Dear Mr Nolan,

**Re: AEU Submission to the Review of the Socio-Economic Status Score Methodology**

Thank you for the opportunity to submit to the review of the SES score methodology.

Please find our submission attached.

Please contact me if you have any questions in relation to this submission.

Sincerely,

Susan Hopgood
Federal Secretary
Introduction
The Australian Education Union (AEU) represents around 187,000 educator members employed in the public schools, early childhood and TAFE sectors throughout Australia.

We welcome the opportunity to respond to the invitation by the National School Resourcing Board to submit to the Review of the SES Score Methodology.

This submission makes the case that the current methodology for scoring SES in the context of non-government schools funding is flawed and should be replaced with a system that collects specific data about income and assets from individual households and schools in order to accurately measure capacity to pay.

Executive summary
The socio-economic status (SES) score methodology is fatally flawed and should be abolished. Here are four key reasons why:

1. **It is an inaccurate measure of parental income and fails to capture the actual capacity of parents to contribute.** The calculation of SES scores is done on the characteristics of a Statistical Area Level 1 (SA1) census district where private school students live – not on the income of their parents. Between 200 and 800 people live in each SA1. The SA1 dimensions are arbitrary and no analysis underpins the weighting used. Two thirds of the score is derived from data on the education and occupation of people living in the SA1. Only 1/6 is calculated from family income and there is a high probability that this is an inaccurate measure due to the fact parents who send their children to private schools are far more likely to have a higher income than those who send their children to public schools (two/thirds of all students attend public schools). The 2011 Gonski Review found using area data “is subject to a potentially large degree of inaccuracy” and recommended the abolition of the current SES model.

2. **The data is out of date.** According to the Commonwealth Education department SES scores used in 2017 were calculated in 2013 using student residential addresses collected by the department in 2012 and using data from the 2011 Census.

3. **No other means test undertaken by the Commonwealth Government uses comparable data.** The SES model is out of step with other means tests used for income support payments which take into account income and wealth.

4. **It fails to take into account school resources.** A more accurate test of the capacity of parents to contribute towards school operating costs would take into account what they actually are contributing and the schools’ accumulated assets.

Replacement for the SES model
The SES model should be replaced with a means test that is calculated on two elements: parental income and school income/wealth.

The income of parents and guardians should be sourced from tax returns submitted to the Australian Taxation Office. The income and assets of private schools should be derived from school financial questionnaire data submitted to the Department of Education and, if necessary, annual reports filed with the Australian Charities and Not-for-profits Commission.
If the board believes it cannot move to a new measure for the 2019 school year, the SES scores should be re-calculated based only on 2016 Census data from families who have children in private schools.

Capacity to Contribute

The development of a new SES model should be followed by the creation of a new Capacity to Contribute scale that reduces the minimum Commonwealth contribution below 20% of the base SRS.

Review Questions

Strengths and limitations of the current SES scoring methodology (Q.1)

The development of needs-based funding policy in education in this country has been guided by the Gonski Review in 2011. In assessing what steps were necessary to effect a needs-based funding system, the Review identified various weaknesses in SES scoring methods and recommended scrapping the current methodology for measuring SES in the context of non-government schools funding. Given the Turnbull government purports, erroneously in the view of the AEU, to be committed to a needs based system of school funding, the government position should reflect or be consistent with the advice of the 2011 Gonski Review.

Concerning the usefulness and accuracy of SES as a measure of need, and the validity of approaches to capturing SES data such as those used in the current system, the Gonski Review in 2011 stated:

_The use of an SES-type measure for this purpose provides a fair, consistent, and transparent basis for funding the different types of non-government schools._

_However, the area-based SES measure used at present is subject to potentially significant error due to variability in family SES within census Collection Districts. This should be replaced in time with a more precise measure that would reflect directly the circumstances and background of each student in a non-government school._

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The Review recommended establishing a new model for funding non-government schools and stated that it should more effectively capture private contributions to non-government schools:

Recommendation 3

_For the purposes of allocating public funding for non-government schools, the Australian Government should continue to use the existing area-based socioeconomic status (SES) measure, and as soon as possible develop, trial and implement a new measure for estimating the quantum of the anticipated private contribution for non-government schools in consultation with the states, territories and non-government sectors._

Concerning the point raised in this recommendation regarding the most accurate method “for estimating the quantum of the anticipated private contribution”, accuracy is most likely to be achieved by *directly* measuring the capacity and propensity for private contributions by parents. To that end, measurement of the capacity to contribute must be derived from variable and fixed sources of income, and is only likely to be captured using data demonstrating precise household income and wealth, such as income data collected annually by the Australian Taxation Office (we elaborate on the second submission question regarding alternative methodologies below). Without collection of data to match actual parental capacity to pay, it is difficult to argue that the current system of government funding for non-government (private) schools does now or could ever reflect the principle of need in the manner appropriate for disbursement of public monies to private entities and individuals.

Characteristic of the dysfunction of the current funding methodology is that increased funding of private schools has occurred alongside huge increases in private school enrolments² and fees:

> fees in wealthy private schools have increased dramatically, far in excess of education costs and despite large increases in Federal Government funding. Fees in 22 elite NSW schools more than doubled between 2001 and 2011, increasing by 104%, at the same time as their Federal funding increased by an average of 118%. Fees in 17 wealthy Victorian schools increased by 88% over the same period, at the same time as their Federal funding increased by 211%.

This trend clearly demonstrates the limitations of the current SES measurement methodology in that federal funding levels illustrated here are not consistent with either the capacity of parents to pay, the behaviours of parents in contributing to fees, and certainly not with the principle of allocating monies according to “need” as it is understood by the wider public in this country. In addition to these dire failings, a situation where government funding is contributing to increased segregation of school systems (elaborated on below) contravenes public expectations regarding the purpose of public expenditure in addressing social need.

In contributing to the Gonski Review, the AEU highlighted similar concerns regarding the accuracy of the SES measure and the completeness of the current methodology as a measures of means, and hence need, within the non-government school sector.

The AEU submission to the Gonski Review in 2011 drew attention to the points identified in 2000 by the former Prime Minister, Julia Gillard, who outlined major flaws in the model including:

- *limitations associated with using of only selected aspects of census data in determining a school’s SES score and neglecting other significant indicators;*
- *the loss of veracity the more geographically dispersed students are;*
- *the loss of veracity in highly differentiated areas where there are extremes of wealth and poverty; and, significantly*

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² Barbara Preston, *The social make-up of schools, Prepared for the AEU, February 2018*, p.3
• the fact that the model makes no allowance for the amassed resources and wealth of any particular school in terms of buildings and facilities, the equipment available, alumni fund raising, trust funds, endowment funds and the like.4

These criticisms regarding the calculation of SES and the inclusion of capital resources are no less salient today. On the particular question of the total resources available to private schools, Gillard identified a fundamental flaw regarding the accurate measurement of means that is totally unacceptable by the standards of our community and must be addressed in the current Review:

Obviously, just as the economic capacity of an individual is affected by his or her income and assets – a principle which is enshrined throughout our social security system and which is used for all benefit calculations for pensions and the like; there is the income test and the asset test, because we recognise throughout our social security system that both contribute to the economic capacity of an individual – it must follow as a matter of logic that the economic capacity of a school is affected by both its income generation potential – from the current class of parents whose kids are enrolled in the school – and the assets of the school. The SES funding system makes some attempt to measure the income generation potential of the parents of the kids in the school but absolutely no attempt to measure the latter, the assets of the school. This is a gaping flaw, one which the government would not allow to emerge in any other benefit distribution system. Can you imagine anybody in this parliament suggesting that social security benefits ought to be distributed with regard only to income and not assets? This government would be the first baying for that person’s blood, yet that is the model that is being predicated here in terms of SES funding, where there is no regard for the question of amassed wealth by schools. That is a very big flaw, one that needs to be addressed.5

The point made here by Gillard in relation to measurement of a school’s means, specifically in relation to fixed and liquid capital, is just as applicable in the context of parent’s capital resources. Gillard points out SES makes “some attempt to measure income generation potential of parents”. In the climate of recuperative fiscal strategies proclaimed by the current government, “some attempt” is hardly satisfactory in addressing Treasury standards. Funding of non-government schools with public monies, if it occurs, should reflect the actual capacity of the individual parents to pay for their decision to use the non-government system. More specifically, a proper measurement of the capacity of private individuals to pay should accurately measure household (private) wealth, of which capital assets is a fundamental part. The impact of the current exclusion of private wealth (in the form of assets) from the definition and measurement of private means is that the measurement of capacity to pay (i.e. the means test), quite unlike other means tests in relation to government monies, is (notwithstanding the points already made about hypothetical means testing) incomplete and therefore unfit for its purpose.

The concerns raised at the time of the “Gonski” Review regarding the efficacy of the SES measurement approach, and the scope of inclusion around means, are echoed in the Issues paper produced for this Review (Victoria University Centre for International Research on

5 Ibid.
Education Systems has produced an issues paper which includes a desktop review of development activities since the SES score was conceived in 1996\(^6\).

The Issues paper, which contains a summary of known stakeholder issues and views on the SES score methodology, identifies issues under the following categories: purpose/objective; design; accuracy; and timeliness.

Design issues identified in the Issues paper include:

- *the inclusion of the occupation and education dimensions in the SES score calculation*
- *the weighting applied to the four SES score dimensions when calculating a school SES score*
- *similar data used in the SES score being applied in the application of SRS loadings*
- *household wealth not being included in the SES score*
- *the treatment of family size in the SES score.*\(^7\)

Linked to these issues of design, and aligned with criticisms raised in the 2011 Gonski Review process, are concerns the Paper raises around accuracy, particularly:

> the ecological fallacy—it has been argued that students attending non-government schools are not representative of their SA1s, meaning school SES scores generated using data on all residents in an SA1 does not accurately measure the capacity of parents to contribute towards school operating costs.\(^8\)

In addition to this point about SA1 data not being representative of the composition of private school attendees is the point that it fails to capture the complexities of family structure and their impact on household income:

> ... data is only used on the SA1 of where students live, and not also the SA1 of where other parents contributing towards the cost of educating their child may live. (and) ... family size is not considered—schools that are identical in every SES dimension will receive an identical SES score, even if there is a significant difference in average family size.\(^9\)

Concerning the last category identified in the Issues paper, the matter of timeliness, the limitations of census data raised:

> With both the ABS Census and SES score calculation only occurring once every five years, there is concern that the resulting school SES scores become quickly outdated. This is of particular concern for areas experiencing significant economic or demographic change.\(^10\)

The broader issue of economic and social change, particularly the increasing levels of social segregation between school systems in recent decades, is a useful lens through which to

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\(^7\) ibid., p.iii

\(^8\) ibid., p.iv

\(^9\) ibid.

\(^10\) ibid.
continue our examination of the effectiveness of the current methodology in non-government schools funding.

In her analysis of the changing composition of Australian school sectors, The Social Make-up of Schools\textsuperscript{11}, Barbara Preston demonstrates what she describes as a process of “residualisation” and increasing segregation in our school system:

\begin{quote}
In 1976 the social mix in public schools was similar to that of the total student population, with only a slightly larger proportion of students from LOW income families (35\% compared with 33\%) and a slightly smaller proportion of students from HIGH income families (31\% compared with 33\%). This had changed by 2016. Students from LOW income families had increased to 43\% of public school enrolments and students from HIGH income families had decreased to 27\% of public school enrolments. In 1976 the independent sector was very elite, with two thirds of students from HIGH income families. However, because the sector was relatively small its impact on public schools and the system as a whole was also relatively small. Since 1976 the independent sector has become less elite, with the percentage of enrolments from HIGH income families reducing to 51\% in 2016. However, its share of all enrolments increased almost fourfold from 4\% to 14\% in 2016. Consequently, the percentage of all students in HIGH income families who attended independent schools increased from 8\% in 1976 to 22\% in 2016\textsuperscript{12}
\end{quote}

This process of segregation is relevant to this Review in two ways. Firstly, the segregation of the school systems exacerbates the tendency where the characteristics of a cohort of families attending non-government schools are not representative of the SA1 in which they live. This is because a disproportionately high number of families with high income are attending non-government schools. A conceptual example of this (ecological fallacy) problem is given in the Issues paper where:

\begin{quote}
the family characteristics of students attending a non-government school (are) materially different to that of other residents within the same SA1.

In this example, 46\% per cent of families with students attending non-government schools are identified as having a high income. This compares to only 8\% per cent among all families...

If the characteristics of families attending a non-government school are not representative of the SA1 where they live, the SES score estimated for a school may be inaccurate. This is a risk in (a) hypothetical example, as it is the 8\% per cent among all families identified as high income that is used in the calculation of the family income dimension score and ultimately the school SES score.\textsuperscript{13}
\end{quote}

These inaccuracies can have a dramatic effect on the actual determination of a school’s funding, as illustrated by the cases of: Adass Israel School and Yeshivah and Beth Rivkah Colleges. In these cases, the current funding methods were sufficiently inaccurate and dysfunctional that these schools exercised the right to contest their SES determinations. The following data shows the scale of the revisions of original determination of SES score, firstly

\textsuperscript{11} Barbara Preston, The Social Make-up of Schools, February 2018, Prepared for the AEU
\textsuperscript{12} Ibid., p.3
\textsuperscript{13} Review of the socio-economic status score methodology – Issues paper (2017) op. cit., p.31
a score 116 for Adass Israel revised to 89, and a score of 118 for Yeshivah and Beth Rivkah Colleges, revised to 88.

Determination DEEWR No School 2009-13 SES score Score after appeal 2 Mar 2010
740 Adass Israel School 116 (CtC 31.2%) 89 (CtC 65%)

Determination DEEWR No School 2009-13 SES score Score after appeal 2 Mar 2010
1301 Yeshivah and Beth Rivkah Colleges 118 (CtC 28.7%) 88 (CtC 66.2%)\(^\text{14}\)

In these two examples, the scale of the SES score shifts from a determination typically consistent with a high SES score with lower financial needs to a low SES score with typically higher needs for the purposes of allocating funding.

A further example, discussed by Preston, of the inaccuracy produced by the current system of measuring school SES is in instances where students attend schools outside their local area:

High-fee metropolitan boarding schools were assessed as not very high SES because of the large number of students who were the children of high-income/high-wealth broad acre farmers who in live in CDs classified as relatively low SES because of the many low SES station hands and rural village residents in those CDs. The children in those lower SES families attend local schools, not high fee boarding schools. The corollary is that those local schools, not attended by the farm-owners’ children, would be classified as higher SES because of those high SES farm-owners in the same CDs as the local students. Such instances, though stark and easy to explain, are not anomalies. The same pattern operates throughout Australia - to a greater or lesser degree.\(^\text{15}\)

Exacerbating these already significant problems around accuracy resulting from a hypothetical rather than actual measurement of SES score, is the timeliness of data used in the determination of SES scores. Further examination of the cases described above demonstrates how the current methodology in measuring SES and funding is susceptible to untimely data collection practices. In this case/s:

The current SES scores were calculated in 2013 using student residential addresses collected by the department in 2012 and data from the 2011 ABS census.\(^\text{16}\)

A time delay of in excess of five years between data collection and the use of data in measuring hypothetical SES creates another layer of variation in data and uncertainty in what is already a hypothetical model subject to error.

Given that the demographic composition of schools enrolment changes annually, particularly in areas such as growth corridors, this combination of system design and demographic factors combine to create a weak and insufficiently robust method from which to establish eligibility for funding of non-government schools.

The criticisms of the system for measuring SES are not limited to those outside of the independent or non-government sector. Similar views are held within the non-government

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\(^{15}\) Barbara Preston, Notes on the ecological fallacy when area-based indexes of disadvantage/advantage are applied to schooling in Australia, 28 March, 2010

\(^{16}\) NCEC meeting brief, Monday 3\textsuperscript{rd} April 2017, op. cit. p.15
schools sector. In its report “Rethink the need”, the Catholic education sector body Catholic Education Commission Victoria (CECV) expresses criticisms of the current methodology that are similar to those identified in the 2011 Gonski Review and raised here and elsewhere in the current review process by the AEU and other independent sources.

The CECV research report, “The need to rethink need”, lists key elements of current funding arrangements “that fabricate a need for public funding in wealthy schools that already raise sufficient income privately.”17

_Schools are means-tested using a hypothetical level of school private income, not their actual private income. The high levels of private resources available to elite, high-fee schools are entirely ignored in estimating their need for public funding;

A school’s hypothetical level of private income is calculated using school SES scores, which are biased in favour of high-fee wealthy schools, resulting in artificially low estimates of their hypothetical private income; and

Irrespective of all else, no school is assumed to raise more than 80% of their required funding (before loadings) in private income. Thus every single non-government school in Australia is estimated to need government funding, no matter how wealthy.

The consistency with which the same flaws are identified by distinct and unaligned groups lend weight to the various arguments being made about the flaws in the current methodologies.

**What refinements or alternative methodologies could be considered to improve on the current SES measure, including how frequently should measures be updated? (Q.2)**

Concerning the matter of refinements or alternatives to improve on the current methodology, the AEU is of the opinion that the weight of evidence regarding flaws in the current methodology is sufficient that “refinement” of the current method is not a realistic alternative. It must be scrapped entirely, not refined.

One key reason for this is because a hypothetical measure is not consistent with other approaches to assessing means in order to determine the distribution of government monies and benefits. In addition to the inconsistencies between this and other benefit distribution systems, this hypothetical measure is subject to a range of technical issues around accuracy (discussed above). Its efficacy is diminished still further by its failure to capture the capacity of households to pay on the basis of income (it is not a hypothetical measure of household income, it is an aggregated measure of income, among other factors, in a locality). Finally, its failure to incorporate the assets of parents and schools renders the current system so grossly inadequate as to raise the question of why the parameters and definitions of means employed in this test so totally out of step with the parameters and definitions of means used in other tests typically administered by governments in day to day fiscal management as part of other benefit systems.

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If this process of Review is to guide government to adoption of a methodology that meets the guiding principles of “fit for purpose, “transparent” and “reliable”, then an alternative methodology must be found.

As we have suggested above in the discussion around strengths and weaknesses of the current system, a stronger methodology would likely reflect existing principles for means testing within government.

More specifically, the SES model should be replaced with a means test that is calculated on two elements: parental income and school income/wealth.

The income of parents and guardians should be sourced from tax returns submitted to the Australian Taxation Office. The income and assets of private schools should be derived from school financial questionnaire data submitted to the Department of Education and, if necessary, annual reports filed with the Australian Charities and Not-for-profits Commission.

**Are the guiding principles appropriate to assess alternative approaches or are there other principles that should be considered? (Q.3)**

Broadly speaking the guiding principles – fit for purpose, transparent, reliable – identified to assess alternative approaches are appropriate for the task, but not entirely adequate in that they fail to specify and elaborate on the defining and guiding principle in schools funding in this country, which is the concept of student need.

What is lacking in these categories is a clear statement under “fit for purpose” that links the definition of purpose in the funding system to the concept, category and definition of student need, as it has been elaborated in the 2011 Gonski Review.

A final point concerns the definition of “burden” as that term is used under the category “fit for purpose”. We believe it is proper that the definition of burden that guides this review process must be consistent with and derived from similar assessments about what is considered burdensome and onerous in other means testing systems administered by central government, and equally, what is considered prudent and responsible in gathering data about household income and means in the course of dispensing government benefits.