



**NORTHERN TERRITORY VIEWS ON  
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*SOCIO-DEMOGRAPHIC COMPOSITION*  
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**COMMONWEALTH GRANTS COMMISSION  
GENERAL REVENUE GRANT RELATIVITIES  
2010 REVIEW**

### ***Key Points Summary***

- The Territory agrees with the Commission's view that the current socio-demographic composition (SDC) measurement framework is robust and conceptually sound.
- An overhaul of the SDC assessment is not necessary to achieve simpler and more reliable assessments. The Territory believes that these objectives can best be achieved through refinement of the 2004 Review approach.
- Where a broad measure warrants further consideration, the following criteria should be used to determine validity:
  - it reflects the costs drivers for all states and not just for the majority of states;
  - is consistent with 'what states do';
  - is policy neutral;
  - a causal relationship has been established between the broad measure and state expenses;
  - it reflect the costs differentials between states for all services assessed under the broad category; and
  - the sample used to derive the broad measure reflects the states demography.
- The benchmark for testing the reliability of a broad measure should be the 2004 Review methodology. The Commission should explain all large variations in outcomes between the proposed and existing models. The Commission's decision to adopt a broad measure or maintain the current approach should be based on which method results in better equalisation outcomes.
- The Commission should disaggregate broad categories on the basis of SDC if there are large differences in the occasions of services and intensity of use, and a single SDC factor cannot be derived to reflect these differences.
- The Territory does not support any approach that results in partial equalisation.
- Large cross-tabulations are generally detailed rather than complex. The Commission should consider aggregating population characteristics if the supporting data is considered unreliable and the difference is immaterial.
- Attempts to disaggregate the Indigenous and non-English speaking background population groups are impeded by the lack of data.

### ***Introduction***

The Territory's particular socio-demographic characteristics have a direct impact on the demand, nature and the costs of delivering services. While the socio-demographic composition disabilities are not unique to the Territory, the impacts are more prominent or extreme than in other jurisdictions.

The key features of the Territory's population include:

- the relatively high proportion of its population that is Indigenous – around 30 per cent compared to 2.5 per cent nationally.
- small population, large land area - the Territory has a population density of 0.1 persons per square kilometre, well below the national average of 2.5 persons per square kilometre;
- highly dispersed population - about 39.8 per cent of the Territory's population live in remote/very remote locations compared with 2.5 per cent nationally; and
- high levels of transience and mobility.

The Territory supports the Commission's intent to refine SDC assessments, however any proposed changes to the SDC assessments must be consistent with the principle of equalisation, with new assessments able to capture the different circumstances of all states rather than a majority of states.

### ***Impact of SDC on Disaggregation***

The framework for assessing SDC needs will largely depend on the outcome of the Commission's top-down approach towards disaggregation. SDC will not necessarily lead to further disaggregation if a single factor can be derived that is simple, reliable and reflects the costs drivers for the entire range of services captured under the broad category.

This is illustrated in the proposed "Schools" category. The current SDC factor for preschool, government primary and secondary school utilises the same costs weights and does not involve overlapping users. Consequently, a combined SDC factor could be developed which would cater for the needs in all school related services. In this case, a single SDC factor would reduce the number of calculations without an offset reduction in transparency.

Similarly, a single SDC factor could be developed for a "Law and Order" category given the similar needs of the population sub-groups for police, administration of justice and corrective services.

Where a range of related services have overlapping users and have large differences in the cost and/or intensity of use for each service, a single SDC factor is not appropriate. An example is the proposed "Health" category which would encompass all health and welfare related services. The Territory contends that the use rates and the costs of providing individual health and welfare services vary significantly within each population sub-group. Therefore, deriving a single standard use and/or cost weight for each population sub-group would be complex and require significant judgement.

Similarly, applying a broad measure such as the number of home and community care users or mortality rates is likely to capture only one aspect of the health and welfare services and could conflict with the needs of other related services.

The simplification gains from using a broad measure of SDC needs would not offset the significant loss in transparency and equalisation outcomes and added complexity. Therefore, disaggregating a broad health category on the basis of SDC appears necessary.

The Commission noted in its paper that small differences in use and cost rates are not sufficient reason to justify disaggregation, the Territory agrees with this view. However, where there are large variations in utilisation and cost rates, disaggregation based on SDC is warranted. The decision to apply a single SDC factor or disaggregate and apply separate SDC factors should be based on which method would result in better equalisation outcomes.

### ***Broader and Simpler Measures of SDC***

The Commission is currently undergoing a reform of its assessment process that may lead to fewer and broader categories being assessed. The new structure will impact on how SDC is measured, including a more inclusive view of what states do.

There is considerable risk that the application of broad simpler measures of SDC could result in significant cost drivers of government services being left unassessed. A number of problems with oversimplification have been identified.

A prominent shortcoming of broad SDC measures is that they are generally poor measures of the differences in the costs of providing services and the intensity of use of services by population sub-groups. In addition, broad indicators are generally inconsistent with the Commission's equalisation pillar "what states do".

One example of a broad measure provided by the Commission is mortality rates as a proxy for state health needs. The Territory considers mortality rates to be a good indicator of the health status of a states' population rather than a good measure of health costs. Furthermore, it is difficult to understand how mortality rates reflect the different cost drivers for the suite of health and welfare services. For example, mortality rates are not a good indicator of housing needs or disabled services.

There is evidence to suggest that broad measures of SDC will have a significant redistributive impact that favours the larger states. As part of the HFE Methodology Review in 2004, the HFE Steering Committee found that broad indicators of expenditure needs at the category level yielded large variations in states' share of GST revenue with a bias towards the larger states. This indicates that broad measures do not capture the drivers of costs nor the disabilities faced by the states.

The Territory believes the following criteria should be used for determining the suitability of a broad indicator as a measure of SDC needs. This is not an exhaustive list.

- Is it consistent with "what states do"? There needs to be a direct relationship between what is being measured and how states provide the service.
- Does it capture differences in the intensity of use and cost of servicing each population group for the entire range of services? It is not sufficient to apply a

measure on the basis that it is a good indicator for the key service/s in the category, this would only serve to achieve partial equalisation. The broad indicator must reflect the costs differentials between states for all services assessed under the broad category.

- Is it policy neutral? States' grant share should not be influenced by a states' decision to spend more or less on a particular service.
- Is the scope of the survey underlying the broad measure representative of the state population? There are concerns that samples used to derive a broad measure may not reflect the states demography. This is a particular concern for the Territory. For example, a majority of ABS household surveys do not include remote areas in the Territory.
- The broad indicator must reflect the costs drivers for all states rather than a majority of states.

#### *Relevant Population*

A secondary option proposed by the Commission is using relevant populations. This is consistent with the initial steps undertaken by the Commission to assess SDC factors in the 2004 Review.

An SDC factor based on relevant population without any adjustment for intensity of use or cost of service provision could result in an equal per capita assessment for most categories including health, welfare and police because these services are generally available to the entire population.

An SDC assessment based on relevant population, without adjustment, is inconsistent with the current definition of equalisation because it does not differentiate between population sub-groups. For example, in hospital-related services, there is a large amount of evidence to support the claim that that Indigenous people have lower health outcomes than non-Indigenous people, and therefore, are more likely to require treatment. Similarly, once in hospital, Indigenous people often cost more to service because of their higher co-morbidity, cultural background and barriers to communication. Under a relevant population measure, a non-Indigenous, urban, high income person would be assessed as having the same needs as a remote Indigenous person on low income. This is contrary to the principle of equalisation.

Using unadjusted relevant population as a measure of needs would only be appropriate in areas of services where there are uniform costs across the population, such as the first home owners scheme. There would appear to be only limited opportunities for the Commission to apply this method.

#### *Proxy Measure*

The Commission's paper suggests that a broader measure could be developed from one or two population groups that are the drivers of differences in state expenses. The main drivers could be identified using regression analysis. The Commission state that the intention of this approach is to account for most needs rather than all.

This implies something short of full equalisation, which is inconsistent with the principle of equalisation. It is incumbent on the Commission to, as far as practical, develop an assessment that reflects all needs, rather than being content with capturing majority of the differences. Any proposal that directs the Commission to capturing

only a proportion of needs is not supported by the Territory as this only serves to achieve partial equalisation.

The Commission suggest that a causal relationship would not need to be established between the broad measure and state expenses, rather the measure used are good predictors of service costs. The Territory disagrees with this view. It is imperative that a causal relationship exist between what is being measured and the cost drivers of state expenses. If a causal relationship did not exist, there are concerns that this could lead to unstable grant shares as changes to the broad indicator will not reflect actual changes to the costs drivers of the service being measured.

The Territory considers that any use of regression analysis be transparent with models available for states to review. There is considerable risk that data characteristics would result in high R-squared values that have limited conceptual validity.

#### *Criteria for Determining the Reliability of a Broad Measure*

The reliability of the broad measure should be tested against the outcomes achieved from the 2004 Review approach. The Territory acknowledges that the 2004 Review approach is only one form of equalisation, however it was considered the best method for achieving equalisation as applied in Australia.

The Commission's current methodology reflects the wealth of knowledge and experience gained by the Commission. The open and transparent review process ensures states have sufficient opportunity to comment on the Commission's methodology and its resultant outcomes. In addition, the Commission has sought advice from independent experts and consultants to address specific issues with the assessment. The Territory believes that the Commission's assessment reflects the views held by the majority of states and agreement by majority of stakeholders on the goals of equalisation and how this should be implemented.

The Territory believes that the Commission should explain all large variations (positive or negative) between the current approach and any new proposals that involve application of broader measure. Furthermore, the Commission should provide its reasons for taking the preferred approach. While the Territory appreciates the need to develop simpler and reliable assessments, this should not come at a cost to equalisation.

#### *Improving the 2004 Review Approach*

Due to the complexities associated with using broad indicators, the Territory believes that the best approach is to refine the 2004 Review methodology. The Territory agrees with the Commission's view that the basic SDC measurement framework is robust and conceptually sound. It is the application of this framework that creates disagreement between states.

The Commission has cited three key areas in the SDC assessment that it would like to address: reducing the size of cross-tabulations, improving the reliability of data and the application of judgement. The Territory's comments on each of these issues follows.

### *Large Cross-Tabulations*

The Commission has sought state views on an approach to minimising the number of population sub-groups being assessed. This issue stemmed from data issues raised as part of the 2004 Review and the recommendations made by the ABS in its *Report to the Horizontal Fiscal Equalisation Simplification Project*. Citing the large cross-tabulation used in the Inpatient Services category, the ABS recommended that the Commission cease using high levels of disaggregation of the data, noting that it may have unintended effects on the Commission's assessment.

It should be noted that the cross-tabulations used in the Inpatient Services category are atypical. The Inpatient Services category provides the most extreme example of the number of data items required for an assessment and is unrepresentative of the complexity of the current process. Furthermore, other states have previously commented to the effect that the assessment is detailed but not complex or difficult to understand. The majority of cross-tabulations used in the Commission's assessment range between 20 and 50 population sub-groups and it is not pushing the supporting data beyond its limit.

Large cross-tabulations are not necessarily complex rather they are detailed. The degree of cross-tabulations in an assessment should first and foremost be based on whether there are material differences in cost and use rates between population groups. If an adjustment towards a high-level aggregation and a reduction in cross tabulation is being pursued for specific service categories, then it is important to consider if and how this adjustment would lead to any fundamental changes to equalisation and less transparency. A reduction in the number of population sub-groups is justified on the basis of lack of reliable supporting data. However, if there is a strong conceptual case and data to support further disaggregation, this should be incorporated in the assessment.

The Commission has sought state views on an approach to minimising the number of cells with cross-tabulations. The Territory believes that the Commission's first step should be to examine the data supporting the current approach. As previously noted, if there is reliable data to support disaggregation then any attempts to aggregate specific characteristics is unwarranted. If aggregation is required, the Commission should focus on limiting the number of age and regions assessed.

During the HFE review, the Commission noted that reducing the number of inpatient services cross-tabulations by reducing the number of age groups had an immaterial impact on states' GST revenue. The Territory supports the Commission examining ways to reduce the number of cross-tabulations provided that material differences are not overlooked in the assessment. The Commission should consider:

- whether there is data available to support further disaggregation;
- an appropriate balance between simplicity and accuracy;
- the cumulative impact of removing small adjustments for a state;
- the loss of transparency; and
- whether it is consistent with the principle of equalisation.

### ***Reliability of Use and Cost Weights***

#### *State Administrative Data*

The onus is on states to provide qualitative and/or quantitative data to support the conceptual basis for including or maintaining a disability. However, there is also a responsibility on the part of opposing states to provide counter evidence. The Commission's role is to consider the evidence provided by all states and use its own experience and judgement to determine whether an assessment should be included. This protocol will ensure that states are not unfairly penalised for maintaining data on issues in isolation from other states. In addition, the Commission can take into account issues and practical constraints with collecting data in some areas or circumstances.

It is 'normal' for the Commission to base an assessment on imperfect data if a strong conceptual case has been established and the factor is material. The lack of comprehensive data is unavoidable. In the report, *Review of the Cost Weights for Assessment of Methodology for Horizontal Fiscal Equalisation*, McHugh noted that "there is no incentive to states to raise issues that would threaten their share of funds". State-generated data is generally limited to issues that are pertinent for that state. Furthermore, the Commission should take into consideration the states' limited capacity to maintain up-to-date data, particularly in remote areas.

Equalisation should not be jeopardised because of a lack of ideal or comprehensive data. Irrespective of whether data can be obtained for all states, if a state can demonstrate that a disability has a material impact on its budget, this should be sufficient to warrant consideration by the Commission. Consistent with the existing definition of equalisation, it is preferable for the Commission to exercise some judgement to derive an assessment based on limited data (if a clear conceptual case has been established), as opposed to the alternative approach which is not to assess the disability. Nevertheless, there is an onus on states to make a reasonable effort to provide relevant and reliable data. To this end, there needs to be a commitment from states to improve their data collection methods to ensure that their data is accurate, reliable, up-to-date and fit for the Commission's purpose.

The Commission has sought state comments on what processes could be implemented to improve the quality of state data and the main datasets that should be reviewed. The states' views on these issues have been incorporated in the Data Working Group report. The Territory believes that the recommendations made in the Data Working Party report including the suggested protocol for improving data collections and the datasets identified for improvement should form the basis of the Commission's approach to improving state data.

In its *Progress Report to the Ministerial Council for Commonwealth-State Financial Relations 2006*, the Commission noted that for governments to have confidence in its assessments, the data used in preparing them need to be robust, reliable, comparable and up-to-date. The Commission has implemented a comprehensive work plan to review the reliability of data used in its assessment, including the development of a set of criteria to determine whether data is of sufficient quality, a protocol for improving state data and a more detailed approach to its annual data update request. The work undertaken by the Commission on improving data quality will ensure sensible outcomes and reliable relativities are achieved.

### *Use Weights*

Use weights are considered reliable because they are generally based on data maintained by an independent reputable source and are fit for purpose.

### *Cost Weights*

Cost weights are an integral part of the equalisation process. They reflect the impact that different population sub-groups have on the costs of delivering government services. Cost weights are particularly important for the Territory due to its unique population characteristics.

Assessing cost weights commonly relies on qualitative data provided by states. Qualitative data provides support for a conceptual argument and allows the Commission to make an informed judgement on the magnitude of the weight. Although qualitative data is inherently subjective at its source, it does not follow that it is unsuitable as the basis for an assessment. Costs weights based on qualitative data should not be considered unsatisfactory only because judgement is required to use them in the assessment process.

Qualitative data, properly collected and evaluated, is a source of high quality information for researchers, contrary to the view expressed by some states that qualitative data is inherently of poor quality. Qualitative data is potentially valuable to the Commission as a means for validating assessment models, as well as for the purpose of estimating cost and use weights where quantitative data is sparse or of poor quality. Qualitative data should be seen as an important source of information in the Commission's process.

McHugh's report lent support to the Commission's approach of assessing cost weights. McHugh stated that the conceptual basis for CGC decision-making is logical and has the support of the states. The report notes that the use of judgement is particularly evident in relation to the determination of nearly all Indigenous and cultural and linguistic diversity cost weights, however McHugh does not draw the approach taken by the Commission or the magnitude of the weights into question. McHugh only identified a few cost weights that were considered hard to justify given the poor quality data or it borders on immaterial. These include adjustments for vandalism, humanitarian refugees and humanitarian migrants.

### *Application of Judgement*

Some states have criticised the Commission's use of judgement in regards to qualitative or incomplete quantitative data on the basis that this assessment method isn't adequately robust: if there is no reliable empirical data, it is argued, the Commission should not resort to subjective measures in determining GST revenue distribution.

The Territory believes that the use of judgement is an important component of the Commission's assessment methodology, and adds a necessary level of detail to capture relevant cost drivers of government service delivery. It should be noted that in its assessments, the Commission does not apply subjective judgement flippantly or arbitrarily. Applications of judgement are often the result of many years of research and consideration of the issue. Judgement is only applied when a strong conceptual case exists in favour of a material cost impact differential. When judgement is applied, all consideration is given to external and internal research on the matter.

Reference is also made to relevant empirical sources in order to enhance the robustness of the applications of judgement. For these reasons, the Territory supports the retention of judgement in the Commission's assessment methodology. However, in order to make its application of judgement as reliable, robust and transparent as possible, the Territory supports the formation of a judgement framework and protocol.

### *Defining the Disabilities*

The Commission has sought state comments on whether it should investigate whether distinct Indigenous or persons from non-English speaking background population groups have different cost impacts and whether this should be incorporated in the assessment. In general, the Territory believes that there is insufficient data to support further disaggregation of the Indigenous and non-English speaking background population groups.

### *Indigeneity*

It has been argued that the classification of the Indigenous population within the Commission's assessment is too broad and fails to capture important distinctions between this population sub-group. The Commission has sought state comments on whether it should investigate the cost impact of delivering government services to three distinct Indigenous population groups: Indigenous people well-assimilated into the non-Indigenous community; Indigenous people who live in Indigenous communities; and Indigenous people who are not integrated within a community (i.e. fringe city dwellers).

The Territory believes that categorising the Indigenous population according to these groups would unnecessarily complicate the Commission's assessment. The Territory notes that Indigeneity is not treated as a homogenous factor in the Commission's assessment. Many of the distinct characteristics of individuals within the Indigenous population are already recognised (such as socio-economic status, English fluency and remoteness) through joint factors. This allows for the cost differentials in providing government services to different sub-groups of the Indigenous population to be accounted for.

There would be significant difficulties with defining and collecting data on the three Indigenous population sub-groups. For example, establishing a robust and consistent definition of 'well-assimilated Indigenous persons' would likely to be contentious. Even if a definition could be agreed upon, sourcing relevant information from individuals in order to categorise them would potentially be costly, intrusive and unlikely to be comprehensive. In the case of categorising Indigenous people who are 'not integrated within the community', it is likely that this population is itinerant, and may have other locations of residence, such as a remote Indigenous community. This highlights the difficulty in establishing a distinct separation between these Indigenous population groups.

Furthermore, there is not a strong conceptual argument that these three groups have material differences in the costs of providing government services. In a Centre for Aboriginal Economic Policy Research working paper by Hunter (1999) it was noted that "high income Indigenous households are much more likely to be arrested than their non-Indigenous counterparts in both relative and absolute terms" and "high income Indigenous families are only 1.2 percentage points less likely to experience

long-term health problems than low-income Indigenous families”.<sup>1</sup> Therefore, it is questionable whether a clear causal link exists between ‘well-assimilated’ Indigenous people and lower per capita use of government services.

Currently, the Commission’s acknowledges that there are cultural barriers to the provision of government services. The Commission recognises these costs by applying costs weights to the remote Indigenous population. However, it could be argued that as a result of urban drift, there are cultural barriers that impact on the Territory’s urban Indigenous population.

It has been argued that the impact of the Indigenous population on the cost of providing government services is due to their low-income status and remote location. The Commission has sought state comments on whether socio-economic status and location would adequately capture the cost impact of Indigenous people.

Past research, such as the work contained in the Productivity Commission’s report *Overcoming Indigenous Disadvantage 2005*, has established that Indigenous disadvantage is not only quantitatively but also qualitatively different from the disadvantage experienced by some sectors of the non-Indigenous population. Past findings have shown that many Indigenous people face a multidimensionality of needs, which adds costs and complexity in delivering government services. In short, there are often materially significant differences in demand for and costs of government services between Indigenous and non-Indigenous people with low income and who live in remote areas. For this reason, a reliance on socio-economic status and remoteness indicators without reference to Indigeneity fails to recognise the needs of the Indigenous population.

#### *Socio-economic status*

The Commission is considering alternative measures of socio-economic status including adjustments for costs of living and family size.

The Territory is willing to consider alternative measures of income and believes that the current method could be refined or simplified. The current approach of assessing gross individual and family income does not capture differences in family and household composition and size. This is particularly relevant in relation to income measures for the Territory’s Indigenous population, who tend to live in larger households than non-Indigenous Territorians. As a result, the Commission’s income measure is likely to overestimate the effective incomes of many individuals in the Territory.

As noted in the Commission’s *2004 Review Working Papers*, it is standard academic practice to account for family and household size in measurements of poverty. To this end, the Territory advocates the adoption of an equivalised household income index as the preferred measure of income. Although the ‘modified OECD’ equivalence scale, as trialled by the ABS, does not fully take into account the composition of Indigenous households (insofar that it fails to capture the effects of intermittent residences of extended family members and other visitors in a household), its adoption would represent an improvement in the Commission’s socio-economic status assessment.

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<sup>1</sup> B Hunter (1999), “Three nations, not one: Indigenous and other Australian poverty”, Working Paper 1, CAEPR, ANU

*Persons from non-English speaking background*

The Commission recognises the higher costs involved in delivering services to some non-English speaking background (NESB) people. The Commission currently treats NESB persons as a homogenous group. The Commission is seeking direction on whether it should disaggregate the NESB population into different cultural groups with different demand and costs impacts.

The Territory acknowledges that there may be sub-groups of the NESB population that have different cost impacts. However, the Territory believes that there is limited reliable or comprehensive data to measure the cost differentials across the whole spectrum of government services. Importantly, there is no evidence to suggest that if there was a difference in servicing NESB sub-groups, an assessment would result in material differences at the state level.

The Territory believes that the added complexity of differentiating costs for NESB population sub-groups would not result in a significant improvement in equalisation. Therefore, the Territory believes that there is little benefit for the Commission to investigate this issue further.

***Materiality***

The Commission has sought comments on whether to introduce a threshold to disaggregate population characteristics, such as age or region. As previously stated, the Territory believes that the Commission should disaggregate population sub-groups if there is robust supporting data and a strong conceptual case has been established and it is simple. For example, the ACT adjustment for diplomatic students does not redistribute a significant amount of GST revenue, however there may be case to retain the adjustment since it is simple and based on reliable data.

Different approaches to disaggregation could also yield different results (eg use of 5-year age groups, 10-year age groups or say 2 specific age groups (0-19,65+)) and as such a more flexible approach may be warranted. If the Commission decides to apply a threshold, it should apply to individual states and to the cumulative impact.