agreement among States and other analysts that some socio-demographic groups are inherently greater users of government services than other groups and the unit costs of providing services to some groups is higher than for others. All States provide additional services to these groups at higher than average unit costs. The conceptual case for an SDC factor is therefore established.

15. There is also broad agreement on the core socio-demographic groups that influence costs — Indigenous persons, persons of non-English speaking backgrounds, persons with different socio-economic status, persons living in different locations and persons in particular age groups. There is no agreement, however, on whether the Commission has adequately defined all the relevant groups for each service, whether it has adopted the correct approach to identifying the cost impacts, or whether adequate data are available to allow it to do so.

16. In other words, the disabilities that have been assessed are largely accepted as existing and to be sufficiently material, but States are concerned that the possible margin of error in the judgements made by the Commission, based on less than complete data, may be too great. For example, some States have suggested that the weights for Indigenous persons, particularly those living in remote areas, are based on too little data.

17. Other States have suggested that the use of partial data rather than broad indicators of need, such as the SEIFA indexes, is less than satisfactory. We do not agree. We believe the link between a population characteristic and the cost impact of that

characteristic needs to be established in the assessment of a disability. That link is usually very difficult to establish with broad indicators such as are available through SEIFA.

18. What the guidelines will mean is that SDC factors will be assessed where we have data on the numbers of people in particular socio-demographic groups, the utilisation of a service by those population groups and the unit costs of providing the service to those groups. But such complete data sets rarely exist and it is not intended that factors will be assessed only where data are complete. Modifications of the basic approach will be used and will need to be explained.

19. We will attempt to assess a disability, based on partial or repeated anecdotal evidence, where we believe that greater equalisation will be achieved by doing so. Evidence which might be sufficient includes:

- (i) data from one or more States, or parts of States, that allow agreed use or unit cost differences to be measured;
- (ii) academic or other research that suggests different use or cost weights for particular population groups;
- (iii) data on special State or Commonwealth (SPPs treated by inclusion) programs directed at specific population groups;
- (iv) evidence provided by experts in the field that a particular group uses more or less than average of a particular service or that providing a service to a member of a group costs more or less than the average; or possibly
- (v) repeated anecdotal evidence provided at workplace discussions in different States, say at schools or hospitals, which is supported by budgetary data of such institutions.

20. The guidelines mean, however, that we will look very closely at current disabilities which rely on incomplete data — where we have less than complete population, use and cost data. It is possible that we will not continue or proceed with the assessment of disabilities where data deficiencies mean that use or cost weights cannot be calculated or estimated with sufficient confidence in terms of their possible margins of error. When disabilities are assessed based on incomplete data, we will explain where we have used judgement and how and why this has been done.

21. A judgement would need to be made about the quality of the information available, how representative of the situation for a socio-demographic group across all States it might be, and whether its use would move States' grant shares in the right or the wrong direction.

22. We think that using this general approach to the determination and explanation of SDC factors assessed in the 2004 Review will make our methods more transparent and give the States greater confidence in Commission outputs.

FACTORS AND WEIGHTS

1999 Review Approach

23. **Joint factor approach.** In the 1999 Review, the Commission used a joint factor approach to calculate SDC factors — that is, use and cost disabilities for population groups with more than one common characteristic (such as 60 to 70 year old Indigenous males with low incomes) were assessed simultaneously. This was to calculate more accurately the impact of the various SDC influences by ensuring that appropriate weights were assessed and applied to population groups so that:

- (i) interdependence between influences was recognised when it existed;
- (ii) unintended interactions between influences were minimised; and
- (iii) any double-counting between interconnected use and cost weights was minimised.

24. The preferred approach to developing such a factor was:

- (i) to identify the target population for the service;
- (ii) to establish the sub-sets of the target population associated with different rates of use or unit costs — for example, age and sex groups; and
- (iii) to develop use and/or cost weights that reflect the rates of use and/or additional costs associated with each sub-set of the population.

25. Factors were calculated by:

- (i) deriving a weighted population for each State by compounding the population in each cell of the socio-demographic matrix with the use/cost weight allocated to that cell;
- (ii) calculating the ratio of the weighted population to the unweighted population for each State and Australia; and
- (iii) dividing the ratio for each State by the Australian ratio.

State Views

26. Most States made no specific comment on the SDC joint factor approach. New South Wales said that the composite approach to SDC factors meant that important influences such as the impact of culturally and linguistically diverse populations were hidden from view. The Northern Territory argued that the full impact of disabilities resulting in demand and cost complexities were not always adequately accounted for when separate weights are applied to each population characteristic.

Issues

27. States' 2004 Review submissions generally accept that the assessment of joint factors is appropriate where interdependent population characteristics simultaneously influence States' service delivery costs. However, the approach is data intensive, may not always correctly capture the interactions between disabilities where estimation and judgement is used, and can obscure the impact of discrete socio-demographic influences within a single combined factor.

Commission Views

28. The joint factor approach requires a great deal of cross-classified data on population groups, their demand for and unit costs of using services. Where the data are available, weights can be calculated based solely on the data sets used, but they reflect the basic reliability of the data. Generally, we have a high level of confidence in such assessments. Where comprehensive data are not available, and parts of the demand and costs weights matrices are estimated, the joint factor approach, if sufficiently well documented, makes our judgements transparent. States can then present evidence to bring about a change in the judgements.

29. Returning to an approach where a separate factor is included in the assessment for each population characteristic is not our preferred option. Such an approach includes the limiting assumption that the relative costs measured by one factor are consistent across other factors compounded with it. If this assumption does not hold, the result of combining the separate factors will not be accurate. There is also the problem of double counting if adjustment has not been made for the interconnectedness of SDC influences.

30. This might best be illustrated by way of example of an assessment which consisted of two separate factors:

- (i) an age/sex factor which was based on different average use weights for age and sex groups for the total population; and
- (ii) an Indigeneity factor which applied a single cost weight to the Indigenous population.

Compounding the two involves the implicit assumption that the Indigenous population has the same age/sex structure as the total population. The age/sex factor will include the effects of the age/sex structure of the Indigenous population and its use pattern, and these effects will also be included in the weight applied in the Indigeneity factor. Double counting is present and would be difficult to eliminate if separate factors were retained. The joint factor approach allows both these distortions to be deliberately dealt with: it requires weights to be derived for each cross-section of the population, broken down by Indigenous status and by age and sex.

31. It is true that it is difficult to separate the individual influences taken into account in a joint factor. It is not possible, for example, to look at a table listing the factors

included in the current Hospitals assessment and see the impact of Indigeneity. Unravelling the effects of single influences on grant shares is possible, as shown in *CGC Discussion Paper 2001/13, The Relativities — What assessments are important*, but this was not a straightforward exercise and involved many judgements. There are a number of answers, depending on how the analysis is undertaken. Nor was it possible to produce this output at the same time as the 1999 Review relativities. How to balance accuracy, transparency and timeliness of analysis is the challenge for the 2004 Review assessments of SDC disabilities.

32. We are convinced that there is a strong case for the continued assessment of joint factors. The results produced by the joint and separate factor methods are quite different and make a material difference to States' relativities. Joint factors give a better result that is more difficult to explain in simple terms, but its benefits justify its continued use.

33. We are inclined to continue to use the joint factor approach to assess SDC factors in the 2004 Review because it:

- (i) overcomes the issue of how factors for single socio-demographic influences should be combined;
- (ii) gives the Commission the opportunity to determine appropriate weights to apply to each relevant population group; and
- (iii) makes explicit the demand and cost weights we have applied to each group in the population.

34. For the 2004 Review, the Commission is building a more flexible calculation system that will allow the timely estimation of the effect on grants distribution of changes in the relative distribution of population groups. This should enable publication, at the same time as the relativities are made available, of analyses showing the effects on grant shares of the various characteristics of State populations. It should overcome some of the perceived complexity and transparency problems associated with joint factors.

CULTURAL AND LINGUISTIC DIVERSITY

35. In the 1999 Review, the Commission treated low English fluency as a population characteristic that caused States to spend different amounts per capita on service provision. Although data from which cost weights could be calculated were not uniformly available, this disability had a strong conceptual base. Additional costs were associated with the use of interpreters and counsellors in providing services, and because of extra time required in delivering services. States had proposed a broader assessment of needs associated with persons from non-English speaking backgrounds but the Commission did not consider that it had evidence which was sufficiently robust to support a broader assessment.

State Views

36. Most States now agree that costs of service provision are higher when providing services to people not fluent in English. A number of States also argue that the Commission has not correctly captured all the relevant costs associated with service provision to people from non-English speaking backgrounds — there are costs additional to those the Commission recognised in the last review relating to cultural differences⁶. New South Wales and Victoria now make specific arguments about the greater complexity of service provision that accompanies cultural diversity.

37. New South Wales, Victoria, Tasmania and the Northern Territory argued that the ‘omitted’ costs relate to the development and provision of specially targeted, culturally appropriate services and services that ensure access of identified groups to mainstream services, such as the provision of ethnic (or Indigenous) liaison officers, health workers and teacher aides. The Northern Territory also argued that it incurred higher costs because the service delivery options it selected were aimed at ‘capacity building’ — training local people to provide the services rather than providing services — which was not always the cheapest cost in the short term.

38. New South Wales argued that some types of migrants, particularly Humanitarian Refugees, used more mental health services, required more intensive education services and made higher demands for public housing because of Commonwealth policies on assistance. The Northern Territory repeated its arguments that Indigenous people resulted in higher demands per capita for a wide range of services.

39. The number of different groups and the size of these groups was said to influence costs. New South Wales argued that it experienced diseconomies of scale because of the wide range of languages (about 160 in total) and cultural backgrounds for which it needed to cater. The Northern Territory made a similar argument relating to the impact of the cultural and language diversity of its Indigenous population, given that English was not the first language for many of its Indigenous people. It noted that there are 681 discrete Indigenous communities in the Territory and that the Northern Territory Aboriginal Interpreter service currently has 104 Indigenous dialects registered.

40. Tasmania argued that States with large culturally and linguistically diverse (CALD) groups (not large numbers of CALD groups) could achieve significant economies of scale. It argued that the weight applied to relevant CALD groups should vary between States depending on whether there were communities with a significant number of people with similar backgrounds, or communities with few people with a similar background. It said that either a discounting of the weight should apply to States with a high number of people with a common non-English speaking background or an additional weight should be applied for those States with few people from a large number of non-English speaking backgrounds.

⁶ Higher costs are said to arise from both cultural and linguistic differences (people with these attributes are described as being people from culturally and linguistically diverse (CALD) backgrounds).

41. New South Wales and the Northern Territory also made a case for adjusting ABS data on people with low proficiency in English. New South Wales submitted that ABS Census data on proficiency in English should be adjusted to take account of:

- (i) more recent migrant intakes, using annual data from the Department of Immigration and Multicultural and Indigenous Affairs (DIMIA); and
- (ii) people born in Australia who indicate they do not speak English well or at all.

The Northern Territory supported the second adjustment.

Issues

42. The issues for the 2004 Review seem to be:

- (i) Should this disability factor be expanded to take into account, in addition to the costs attributed to providing services to people with low English fluency, the expenses incurred in:
 - developing and delivering appropriate programs for different CALD groups;
 - developing and delivering programs to ensure access to services by these groups;
 - any additional complexity in service provision attributable to greater numbers of culturally different groups; and
 - dealing with the claimed alienation experienced by some CALD groups?
- (ii) Does the same cost disadvantage exist for all individuals in each CALD group, or should we narrow the target population to a subset of the CALD group? How should we identify any subset of a CALD group?
- (iii) Does the same relative cost disadvantage exist for groups of different size concentrated in particular areas? Do States with larger groups have some scale advantage? Does any such advantage relate only to unit cost, or does it also influence the level of demand?
- (iv) Should ABS Census data on CALD groups be adjusted in an update assessment by including DIMIA data on recent arrivals?
- (v) Is it best to measure the additional costs of cultural diversity amongst Indigenous people within a broad assessment of the effects of cultural diversity or within the Indigeneity element of the SDC factor?

43. The Commission will need to decide what population characteristics influence the costs identified and how best to identify and measure these characteristics and the effects they have on costs. It will be looking for State assistance to produce evidence for these assessments.

Commission Views

44. We accept that States experience differences in demand and unit cost in providing services:

- (i) to population groups with low English fluency — because of the need for interpreters and the extra time taken in providing the service;
- (ii) to culturally diverse populations because
 - developing culturally appropriate services and ensuring access to them as well as to mainstream services costs more per client than the standard service; and
 - special programs are needed to deal with the alienation experienced by some CALD groups, for example, to manage disruptive behaviour in schools or deal with gang-based crime.

45. Evidence has also been presented that some migrant (refugee) and Indigenous groups have higher demands for many mainstream services. For example, New South Wales argued that Humanitarian migrants often have additional needs relating to health, education and welfare due to their lifestyle and traumatic experiences before coming to Australia. Victoria supported this case with examples of the high demand for services and the high unit cost in providing them (costs of providing health care to migrants at risk were said to be up to 15 times greater than for English-speaking people). We accept that an in-principle case exists to recognise disabilities relating to specific migrant groups and that they are not distributed between States according to an equal per capita distribution (see Table 2). We are, however, uncertain of the additional expenses incurred and whether demand for services is always higher than average. We seek empirical evidence from the States on the cost of programs and rates of service use.

46. Most evidence presented in submissions on costs of CALD programs was on a category by category basis. We propose to examine this evidence on the special programs in place, their costs and the use made of them by the different groups to determine use and cost weights for inclusion in new SDC factors for each category. We will also make judgements on how material the costs are.

47. For example, New South Wales and Victoria argued that the education assessments should account for the costs resulting from diverse cultural backgrounds in addition to language services, such as the cost of addressing communication breakdown and cultural differences. It argued that this could be addressed by adjusting the weight applied for low English fluency to account for the degrees of cultural diversity in different States. We welcome further evidence from the States on this issue.

Table 1 DISTRIBUTION OF HUMANITARIAN SETTLERS (1997-2002) AND ESTIMATED RESIDENT INDIGENOUS POPULATION (30 JUNE 2001)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Settlers who arrived under the Humanitarian Program 1996-2001	17 647	13 266	3 840	5 192	3 563	621	490	264	44 883
Per cent of total population	0.28	0.29	0.11	0.28	0.24	0.14	0.16	0.13	0.24
Estimated Resident Indigenous population	135 319	27 928	126 035	66 069	25 620	17 442	3 941	57 550	459 904
Per cent of total population	2.12	0.60	3.45	3.57	1.75	3.82	1.26	27.32	2.42

Source: Department of Immigration & Multicultural & Indigenous Affairs Settlement Database. CGC Special Data Request from ABS.
ABS Population Distribution, Indigenous Australians ABS Cat No. 4705.0 June 2002.

48. We will investigate whether States incur additional costs when there are many CALD groups and consider whether there are any economies of scale in providing services for larger CALD groups. We seek further evidence of the approach taken to providing special programs by States with a large number of CALD groups, but with very few members in each, dispersed throughout the State.

49. The differentiation within CALD groups will be as specific as necessary to measure the differences in cost that we are trying to capture. Where we conclude that the only costs are those relating to interpreters and the additional time taken to service clients, for both migrant and Indigenous groups, we will use data from the ABS 2001 Census on English proficiency. Refer to Tables 3 and 4. We will look closely at the New South Wales proposal that the capacity to update this information annually using ABS and DIMIA data, should be considered when determining the way the factor is calculated.

Table 2 FLUENCY IN ENGLISH, NUMBERS AND PROPORTION OF TOTAL STATE POPULATION, 2001 CENSUS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Speak English Not Well or Not at all	230 487	177 308	40 450	33 204	30 861	1 854	5 352	11 807	531 323
Proportion of total population (%)	3.62	3.82	1.11	1.79	2.10	0.41	1.72	5.60	2.80

Source: Australian Bureau of Statistics, 2001 Census.

Table 3 INDIGENOUS AUSTRALIANS WHO SPEAK ENGLISH EITHER NOT WELL OR NOT AT ALL, 2001 CENSUS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Indigenous Australians who speak English either not well or not at all	370	206	2524	2019	992	17	18	9408	15560
Indigenous population	135 319	27 928	126 035	66 069	25 620	17 442	3 941	57 550	459 904
Proportion (per cent)	0.27	0.74	2.00	3.06	3.87	0.10	0.46	16.35	3.38

Source: ABS Population Distribution, Indigenous Australians ABS Cat No 4705.0 June 2002. Australian Bureau of Statistics, 2001 Census.

50. Where we are being encouraged to identify groups that require access to culturally appropriate services, we propose to do the following.

- (i) For different cultural groups, we will investigate the use of data from the Census on birthplace and the DIMIA Settlement Database — assessed according to English Proficiency Country Groups, as defined by the then DIMIA⁷ and year of arrival in Australia, if appropriate — refer to Table 4.
- (ii) We will identify population characteristics that are indicative of the need for culturally appropriate services. For example, is it all persons born overseas, those from particular countries, or recent arrivals, particularly those arriving under specific programs, who need such services? We seek advice from the States on measurable population characteristics indicate specific service needs.

In relation to Aged Care, for example, Victoria and New South Wales argue that in a CALD community, the cost structures are different and reflect the costs of ensuring equity and that there are multiple constructions of disability in different ethnic groups that make meeting

⁷ The English Proficiency (EP) Country Groups are based on the percentage of arrivals from each country of birth in the five years up to the 1996 Census who only spoke English or, if they spoke another language, spoke good English (as stated in the Census). This percentage is termed the EP index.

The EP groups are:

- EP1 = countries with an EP index rating of 98% or more with at least 10,000 residents in Australia;
- EP2 = countries with an EP index rating of 80% or more but excluding those countries in EP1
- EP3 = countries with an EP index rating of at least 50% but less than 80%
- EP4 = countries with an EP index rating of less than 50%.

needs more complex. What are these disabilities and how can we measure their impacts on costs?

In contrast, Australian Institute of Health and Welfare research has found that overseas-born people make less use of residential aged care services than do Australian-born, and that people in EP Group 4⁸ have about one-third the institutionalisation rate of the Australian-born. When age and sex are taken into account, the rates of use of residential aged care services are substantially lower among overseas-born people, especially for males⁹.

Table 4 IMMIGRANTS WHO ARRIVED 1 APRIL 1997 TO 31 MARCH 2002, WHO SPEAK ENGLISH EITHER NOT WELL OR NOT AT ALL

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Not Stated	Aust
EP 1	72	33	42	57	18	0	3	1	0	226
EP 2	5003	2 272	1 092	675	384	92	156	89	36	9 799
EP 3	24 102	15 263	6 142	5 554	3 159	486	552	330	28	55 616
EP 4	14 204	8 125	1 315	1 082	792	31	243	64	28	25 884
Not Stated	242	120	40	73	17	2	5	2	2	503
Total	43 623	25 813	8 631	7 441	4 370	611	959	486	94	92 028

Source: Department of Immigration & Multicultural & Indigenous Affairs Settlement Database.

- (iii) While we can use Census data to identify the number of Indigenous people in each State, Census data allowing us to differentiate between culturally different Indigenous groups are not available. Other data sources will be explored. Whether we include the higher cost of providing culturally appropriate services for Indigenous groups in a broad assessment of the impact of cultural diversity requires further consideration.

51. Where we are being asked to identify costs of providing services to groups that experience alienation, we will identify population characteristics that might be relevant to differential costs in service provision and delivery. Such characteristics may include type of new migrant, ethnic background and area of settlement in Australia. For example,

⁸ Department of Immigration and Multicultural Affairs, *Independence in Ageing: The social and financial circumstances of older overseas-born Australians*, June 2000 pg 1. While there is a universal increase in English proficiency over time, the EP Groups remain differentiated or staggered in terms of overall proficiency for any given cohort of arrivals. For example, among recently arrived women (1991-96) who speak a language other than English, the proportion who speak English well or very well varies from 90% in EP Group 1, to 51%, 17% and 6% respectively for EP Groups 2, 3 and 4; while among women who arrived before 1981 and who speak a language other than English, the percentages are 95%, 88%, 58% and 31% respectively. Substantial gender differences in English proficiency are also apparent among older migrants. Older women report consistently poorer English than older men, and these differences do not abate over time.

⁹ Australian Institute of Health and Welfare, *Independence in Ageing*, Paragon Printers 2000, p 71.

people arriving under the Humanitarian program who have experienced trauma prior to their arrival may require more, or more costly, services.

52. The need to identify concentrations of specific ethnic communities will depend very much on the service being considered. We propose to do the following.

- (i) We will investigate whether States develop special programs or provide additional funding for certain concentrations of CALD groups and, if so, what the critical size of such groups might be.
- (i) We will seek evidence that special programs or funding are provided in areas of migrant concentration. For example, are there special programs provided in Local Government Areas where at least 20 per cent of the community have the same ethnic or Indigenous background? We seek advice from the States on this issue, in particular regarding population characteristics that are indicative of a need for specialised services and associated additional costs.

New South Wales, for example, argued that there are significant additional costs, in addition to the provision of translation services, incurred by agencies in providing services to people from CALD backgrounds. It stated that where large numbers of people from similar backgrounds live together in an area, migrants are 'encouraged' to maintain their original language. This greatly increases the time it takes for people to learn English, which in turn impacts on service delivery costs.

In relation to Policing, investigations by the National Crime Authority and the Parliamentary Joint Committee of the Commonwealth Parliament have revealed that the geographic spread of Chinese and Vietnamese organised crime is very much focused in Sydney and Melbourne, particularly with respect to illicit drugs. New South Wales and Victoria have allocated operational resources to deal with this issue. For example, in Victoria, the Asian Squad is a dedicated unit that provides specialist policing services to a population group of Asian origin.

53. In summary, we have accepted the conceptual argument. However, we need better quantification on a consistent and comparable basis across Australia to enable us to make appropriate allowance for these cost imposts. In the absence of robust data, we will either have to make an assessment largely on the basis of judgement using the anecdotal evidence available, or not make an assessment. Our preference is for the former. We seek advice from the States on each element of SDC discussed in this section of the paper. In particular, we seek evidence of services that meet the specific needs of CALD groups, and the associated unit costs.

INDIGENEITY

The 1999 Review Approach

54. During the 1999 Review, the Commission assessed the effects of all population characteristics jointly, where data allowed. In that approach, the use and/or unit cost weights for Indigeneity reflected the additional use or costs attributable to the Indigenous population, above those arising from age-sex, low English fluency and income. Indigenous weights were included in many expenditure assessments, reflecting the Commission's general view that the demand for, and cost of providing services to the Indigenous population differs from the rest of the population, irrespective of other characteristics. This might be best illustrated by the number of grant programs where service outlets, such as schools, receive extra funding for each Indigenous client (student) they cater for, irrespective of the other characteristics of that client (student).

55. In that Review, for the first time, the Commission also differentiated between the costs of providing services to Indigenous people in more remote areas and the costs in other areas. It introduced this distinction because State submissions, workplace discussions and its own analysis showed that the effects of Aboriginal and Torres Strait Islander peoples on the costs of providing State government services are not uniform. Analysis of selected socio-economic indicators from the 1996 Census suggested that there were large differences between the Indigenous populations of the States in terms of the proportions who: spoke an Indigenous language; had low English fluency; had limited education; were unemployed; lived in households which comprised two or more families; and lived in remote areas. The level of disadvantage often appeared to be greater in remote areas.

56. The Commission chose remoteness as the summary variable for these effects because:

- it was simple and provided a clear marker of the additional disadvantage within the Indigenous population;
- data were readily available from the Census; and
- the additional weights could be easily incorporated into the joint calculations of the socio-demographic composition factors in a way that avoided double-counting.

57. The reliability of Census counts of Indigenous people was an issue but the Commission saw no real alternative to the use of ABS data and, wherever possible, based

its assessments on population counts in the ABS publication *Experimental Estimates of the Aboriginal and Torres Strait Islander Population*¹⁰.

State Views

58. In their submissions for this Review, States have focussed on three major themes:

- (i) whether sufficiently rigorous tests had been applied to the weights included in the assessments;
- (ii) the correct value for Indigenous weights; and
- (iii) the need to adjust the Census for Indigenous population counts.

59. On the first issue, Victoria said that a more explicit justification of the application of Indigenous weights was required in all categories in which they appear, or the cost weights should be excluded from the SDC factor. It argued specifically for the application of this procedure for the weights applied to Indigenous people in remote areas.

60. The majority of State comments centred on the second issue. Western Australia said the Commission's current assessment ignores the interconnection of services. It suggested, for example, that improving education outcomes for Indigenous people is partly contingent on improving their health, housing and economic circumstances, but this was not allowed for in the Commission's assessment. Western Australia also argued that the different demand weights implied by Indigenous use of services in different States were not totally policy driven and could be an alternative to the current differentiation within the Indigenous population.

61. South Australia supported the use of the remote/non-remote criterion as a partial response to the need it saw for a distinction to be made, in applying use/cost weights, between 'traditional' lifestyle Aboriginals and 'non-traditional' Aboriginals.

62. Tasmania suggested that the Commission's current methodology understated the additional cost of delivering services to Indigenous people in urban and rural areas relative to those in remote areas. It said that this was particularly the case in relation to relatively small Indigenous population groups. It was not able, however, to quantify the extent of this cost differential.

63. The Northern Territory presented arguments across a range of functions for variation of the weights currently assessed.

64. With respect to the enumeration of the Indigenous population, the Northern Territory estimated that undercounting of its remote Indigenous population cost in excess

¹⁰ ABS catalogue No. 3230.0, 30 June 1996. The data in this publication are based on Census responses, adjusted for the results of under counting and an allocation of people who did not respond to the question on Aboriginality.

of \$50 million over a five year period. The Territory advocated adjustments to remote Indigenous population estimates to ensure that equalisation is achieved.

Additional Evidence

65. Findings from the Commission's *Report on Indigenous Funding*¹¹ support the inclusion of Indigeneity in the SDC assessment. That report found that in all regions and across all functional areas studied, Indigenous people had additional expenses attributed to them, but still experience entrenched levels of disadvantage compared to non-Indigenous people. The demand for, and cost and provision of services varied according to location, the degree of socio-economic disadvantage, and the traditional lifestyle of the Indigenous population. More specifically, the Inquiry found that Indigenous communities needs and service provision vary according to their:

- (i) different socio-economic status, measured by:
 - age;
 - household income;
 - education level;
 - occupation;
 - family size; and
 - employment status;
- (ii) distribution by geographic location — urban, rural and remote areas; and
- (iii) affiliation to traditional culture, but the only way of measuring this with reliable and comparable data was thought to be by using English language fluency.

66. Some of the evidence gathered by the Inquiry is summarised in Attachment 1.

Commission Views

67. Given States' comments in their 2004 Review submissions, the on-the-ground evidence we have seen so far in State workplace discussions, our own research and the accumulation of empirical experience drawn from past Inquiries, we remain convinced that:

¹¹ Commonwealth Grants Commission, *Report on Indigenous Funding 2001*.

- (i) there is a strong conceptual case for assessing Indigeneity as a differential influence on States' costs of service delivery;
- (ii) there is a strong case for continuing to differentiate within the Indigenous population, other than for the normal SDC influences such as age/sex;
- (iii) the differential influences can sometimes be measured using empirical data and sometimes judgment must be used; and
- (iv) the assessable influences are both material to the overall assessment of the SDC factor and within an acceptable margin of error.

68. We think previous analysis confirms the existence of three dimensions of Indigeneity that results in disability factor calculations:

- socio-economic status;
- location; and
- cultural and linguistic difference (both from non-Indigenous people and within the Indigenous group).

We will look at identifying use and unit cost impacts of the Indigenous group by these dimensions if data are available. If they are not, we propose to continue to apply a measure of remoteness as a reasonable proxy for increased disadvantage and higher costs due to these influences.

69. How the additional costs associated with Indigenous people are reflected in the assessments and the correct magnitude of use and cost weights will be critically examined. But given the nature and quality of administrative data from which cost and use weights can be derived, judgement will be required. We intend to apply the guidelines set out earlier in this paper to ensure that where judgement is necessary it is grounded in a clear understanding of how government services interact with Indigenous disadvantage.

70. **Population issues.** The Commission staff are already in contact with ABS officers on enumeration issues and, when the full 2001 Census results are available, including information from the post enumeration surveys, we will review the issues raised by the Northern Territory. Similar issues were raised with us during recent workplace discussions in Port Augusta, South Australia. The updated experimental estimates of the Indigenous population suggest that the Northern Territory's concerns remain relevant. Table 5 shows the estimated Indigenous population by State, for 1996 and 2002, and the percentage increase for this period. We propose to base the assessments on data on Indigenous populations from the 2001 Census and take advice from ABS when considering the base to be used when calculating disabilities resulting from Indigeneity.

Table 5 INDIGENOUS POPULATION CHANGE 1996 TO 2001

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1996 Experimental estimates	109 925	22 598	104 817	56 205	22 051	15 322	3 058	51 876	385 852
Estimated Resident Indigenous population	135 319	27 928	126 035	66 069	25 620	17 442	3 941	57 550	459 904
Percentage increase	18.8	19.1	16.8	14.9	13.9	12.2	22.4	9.9	16.1

Source: Experimental Estimates of the Aboriginal and Torres Strait Islander Population, ABS Cat No 3230.0, March 1998.

ABS Population Distribution, Indigenous Australians ABS Cat No 4705.0, June 2002.

SOCIO-ECONOMIC STATUS

71. The 1999 Review recognised that people with low socio-economic status made greater use of many government services and/or cost more to service for each occasion of service. Disability factors relating to socio-economic status were approached in three different ways, depending on the assessment.

- (i) **Socio-economic status** was recognised as resulting in a disability, and income level was used as a proxy in measuring it. An example of this was in health. People from low socio-economic status use most health services more than average. This is thought to be because of the stress associated with socio-economic disadvantage, lack of education, unemployment, lifestyle factors (such as smoking and obesity) and chronic disease — all indicators of greater health services use.
- (ii) **Income status** was sometimes recognised as directly resulting in a disability. For example, the Housing category assesses needs in relation to income status as a measure of relative demand for public housing.
- (iii) In a few cases, such as for the Concessions and Other Payments categories, **social security beneficiaries** were used because the eligibility criteria for concessions were linked to eligibility for a welfare benefit or pension.

72. 1996 Census income data were used to measure the number of people in each State with an annual household income of less than:

- \$26 000 for families; and
- \$15 600 for individuals.

73. The Commission decided against making any adjustment for differences between States in the cost of living because of the assumptions needed to cope with data deficiencies and doubts about whether it would improve the accuracy of the assessments.

74. Income level was used as a proxy for socio-economic status because:

- (i) it was a clear, easily defined and widely recognised measure of socio-economic status;
- (ii) it was consistent with the use of other Census based data such as age, Indigeneity and place of residence and, more generally, with the broad approach the Commission had taken for assessing SDC disabilities;
- (iii) the number of people with low income could be calculated from the Census and cross-tabulated with other characteristics; and
- (iv) the influence of income status could be separated from the influences of age-sex, Indigeneity and place of residence (avoiding double counting).

State Views

75. New South Wales sought adjustment to the income threshold for housing costs across States.

76. Victoria argued that the Henderson Poverty Line should be applied on a State by State basis, and updated annually using the growth in gross household income in each State.

77. Tasmania said that, in addition to recognising the greater demand for services by people with a low socio-economic status, the Commission should recognise the greater unit costs of delivering service to them. It argued that income does not fully capture how low socio-economic status affects the cost of providing services, and cited influences such as:

- (i) knowledge and understanding of available information;
- (ii) ability to readily access services, including early intervention and follow-up activities;
- (iii) employment status; and
- (iv) accommodation and location of residence.

78. Tasmania also noted the availability of SEIFA type indexes, which it said would capture socio-economic influences more comprehensively.

79. The Northern Territory noted the high proportion of the Indigenous population with low socio-economic status. It also raised a number of issues regarding the applicability of SEIFA indexes to the Northern Territory, especially in remote areas.

Commission Views

80. New South Wales and Victoria want adjustments to the way income threshold is set in each State. We propose, at a minimum, to update the income thresholds used in the 1999 Review. In addition, there is little doubt that cost of living, including housing, does affect the threshold on which we should base income measures in different areas. We will investigate the feasibility of both the New South Wales and Victorian proposals for adjustments based on housing costs or State-specific poverty lines.

81. Tasmania is the only State arguing for substantial changes to the current socio-economic status assessment. Any proposal for a departure from using income as the proxy measure of socio-economic status needs to be reviewed against the alternatives and the attributes that resulted in its use in the 1999 Review.

82. Tasmania's suggestion that using broader measures such as the SEIFA indexes is not supported. The SEIFA indexes are broad measures of socio-economic status. So wide, in fact, that their general use in the Commission's assessments was rejected in the 1999 Review because of possible double-counting with the assessments of age-sex, Indigeneity and place of residence. They are also area-based (rather than people-based) which makes them inconsistent with other socio-demographic data used in assessments.

83. An argument could be mounted for SEIFA indexes to also replace the age-sex, Indigeneity and place of residence measures, but their use in this way would mean the loss of transparency due to the impossibility of identifying disabilities incorporated within the indexes. In addition, data linking service use and cost to SEIFA characteristics are not as frequently available as characteristic-based data.

84. We acknowledge that the population with low socio-economic status is not particularly well defined by low income alone. The use of measures such as employment status and/or education attainment would fit very well within the current framework. There is also evidence to suggest that people with low income and low educational achievement suffer compounded disabilities.

85. In addition, there is a high correlation between the different low socio-economic status measures. For example, unemployed and poorly educated people are likely to be on low income, and poorly educated people are more likely to be unemployed. This means that the target population is only likely to change at the margin. It is also likely, therefore, that the weights applied to low income groups would at least partly cover the effects of differences in unemployment and poor education.

86. **Summary.** Given States' comments in their submissions, our observations from workplace discussions held to date and our staff research, we remain convinced that:

- (i) there is a conceptual case for assessing socio-economic status as a differential influence on States' costs of service delivery;
- (ii) the differential influence can be measured by empirical data and supported by judgment where necessary; and
- (iii) the assessed influence is both material to the overall assessment of SDC factors and within an acceptable margin of error.

87. Our preliminary conclusions regarding the assessment of socio-economic status as part of the overall SDC assessment are as follows.

- (i) On the balance of the arguments made, we are not inclined to measure this influence by using SEIFA indexes.
- (ii) While some States have argued that the current assessments do not fully capture the effect of low socio-economic status, we do not consider there is strong evidence of the existence of other material disabilities relevant to this element of SDC.
- (iii) Where evidence is presented that low socio-economic status increases unit costs, a unit cost disability will be assessed.
- (iv) At this stage we are inclined to retain the same approach to this assessment as was taken in the 1999 Review. However, we will investigate the practicalities of adjusting income thresholds for cost of living, and will, of course, continue to consider further arguments.

LOCATION

88. The geographic location (spatial distribution) of the population within each State will continue to cause variations between States in their costs of providing services. The Commission assesses the impacts of population location through three disability factors — dispersion, urbanisation and socio-demographic composition.

89. The urbanisation factors cover both demand and unit cost influences of large urban centres. Costs associated with sparsely populated areas are covered through the dispersion and SDC factors. The dispersion factor generally catches variations in unit cost influences of where people live. The SDC assessments of location are very largely focussed on demand side influences arising from population location — variations in demand for services as between urban, rural and remote areas. For example:

- (i) rural and remote people tend to use public hospitals more than people in urban areas, in part because of the lack of private sector alternatives; and

- (ii) rural people access vocational education and training (VET) services less than people living in urban areas, in part because VET service providers — both public and private — are much more likely to be located in larger urban centres.

90. The Commission's dispersion assessments, on the other hand, focus entirely on cost side influences of population location on States' service delivery costs — in particular the costs of communications, freight, travel and locality allowances. We will continue to ensure that there is no double-counting between the dispersion factor and the location assessments within the SDC factor.

91. New South Wales and Victoria have presented arguments that the expanding use of IT & T facilities is improving access to services in rural and remote areas, as well as reducing unit cost. We will need to understand all the implications of the new uses to which technology is being put before deciding what disability factors are being affected and how their calculation should be changed.

92. New South Wales and Victoria have also advanced the view that the costs of providing services in large urban areas are higher than in other locations because of the complexity of the service delivery required, and some associations between the ethnic diversity of their populations, and drugs and crime. We will need to ensure that there is no double-counting between the urbanisation factor and the location assessments within the SDC factor.

93. In the 1999 Review, the Commission used the Rural, Remote and Metropolitan Area (RRMA) classification, with some modifications, to define remoteness for the purposes of assessing the demand impacts of where people live. Because of its different focus, the Commission made some modifications to the basic RRMA data. The modifications made (which had implications for both the dispersion assessment and the location assessment within SDC), were.

- (i) In New South Wales, Broken Hill was classified under RRMA as a 'small rural centre', but the Commission treated it as 'remote' because it is surrounded by remote areas and was considered remote from the State capital.
- (ii) In Victoria, Mildura was classified under RRMA as a 'small rural centre', but the Commission treated it as 'remote' because it is surrounded by remote areas and was considered remote from the State capital.
- (iii) In Victoria, French Island was classified under RRMA as 'remote', but the Commission treated it as 'non-remote'.
- (iv) In South Australia, Kangaroo Island was classified under RRMA as 'remote', but the Commission treated it as 'non-remote'.

State Views

94. With respect to Health assessments, New South Wales noted that the ABS has replaced its previous Health Related Rural Status measure of rurality with the Accessibility/Remoteness Index of Australia (ARIA). The Commonwealth Department of Health and Aged Care funded the National Key Centre for Social Applications of Geographical Information Systems (GISCA) to develop the ARIA index. Since the Commonwealth has proposed that ARIA be adopted as a national standard for measuring remoteness, the index has been included in the 2000 Health Need Index used in the New South Wales health resource distribution formula.

95. Western Australia argued that ARIA appears to be a more equitable measure of accessibility than the RRMA classification and contended that the Commission should use ARIA in all Health categories, rather than RRMA, when considering disabilities associated with population location. However, it also noted the shortcomings of ARIA, and proposed that the Commission could avoid them by:

- (i) recognising that ARIA does not take into account special cost drivers such as road conditions and impacts of regular flooding (although RRMA did even less in this regard); and
- (ii) introducing a 'very isolated' category because of evidence that the ARIA rating system does not adequately differentiate within very remote communities.

96. In addressing dispersion assessments, South Australia noted RRMA has recently been superseded by ARIA, and that ARIA has been adopted by the ABS and the Commonwealth Department of Health and Ageing. It argued that ARIA is a true accessibility measure being based on road distances from all populated points in Australia to service centres of various size. It argued that the ARIA approach would seem to be more appropriate for Commission assessments and said it should be adopted without modification.

97. The Northern Territory supported the use of the ARIA approach in principle, acknowledging it to be the best available measure of remoteness. However, the Territory argued that it is not a measure of accessibility, as its name suggests, and pointed out that it was designed as a tool to distribute funding. It said that the Commission should become aware of the deficiencies of ARIA and the need to continue to make adjustments for road conditions, seasonal inaccessibility and additional centre classifications.

Issues

98. ***Location as an assessable influence.*** No State has argued against the concept that the location of people influences the demand for (and unit cost of) government services. There is acceptance that population location is a demographic characteristic that should be taken into account in the assessments. As such, we will continue to bring the influences of location on demand into the SDC factors.

99. **The ARIA approach.** There is a clear view across the States that the measure of location used in the 1999 Review — the RRMA classification — has been superseded by the ARIA approach. States argue that, if the Commission is to use a measure of remoteness in its location dependent assessments, including the SDC factor, then the ARIA approach is the best currently available.

100. The ARIA approach defines ‘remoteness’ as the road distance between where people live (populated localities) and the places to which people travel (service centres) to obtain goods and services and to enjoy opportunities for social interaction. It measures people’s access to services, and is not designed to measure differences in per capita demand a unit costs of providing services at different locations. As a result, people living in a large but remote centre might have a high level of accessibility. In Commission terms, however, they may also have a high unit cost because of remoteness.

101. The ARIA index is based purely on geographical factors — population size, and socio-economic and rural/urban characteristics are excluded from the index. It is derived by ‘scoring’ populated localities on the basis of the road distance of such localities to designated service centres, classified by size. While the original ARIA approach developed by GISCA classified service centres into four size groups, the ABS variation of the ARIA approach (termed ARIA+) adds an extra category of service centre size at the lower end. The ARIA+ approach classifies service centres by size as:

- 250 000 people or more;
- 48 000 to 249 999;
- 18 000 to 47 999;
- 5000 to 17 999; and
- 1000 to 4999.

102. The result is an ARIA+ index ‘score’ from 0 to 15 for each populated locality, which is then classified into five categories:

- major cities (ARIA+ score of 0 to 0.20);
- inner regional areas (ARIA+ score of >0.20 to 2.40);
- outer regional areas (ARIA+ score of >2.40 to 5.92);
- remote areas (ARIA+ score of >5.92 to 10.53); and
- very remote areas (ARIA+ score of >10.53).

103. The 2001 edition of the Australian Standard Geographic Classification (ASGC) includes, for the first time, a concept of remoteness — the ARIA+ measure.

104. While the ARIA+ approach may have some limitations, it does represent an improvement on RRMA because it measures accessibility in terms of actual distances by road. The limitations of the approach are that it:

- (i) is unable to discriminate between different levels of remoteness within the areas classified as 'very remote' due to broad grouping of ARIA+ scores and truncation of data;
- (ii) uses simple road distance measures, with no consideration of road quality, seasonal flooding and isolation; and
- (iii) fails to account for jurisdictional boundaries by measuring distance to services centres which are sometimes located across State borders.

Commission Views

105. Given States' submissions and our staff research, we remain convinced that:

- (i) there remains a conceptual case for assessing population location as a differential influence on States' costs of service delivery;
- (ii) the differential influences of population location can be measured using empirical data and supported by judgment where necessary; and
- (iii) the assessed influence is both material to the overall assessment of the SDC factor and within an acceptable margin of error.

106. For the 2004 Review, we are attracted to the ARIA+ approach, with modifications to adjust for results which we find counter-intuitive, as a means of assessing the influence of population location on demand for, and costs of service delivery. On modifications, we are inclined to think that Broken Hill and Mildura should continue to be treated as 'remote' centres, and French and Kangaroo Islands should continue to be treated as 'non-remote' locations. Other modifications are also possible.

107. We also have some concerns about the assumption implicit in the ARIA measures that centres of similar size provide the same range of State government services, irrespective of their proximity to other centres of similar or larger size.

108. At the macro level, we know that the ARIA+ index:

- (i) is independently and consistently calculated for all localities;
- (ii) has been incorporated into the ASGC and will be consistent with 2001 Census outputs; and
- (iii) has been proposed by the Commonwealth as the national standard definition of remoteness.

109. At the micro level, the ARIA+ approach represents an improvement over the RRMA classification, because the RRMA was based on:

- (i) the Statistical Local Area (SLA) definition, while the ARIA+ uses a finer one kilometre grid, and is therefore more flexible and potentially more accurate; and
- (ii) straight-line distance measurement, while the ARIA+ uses road distance.

110. Having classified populations into remote or non-remote areas using the ARIA+ approach (modified as indicated), we will continue to use the standard method to assess the influence of population location within the SDC factors.

CONCLUSIONS

111. Based on comments made by States in their submissions, our observations made in workplace discussions held to date and our research, we think that large changes to the assessment of SDC factors in the coming review are unjustified.

112. We will make adjustments to the assessments to more accurately take into account all relevant costs — for example, in the assessment of influences arising from the cultural and linguistic diversity of States' populations. A review of the weights assessed for all components of the factor is essential, and we will use published guidelines to do this. For the assessment of influences arising from population location, a change to the measurement of remoteness seems warranted, and we will probably use the ARIA+ approach, with modifications. Assessment of joint factors will be continued where appropriate.

113. We invite comments from the States on the proposals for change addressed in this paper, and welcome the provision of any further empirical information which will assist our settings of use and unit cost weights in the SDC factors for the 2004 Review.

ATTACHMENT

EVIDENCE FROM INDIGENEOUS FUNDING INQUIRY

Education and Training

1. *Max Neutze, et al*, report stated that ‘inaccessibility’ and ‘unsuitability’ have important impacts on Indigenous educational outcomes. The report found that per capita education expenditure in the Northern Territory is higher than the national average at every level, and highest in primary and secondary — around 50 per cent above the average. The main reason for this difference was explained by higher proportion of Indigenous people living in small settlements in rural areas in NT — where many general services are not available and costly to provide. The study also noted that Indigenous people are more likely to access specific programs designed to address their needs, rather than general programs. Reasons why general services may be inaccessible or unsuitable include the geographical location of Indigenous people, cultural barriers and a preference for services delivered through organisations under Indigenous control¹.

2. The Australian National Training Authority Report *Partners in a Learning Culture*² recommended that Indigenous people need different learning approaches, which suit their lifestyle and are based on the values of Indigenous culture. It noted that Indigenous people’s culture, identity, language, literacy and numeracy, and life skills must be wrapped up with VET and workplace learning in order to achieve quality outcomes. It also recognized that poor training outcomes for Indigenous students are exacerbated by the geographical and social isolation of Indigenous people, poor numeracy and literacy skills, a poor standard of living, low income levels and low life expectancy.

3. The Indigenous Funding Inquiry report³ identified ‘cultural issues’, combined with location and accessibility to services as the major reasons for higher service costs associated with Indigenous students. The report explained that Indigenous students in (or from) remote and rural regions are unable to cope with unfamiliar surroundings or new social pressures, resulting in high dropout rates. Flexible delivery, with the training provided on site, result in better outcomes but increases costs. Delivering IT services in Indigenous communities involves additional cost in remote and isolated areas, particularly due to higher costs of transportation and accommodation for teachers to travel to the students, or for students to travel to a service provider.

¹ Nuetze, M, Sanders, W., Jones, G, *Public Expenditure on Services for Indigenous people — Education, Employment, Health and Housing*, Discussion Paper 24, The Australian Institute, Canberra, p3.

² ANTA, *Partners in a Learning Culture — Australia’s National Aboriginal and Torres Strait Islander Strategy for Vocational Education and Training 2000-2005*.

³ CGC, Report on Indigenous Funding Inquiry 2001.

Health

4. An ABS report, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, found that Indigenous people's accessibility to health services is highly affected by factors such as proximity, availability, cultural appropriateness of service delivery and clients proficiency in English⁴. A study undertaken by *Deeble et al*⁵ found that Indigenous people of low socio-economic status made much greater use of hospitals, community health services and patients' transport, but made much less use of private hospitals, Medicare and Pharmaceutical Benefit Scheme (PBS) than other Australians. The Indigenous Funding Inquiry Report found that although they use the services less frequently, public hospital expenditure for Indigenous peoples was at least twice that of non-Indigenous populations and about three times higher in remote regions. This is due to longer lengths of stay once admitted and increased cost of providing services in remote areas, particularly patient transport and accommodation⁶.

5. A case mix study undertaken in 1998 by *Beaver et al*⁷ found that the average length of stay of Indigenous patients in the Northern Territory, in all but one of the top twenty diagnostic related groups, was significantly higher than non-Indigenous patients — creating additional costs to the Territory. The study implies that a substantial part of that difference may be because more Indigenous people live in rural and remote areas where there are no doctors or pharmacies available. The Neutze study stated that Indigenous patients, particularly those from remote and rural areas, stay longer in hospital. This is partly due to Indigenous people being sicker when they are admitted to hospital and partly because it is difficult for them to access services where they live once discharged⁸.

6. The work by *Ivers et al.* stated that perception of cultural barriers cause Indigenous people to travel substantial distances in order to access what they consider to be culturally appropriate services. The study indicated that the willingness of Indigenous people to access health services was affected by factors such as Indigenous community control of the services, the gender of the health staff, and the availability of Indigenous staff, particularly where the patients proficiency in spoken and written English is limited⁹.

Welfare Services (Housing, Aged And Disabled Welfare)

7. **Housing.** The Indigenous population relies much more heavily on renting than the general population, especially public and community housing. Indigenous people are major users of Supported Accommodation Assistance Programs (SAAP). Nationally,

⁴ ABS, *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples*, ABS, Canberra, 2001,

⁵ Deeble, J., Mathers, C., Smith, L Goss, J., Webb, R and Smith, V., *Expenditure on health services for Aboriginal and Torres Strait Islander people*, Australian Institute of Health and Welfare, Canberra, 1998.

⁶ CGC, *Report on Indigenous Funding 2000*.

⁷ Beaver, Carol, Yuejen Zahao, Stewart McDermid and Don Hindle (1998) *Casemix-based funding of NT public Hospitals: Adjusting for Severity and socio-economic variations*, Health Economics, Vol 5.

⁸ Nuetze, M, Sanders, W., Jones, G, *Public Expenditure on Services for Indigenous people — Education, employment, health and housing*.

⁹ Ivers, R., Palmer, A., Jan., S.& Mooney G. 1997, *Issues Relating to Access to Health Services by Indigenous and Torres Strait Islander People*, Discussion Paper 1/97, Department of Community Medicine, University of Sydney.

they comprise 14 per cent of all SAAP clients — seven times their percentage of the population¹⁰.

8. Max Neutze and his colleagues explained that the proportion in public housing would be expected to be higher among Indigenous people, partly because Indigenous households are poorer and because earlier generations were also poor, less wealth has been passed down to current households. Therefore Indigenous households at any income level are less likely to be home owners¹¹.

9. A study of Indigenous housing issues undertaken for the SAAP found that ‘ability to access secure and affordable housing is in line with poverty and unemployment rates among the Indigenous population’¹². The report found that the low income of many Indigenous people results in fewer being able to afford the cost of private rental housing, particularly in major metropolitan centres. Discrimination and the requirement to pay bond and supply referees are other factors said to be preventing Indigenous people from renting privately. Levels of domestic violence and poor parenting skills are viewed as combining with some very difficult cultural transition issues and leading to problems of child abuse and youth homelessness, and needs for higher levels of temporary accommodation.

10. In explaining the housing status of Indigenous people, ABS noted that Aboriginal and Torres Strait Islander people do not have the same levels of access to affordable and secure housing as other Australians. This can be a result of low-income levels, discrimination of landlords and rental agencies or a lack of suitable housing¹³.

11. ***Aged and Disabled Welfare.*** In relation to services for aged and disabled people, the New South Wales submission¹⁴ to the Indigenous Funding Inquiry provided evidence to show that the pattern of need is geographically complex. It identified that, in certain regions, both metropolitan and rural, where the population is scattered thinly, Indigenous-specific services cannot to be provided locally, resulting in higher unit costs of provision.

12. Transport options are limited and often expensive in outlying metropolitan and regional areas. In rural and remote areas, some costs such as petrol and vehicle leasing can be more expensive for service providers. Air transport needs to be considered in some situations. Where health patients do not get a service in a timely fashion and diagnosis and treatment is delayed, their condition can deteriorate. By the time the individual obtains service they may have higher and more costly needs.

¹⁰ SAAP, *Homelessness in the Aboriginal and Torres Strait Islander context and its possible implications for the Supported Accommodation Assistance Program*, Final report, 1998.

¹¹ Nuetze, M, Sanders, W., Jones, G, *Public Expenditure on Services for Indigenous people — Education, employment, health and housing.*

¹² SAAP, *Homelessness in the Aboriginal and Torres Strait Islander context and its possible implications for the Supported Accommodation Assistance Program*, Final report, 1998.

¹³ ABS, *The health and welfare of Australia’s Aboriginal and Torres Strait Islander peoples*, ABS, Canberra, 2001, p19.

¹⁴ NSW State Government, CGC, *Indigenous Funding Inquiry Submission*, June 2000.

13. Indigenous communities tend not to view the individual in isolation from the family. The definition of the client for service provision purposes in an Indigenous context often includes the client's family — for example, it is deemed inappropriate to provide meals to an individual only, creating additional cost.