MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

Education Report: Presenting the Equity Index – options for mitigating stigma

To:	Hon Chris Hipkins		
Date:	1 August 2019	**Priority:**	Medium
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Messaging seen by Communications team:	N/A		

Purpose of report

The purpose of this paper is for you to:

- **indicate** how you would prefer to present the Equity Index to mitigate the risk of stigmatisation

Summary

1. The decile rating system is commonly misinterpreted as a measure of schooling quality, as opposed to its true purpose as a measure to target funding to address socio-economic disadvantage. This has had major impacts on social stigma and how schools are viewed, enrolment patterns, staffing of schools and how students view their educational opportunities. Transitioning to the Index presents an opportunity to prevent, or at least mitigate against, the stigmatising impact of targeted equity resourcing.

2. One of the ways we can do this is by assessing how the Index is presented to the public (e.g. how it is presented on school funding notices). There are a number of ways Equity Index outputs can be presented including; releasing raw percentages, converting outputs to a different numeric scale, banding outputs, and completely withholding Index outputs.

3. Each option provides schools with varying levels of information for the basis of their equity funding. Some of these options have higher utility and feasibility to implement (e.g. releasing raw percentages or converted outputs), while other methods better mitigate the potential for stigmatisation (e.g. withholding Index outputs). There are also broader considerations for assessing presentation options, including the implications for data extraction, resourcing accuracy, and wider legislative repercussions.

4. We recommend presenting the Index on a different numeric scale for presentation. For example, instead of assessing school outputs as a percentage of a school roll or a band, schools could be allocated an output on a scale with a median of 400 and a standard deviation of 50. Similar approaches are used in other jurisdictions (Australian central government and New South Wales), and this allows for greater accuracy and flexibility in resourcing allocation, while also reducing the likelihood for stigmatising effects. It is also feasible to implement, and supports better utility for targeting services and research.

Recommended Actions

The Ministry of Education recommends you:

a. **note** you have agreed to the development of a Cabinet paper seeking in principle agreement to transition from deciles to the Equity Index

Noted

b. **note** the decile rating system is currently used to distribute resourcing to schools, and has been commonly misunderstood and misused as a measure of schooling quality

Noted

c. **note** there are a number of ways in which Equity Index outputs can be presented, potential options include:

i. **Option 1:** School-level Equity Index outputs are released as raw percentage generated in the Integrated Data Infrastructure

ii. **Option 2 (recommended):** School-level Equity Index outputs are converted to a different numeric scale (e.g. schools could be calculated an output on a scale, with a median of 400 and a standard deviation of 50)

iii. **Option 3:** Banding school level outputs into a high number of bands (nine or more) with less school coverage in each (e.g. schools are allocated into the following bands 0-9%, 10-19%, 20-29% etc.)

iv. **Option 4:** Banding school level Index outputs into less bands with wider school coverage in each (e.g. 0-19%, 20-39%, 40-59% etc.)

v. **Option 5:** Completely withhold information relating to school level Index outputs **(not recommended)**

Noted

d. **note** there are a number of risks associated with these potential presentation methods for Equity Index outputs, and there are particularly significant risks associated with options that involve legislative change (Option 5)

Noted

e. **agree** to proceed with **Option 2**, to convert school-level Index outputs to a different numeric scale

Agree / Disagree

OR

f. **indicate** which alternative option you would like to pursue

~~**Option 1 / Option 3 / Option 4 / Option 5**~~

g. **note** the presentation method you select may also impact how Index output data is extracted, and this could affect how effectively schools are resourcing is calculated and distributed using the Index

Noted

h. **note** the possible data extraction methods include:

i. extracting detailed Equity Index output data as a percentage for resourcing calculations and distribution, which may differ to the presentation method you select

OR

ii. extract data from the Integrated Data Infrastructure in the same format as the agreed presentation method

Noted

i. **agree** to extract Equity Index data from the Integrated Data Infrastructure calculated on the same scale as (e) above to support consistency, and greater flexibility and accuracy for resource allocation **(recommended data extraction method)**

Agree / Disagree

j. **note** the Ministry of Education will provide you with further advice based on your preferred option

Noted

Proactive Release Recommendation

k. **agree** that this Education Report is not proactively released at this time as final decisions are still to be made on the wider piece of work

Agree / Disagree

Damian Edwards
Associate Deputy Secretary
Education System Policy

1/8/19

Hon Chris Hipkins
Minister of Education

6/8/19

Background

1. We have provided you with an update on the Equity Index work programme [METIS 1183599 refers]. A broad range of work is underway to consider what future resourcing for equity will look like, this includes:

    a) technical refinements to develop and improve the Index's final output,
    b) considerations for how best to distribute resources post-transition to the Index,
    c) identifying how the Index could be applied to broader system settings and
    d) assessing how to communicate the model to schools and the wider public.

2. A key part of (d) above, is to mitigate the potentially stigmatising nature of the Equity Index in how it is communicated to schools, parents, whānau and the wider community. Addressing or mitigating potential stigma associated with the Index requires a broad range of actions to influence change. Key levers to address or mitigate social stigma associated with the Index include:

    - options relating to the external presentation of the Index's finalised output, both at a school-level and for aggregations across population subgroups, and

    - supporting actions (e.g. communications and resources, transition support for schools, leadership support etc.). We will be engaging with the sector, parents and whānau to understand what the best supporting actions are.

3. The options provided in this paper relate specifically to the external presentation of the Equity Index's finalised output.

What we know about the stigmatising impact of deciles

4. Decile ratings are highly visible within the education system. We know decile ratings have been incorrectly conflated as a measure of schooling quality, as opposed to their true purpose as a measure for targeting resources to support schools in removing socio-economic barriers.

5. Evidence shows the stigma associated with the current decile 'label' has had a tangible impact on how the schooling system operates in New Zealand. This has had particular impacts on school choice, enrolment, and staffing. Resourcing for equity is intended to support schools to remove socio-economic barriers for their students. However, in doing this, there is a risk that the negative impacts relating to stigmatisation are exacerbated. We know this overly impacts on groups of learners the education system is currently underserving, including Māori and Pacific learners.

6. We have attached an overview of various evidence and stakeholder feedback relating to the impact of the decile label **(Annex 1)**.

Externally presenting the Equity Index

7. Decile ratings are presented in a range of different media. They are mainly used by the Ministry to calculate and inform schools of their decile-based operational grant funding[1]. Schools currently receive their decile rating in their funding notices. Decile ratings are

[1] There are currently three decile-based funding streams delivered through operational grant: the Targeted Funding for Educational Achievement (most commonly referred to as 'decile funding'), the Special Education Grant and the Careers Information Grant.

also socialised by schools, other government agencies, the media, real estate agents, researchers and more.

8. One of the ways in which Equity Index information will be used is to identify the level of socio-economic disadvantage at a school. This will be used within a funding formula, to allocate equity resourcing. Index outputs can also be used to target services and programmes into schools.

9. Depending on which presentation option you select, schools could potentially receive their individual Index outputs in their funding notices as an indicator for their school's level of equity resourcing.

10. The way in which Index outputs are externally presented will influence stigma. The Index is a more granular measure of socio-economic disadvantage than decile, as it looks at a large basket of socio-economic characteristics, and considers the circumstances of individual children rather than neighbourhoods. This means it has a greater potential for stigmatisation, depending on how the outputs are presented.

Equity Index presentation options

11. We have identified five possible options for presenting the Index's final outputs, and one add-on option. The key trade-off for the presentation options is between options that provide more detailed information, greater utility, and are more feasible to implement versus presentation methods that present greater potential for mitigating stigma.

Option 1 – School-level Equity Index outputs are released as percentages generated in the IDI

12. This option would mean Index outputs for individual schools would be released as percentages. This is likely to be a percentage figure indicating the proportion of disadvantaged students in a school's roll. We recommend option 2 over this option.

Option 2 – School-level Equity Index outputs are converted to a different numeric scale within the IDI.

13. This option would mean Index outputs would be converted to a different numeric scale, this is similar to approaches used in other jurisdictions.

14. For example, the Australian central government uses the Index of Community Socio-educational Advantage (ICSEA) which is calculated on a scale that has a median of 1000 and a standard deviation of 100. ICSEA values are applied to all schools and typically range from approximately 500 (representing extremely educationally disadvantaged backgrounds) to about 1300 (representing schools with students with very educationally advantaged backgrounds).

15. The New South Wales Resource Allocation Model uses the Family Occupation and Education Index (FOEI) to measure socio-economic status. FOEI is calculated on a scale with a mean of 100 and a standard deviation of 50. FOEI values range from 0 to approximately 300, with higher FOEI scores indicating higher levels of need (i.e. lower socio-economic status). Some schools get assigned negative scores, however these are not publicly reported.

Option 3 – Banding school level outputs into more bands with less school coverage in each

16. The banding approach is similar to the decile system, where schools would be grouped to provide aggregated Equity Index information to schools. The key difference between this approach and the decile banding system, is that schools would not be grouped in equally-sized bands (in terms of number of schools in each band), but would be grouped in bands to reflect actual Equity Index score of the school. The number of bands used is also changeable.

17. Option 3 would result in a large number of bands (nine or more), which would have narrow school coverage within each. For example, there could be roughly nine bands reflecting a score of 0-9%, 10-19%, etc.

Option 4 – Banding school level outputs into fewer bands with broader school coverage in each

18. Similarly to Option 3 above, this option would result in fewer bands (up to five), with wider school coverage within each. For example, 0-19%, 20-39%, 40-59% etc.

Option 5 – Completely withhold school-level Index outputs

19. This option would completely withhold Equity Index outputs from the public domain. School resourcing would still be based on schools' actual Equity Index outputs.

20. This option would require change to the Education Act 1989 to exclude Index outputs from being discoverable under the Official Information Act 1984 (the OIA). There are a handful of examples where legislative measures have been used to exclude specific information from the OIA.

21. There is limited crossover between the proposed option to withhold Index outputs from the OIA and these past examples. None of these relate to use of the IDI, socio-economic information or stigma. They are associated with commercial sensitivity and preventing vexatious requests.

Examples:

Education Act 2013 Section 158Y – Partnership Schools
A clause was introduced to the Education Act in 2013 that excluded Partnership Schools from the OIA. This was repealed in 2018. The only rationale cited for this was stated in the Cabinet Social Policy Committee paper to "ensure Partnership Schools/Kura Hourua are not susceptible to costly and vexatious requests." This clause was heavily opposed by the Office of the Ombudsman.

Climate Change Response Act 2002 Section 99(2) – Obligation to maintain confidentiality
This clause states that any information received by the chief executive, the Environmental Protection Agency or an enforcement officer when exercising their powers under the Act, must be kept confidential, apart from the exceptions outlined in section 99(2)(b). The Ombudsman has ruled that the OIA does not override the restrictions imposed by section 99.

Equal Pay Amendment Bill
This bill is currently being considered by parliament. Under the proposed legislation, pay equity settlement agreements would not be subject to the provisions of the OIA. This is consistent with the Employment Relations Act in that it recognises the confidentiality of the agreement to the parties involved.

Assessment criteria

22. Each of the presentation options have been considered against the following criteria:

    a. *Mitigation against stigma* – how well the option mitigates the potential for schools, students and wider communities to be stigmatised based on the output. Some parents, schools and communities will value mitigating stigma over having more detailed information on equity resourcing due to lived experience.

    b. *Level of information detail* – assesses the level of information detail provided by each presentation option. Some parents, schools and communities will value having more detailed information about equity resourcing over the risk of stigma (e.g. higher decile communities, parents who can afford to exercise school choice).

    c. *Feasibility* – how feasible implementation of this option is. This takes into account how the option impacts internal Ministry data extraction processes as well as wider legislative implications.

    d. *Utility* – the level to which the presentation option is useable by parents, schools, researchers, government agencies and NGOs. Oranga Tamariki-Ministry for Children (OT) and the Ministry of Health (MOH) emphasised in their feedback that they require a granular enough Equity Index output per school to be able to target services. The same is true for MoE supports/services. This criterion also considers the ability to resource schools accurately using each presentation method.

Options analysis

23. **Annex 2** attached provides you with an A3 outlining detailed analysis of the potential Index presentation options in relation to the above criteria. This analysis has been informed by consultation with other agencies including MOH, OT, and Statistics NZ. **Table 1** below provides an overview of this analysis.

Table 1 – overview of options analysis against criteria

Criteria	Option 1 School-level Equity Index outputs are released as a raw percentage.	Option 2 (Recommended) School-level Equity Index outputs are converted to a different numeric scale	Option 3 Banding school level outputs into more bands with less school coverage in each	Option 4 Banding school level Index outputs into fewer bands with wider school coverage in each	Option 5 (Not recommended) Completely withhold information relating to school level outputs
Level of information detail	High	High	Moderate	Low	Low
Mitigation against stigma	Low	Moderate	Moderate	Moderate	High
Feasibility	High	High	High	High	Low
Utility	High	High	Moderate	Low	Low

Recommended option – *Option 2: school-level Equity Index outputs are calculated on a different numeric scale*

24. We have considered the broad range of options for presenting the Equity Index outputs against the aforementioned criteria. On balance, we recommend proceeding with presentation **option 2**, to convert school-level Equity Index outputs to a different numeric scale.

25. As mentioned above, this approach has been undertaken in Australia with the ISCEA (central Australian government) and FOEI (New South Wales) resource allocation models. This has allowed for greater flexibility for funding and research in the Australian education system, while also ensuring negative comparisons are mitigated by the abstract presentation method. Our recommended option seeks to achieve similar outcomes.

What this might look like – an exemplar scale

26. Schools would be allocated an output on a scale with a median of 400 and a standard deviation of 50. Some exemplars are provided below of what different schools might see on their funding notice:[2]

Exemplar School A

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	355	40,949.68

Exemplar School B

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	408	23,949.68

Exemplar School C

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	433	30,949.68

Benefits

27. This option supports the Ministry's commitment to providing schools with detailed information about equity resourcing, while also providing a layer of protection for schools due to the technical nature of this presentation option.

28. There are a number of practical benefits:

- It does not provide an easily comparable 1 to 10 rating system like decile, which equally distributes schools into 10 bands.

[2] The exemplars provide an indicative view of what schools may see in their funding notice. This scale has not been finalised.

- It is a relative measure, not a raw percentage. This limits the potential for misuse as releasing a percentage would provide an extremely granular level of detail that could be misused. For example, if a school's Index output is released as a percentage. This could be compared to a school's roll to estimate the number of disadvantaged students. An Index output of 408 on the converted scale cannot be directly compared with a school's roll information.

- Individual school Index outputs and funding amounts would change on a yearly basis. This lowers potential for a long-standing 'label'.

29. This allows for a separation from the negative connotations associated with decile. It provides an opportunity to build a clearer narrative around a new measure to clarify what the Index is, what it does, and that it is not a proxy for school quality.

30. From a technical standpoint, an output that is converted to a different numeric scale will always be a relative measure that is calculated on a yearly basis. This lowers potential for a long-standing 'label' as school outputs would likely change from year to year due to a range of factors including roll size, student profile and student movement. This would make this presentation method a less accessible measure for groups such as real estate agents and the media, which can limit misperception and misuse.

31. Transposing Index outputs to a scale also supports use of the Index for more than just school resourcing, specifically for detailed research. Our analysis using the Index to date shows the relationship between socio-economic status and educational achievement is complex. Utilising a detailed Index measure for research can build a more in-depth understanding of socio-economic disadvantage and what works in supporting students who face greater barriers to educational achievement.

32. This approach has been supported by other agencies including Statistics New Zealand, the Ministry of Health and Oranga Tamariki-Ministry for Children, as it still provides a granular mechanism for which other services and supports can be targeted, such as social workers, youth workers, nurses and potentially more.

Risks and mitigation

33. A lack of understanding regarding this technical Index presentation method could create confusion around how the outputs work. This might result in negative public perception and acceptance of the Index.

34. Conversely there is an added risk that, despite actions to mitigate stigma, the Index may still be misused as a proxy for school quality as is currently the case with decile. This could result in similar outcomes as under the decile system, including "white flight", concentration of Māori and Pacific learners, and negative perceptions of schools and kura that are not based on quality of teaching and learning.

35. Potential actions to mitigate these risks include robust engagement and communications to be undertaken by the Ministry. This can build trust and understanding around the concept of the Index, and how it will better target resources to schools who face greater socio-economic barriers.

36. We are planning to engage more widely with the sector, parents, students and other key stakeholders once Cabinet has agreed in principle to transition to the Index as a replacement for deciles. One of the key objectives for proposed engagements is to build public trust and understanding in the model. One of the key messages for future

engagement is to ensure parents, schools, and wider communities understand that the Index is not a proxy for schooling quality. We will be providing updated information and communications through the engagement process to support this objective, as well as undertaking targeted stakeholder consultation.

37. As mentioned previously, we will also be engaging specifically on what other actions the Ministry can undertake to support mitigating stigma associated with equity resourcing. This could include additional communications and resources, transition support for schools, leadership support and more. We will gain insights from the sector and wider communities during the engagement process to inform what actions we may undertake.

38. We will also continue to work with the Sector Reference Group to inform how best to engage and communicate with schools on the transition to the Index.

Analysis of alternative options (Options 1, 3, 4 and 5)

39. In addition to the recommended approach discussed above, we have included a brief summary of the rationale for other options below:

Option 1 – school level Index outputs are released as a percentage, as generated in the IDI

Benefits	Risks
• This option provides schools with the most detailed information about equity resourcing as well as the socio-economic makeup of their school population.	• While this option would provide the most detailed information to schools on their equity resourcing, we have concluded that this approach would be too stigmatising. This option has high potential to perpetuate, and possibly exacerbate stigmatisation due to the more granular nature of the Index's outputs. • Releasing school-level outputs as percentages increases the risk for school rolls to be measured against the percentage output to identify a school's proportion of disadvantaged students.

Option 3 – banding Index outputs into more bands with narrow coverage of schools

Benefits	Risks
• This presentation method, though not as informative as Options 1 or 2, would provide external stakeholders with a moderately granular measure of socio-economic disadvantage. This could be used to target services.	• This would likely perpetuate the stigmatisation of schools, students and communities due to its similarities to the decile system. • High potential for negative public response. This option could be perceived as a lack of action to address the issues associated with decile-based labelling of schools and communities as shown in the evidence and stakeholder feedback. • Targeting of resourcing/supports/services by MoE, OT and MOH would be hampered by banding as the variance in individual school need is not reflected using this presentation method.

Option 4: banding Index outputs into fewer bands with broader coverage of schools

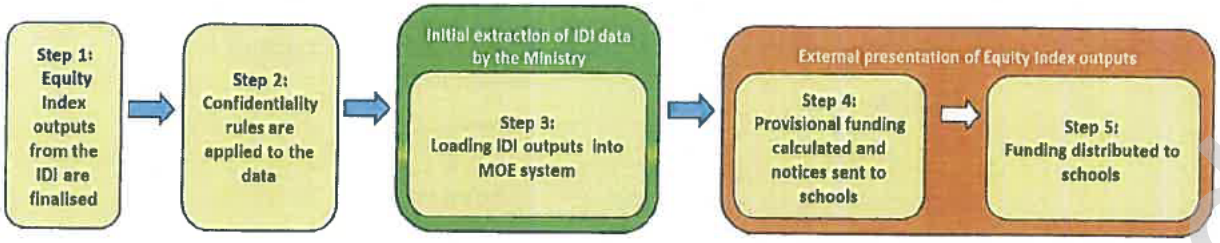
Benefits	Risks
• The increased breadth of schools covered in each band may be more effective in mitigating stigma. This may repeat similar stigma issues as decile, though across a smaller number of bands.	• This method would have low utility for stakeholders. It would limit schools' ability to review resourcing allocations. • This method disguises the different socio-economic experiences of schools in the same band (e.g. schools at the lower end of a band may have a considerably different disadvantage profile than a school in the upper end of the same band). • Much like option 3 above, targeting of supports/services by MoE, OT and MOH would be hampered as the variance in individual school need is not reflected. This is worsened with broader coverage of schools within fewer bands.

Option 5 – completely withholding Index information

Benefits	Risks
• Schools can still be resourced and informed of their actual Index outputs, with legislative protection from this information being publicly misused and for schools to be labelled based on this. This would be the most effective option at mitigating stigma.	• Schools would not know the basis of their equity resourcing calculation. This would require a high level of trust from the public and the sector in the methodology. • There will be large distributional impacts from shifting to the Index. Withholding information relating to equity resourcing could lead to groups drawing incorrect conclusions based on funding levels and other resourcing schools receive. • This option would require legislative change to the Education Act to exclude IDI outputs from the OIA based on socio-economic reasons. This would likely be seen as a regressive step and inconsistent with the purposes of the OIA. • There is also added complexity as education-specific legislation to withhold data does not extend to Statistics NZ. This would create a loophole in the provisions of any legislative change, as Statistics NZ are not bound by such change and would still be required, subject to the OIA, to provide the data they hold. Statistics NZ provided feedback opposing the potential for legislative measures to withhold IDI data and findings which have been approved for release. • This option would severely impact the Ministry's research and reporting functions, limiting the ability to share findings and insights using Index data.

The presentation method may impact how data is extracted from the IDI

40. Options 1 to 4 discussed above require some form of initial data extraction. The process map below shows the key steps involved in calculating school Index outputs and distributing resources.



41. Step 3 highlights where finalised outputs from the IDI would be extracted and loaded into Ministry information systems. Any information held in Ministry systems would become official government information subject to the Official Information Act 1982 and available to the public on request.

42. This may mean requests for school-level data extracted from the IDI could undermine external presentation methods aimed at mitigating stigma. For example, the Ministry may extract raw Index percentages for resourcing calculations and this may be presented to the public as a converted output or in a band to mitigate stigma. An individual from the general public could request the raw percentage outputs extracted from the IDI, thus undermining the process of transposing or banding outputs. **Table 3** below outlines the key benefits and risks associated with the different data extraction options.

Table 3 – benefits and risks of potential data extraction methods

	Extract detailed IDI data for resourcing calculations and distribution, regardless of presentation method selected	Data extraction is consistent with the presentation approach selected	Data extracted is protected by legislation (e.g. only allowing access to extracted data based on a prescribed criteria – or – completely withholding this information)
Benefits	• This option allows for greater accuracy and flexibility in resource allocation.	• Ensures consistency between the presentation method you select and the way data is extracted from the IDI • If you select **Option 1 or 2**, extracting data in the same format (e.g. as a percentage or as a converted numeric output) allows for greater accuracy and flexibility in resource allocation.	• Most effective way to protect raw IDI data from misuse to stigmatise disadvantaged communities. • The Ministry can extract raw detailed data for resourcing calculations and allocation, without the risk of data being available for misuse.
Risks	• There is no protection of IDI data that is extracted for resourcing calculations. This could potentially undermine actions to mitigate stigma if this information is readily available.	• If you select **Option 3 or 4** (banding options), extracting data from the IDI in bands would severely limit the accuracy and flexibility of school funding. This impacts the effectiveness of equity resourcing, which is contrary to the policy intent for implementing the Index. • This may lead to a funding mechanism that looks similar to decile. The lack of granular detail would also mean equity resourcing would be targeted less effectively. (E.g. a school at the upper end of a band may have a significantly different socio-economic profile than a school at the lower end of the same band, yet they would both be resourced at the same per-student rate).	• This option would require legislative change to the Education Act. • Statistics NZ has raised concerns around withholding IDI data being contrary to the fundamental principles of transparency associated with the IDI. This may also set an undesirable precedent for IDI use moving forward. • Legislative change would not extend to Statistics NZ. This would create a loophole as Statistics NZ are not bound by such change and would still be required, subject to the Official Information Act (OIA), to provide the data they hold.

43. Depending on how data is extracted from the IDI, this also impacts how effectively resourcing can be allocated using the Index. More detailed data extracted from the IDI (e.g. raw percentages) allows for greater accuracy and flexibility in resource allocation, whereas the more data is aggregated to bands, the less accurate and flexible our ability to resource schools becomes.

Recommended data extraction method

44. In conjunction with the recommended presentation approach to convert Index outputs to a different numeric scale, we also recommend data be extracted from the IDI in the same converted format. This supports consistency for data extraction and presentation, and also allows for more accuracy and flexibility for resourcing calculations and distribution. This allows for resources to be targeted in the most effective way to support students facing greater socio-economic barriers. This will also ensure consistency between data the Ministry holds and what schools receive on their funding notices.

Next steps

45. As noted, we recommend calculating and presenting Index outputs on a different numeric scale. We also recommend extracting data from the IDI in the same format.

46. If you agree with this approach, we will provide more detailed advice on implementation. We will also incorporate the presentation and data extraction method to all Equity Index-related work. It will inform the way we talk about the Index as we engage on it, and will feed into our work on developing the funding formula (and other resourcing allocation mechanisms).

47. If you choose to proceed with a different option, we will update our work programme accordingly and provide you with further advice.

Annexes

Annex 1: Evidence and stakeholder feedback on the impact of the decile label

Annex 2: Exemplar funding notices using presentation options

Annex 3: A3 Options analysis – criteria-specific analysis

Annex 1: Evidence and stakeholder feedback on the impact of the decile label

School choice

48. Research by Lubienski et al concluded that higher decile schools use zone boundaries to exclude the most disadvantaged students[3]. In addition, the research suggests that schools may be recognising competitive incentives to maintain or improve their market position by attracting "better" students. Research also points to the disproportionate impact of enrolment schemes, school fees and transportations costs, as a result of the decile scheme, on Māori and Pacific learners, ultimately limiting school choice for these groups.[4]

Enrolment

49. A report developed by Allan Vester for the Ministry on the decile 'label' and the impact of stigma[5], outlines how student movement within schooling networks is noticeably influenced by decile. Data analysis shows more students now attend higher decile schools and fewer students now attend lower decile schools than when 'school choice' first became policy.[6]

Decile and ethnicity

50. Low decile schools are more likely to have a greater proportion of their roll made up of Māori and Pasifika students. Lower decile schools have seen a growth in Māori and Pasifika enrolments and a marked loss of European students. Research recognises this phenomenon of social distancing as "white flight"[7]. Upwards of 70,000 fewer Pakeha students attended decile 1-5 schools in 2013 than in 1996. During that period total Pakeha numbers fell by 30,000 but attendance at decile 6 to 10 schools rose by 40,000.[8]

Staffing

51. Vester's research on the decile label also shows that respondents and interviewees reiterated how decile impacts on a school's ability to attract and retain staff.[9] International research shows that highly disadvantaged schools often face greater challenges in terms of teaching and curriculum, management, school climate, and progress made by students.[10] We will be analysing our workforce data to estimate to which extent this is the case in New Zealand.

Self-perception and performance

52. Public and self-perception of decile rating influences student, staff and community esteem. Studies show that perceptions of school 'quality' shape how students, especially high school students, participate socially and academically in school life. When students

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[3] Lubienski, C., et al., "Self-managing schools and access for disadvantaged students: Organisational behaviour and school admissions" New Zealand Journal of Educational Studies vol. 48, no. 1, (2013): 82-98.

[4] Ladd, H. F., & Fiske, E. B. (2001). The uneven playing field of school choice: Evidence from New Zealand. *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management*, *20*(1), 43-64.

[5] Vester, A. (2018) Removing the decile label: An inquiry on the causes, impacts and possible mitigation of the stigmatisation that accompanies resourcing for disadvantage. Prepared for the Ministry of Education.

[6] Ibid, 21.

[7] Gordon, L. (2015) 'Rich' and 'poor' schools revisited. New Zealand Journal of Educational Studies, 50, 1.

[8] Ibid.

[9] Vester, A. (2018) Removing the decile label: An inquiry on the causes, impacts and possible mitigation of the stigmatisation that accompanies resourcing for disadvantage. Prepared for the Ministry of Education.

[10] Productivity Commission (Australia), *Schools Workforce*, (Canberra: Commission Research Report, 2012): 22, retrieved from http://www.pc.gov.au/inquiries/completed/education-workforce-schools/report/schools-workforce.pdf

are associated with a negative label or stereotype through their schools, they tend to internalize the stereotype and perform worse.[11]

What stakeholders have told us about decile stigma and labelling

53. We have been engaging with an external Sector Reference Group (SRG) mostly made up of primary and secondary school principals, as well as other sector stakeholders. The SRG's representatives encompass a broad range of schools and kura from all deciles, covering the whole country. Many of the principals in the group have worked across both high and low decile schools.

54. Some of the group's insights on how the decile 'label' has impacted their students, school and wider communities are outlined below:

    - *"People want a label to assist with choice."*
    - It is hard to mitigate against public perception of being the 'poor school in town'.
    - Being at the 'wrong end of town' in an area with high levels of social housing can lead to being a 'magnet school' for students other schools will not enrol.
    - The decile label increases potential for deficit thinking. Sometimes in low decile schools, staff and parents have lower expectations that can directly impact student aspirations and achievement.
    - Decile disguises the reality of schools with fundamentally different challenges.

55. A smaller group of SRG participants did not see stigma as having a significant impact on their communities. This was either due to a lack of competition or due to the need for additional funding outweighing the associated stigma.

    - "*Some schools and communities actively want to lower their decile for the extra funding."*
    - If there is no decile choice in an area, stigma is not an issue. This is particularly true for schools in isolated areas with less choice.

56. We have examined findings from recent wānanga and fono with Māori and Pacific communities to understand some of the challenges associated with deciles. While there is limited information specifically referencing decile stigma, a number of responses highlight the impact of labelling and stereotypes for Māori and Pacific peoples. We know some of these stereotypes and labels are associated with decile stigma.

Thematic summaries from wānanga regarding negative stereotypes, bias and labelling:

- *"You said ignorance, highlighting negative statistics, stereotyping, deficit language and poor expectations are all types of racism. You told us this is a daily reality for many Māori students from a young age". – The Future of Māori Education: National report*

[11] Steele, C., & Aronson, J. (1995) Stereotype threat and the intellectual test performance of African Americans. Journal of Personality and Social Psychology 69(5), p797–811.

- Stereotyping, ignorance and low expectations are all impacting on Māori learner confidence and achievement. There is a need to break these mindsets in education in order to recognise and realise Māori potential. – *excerpt from Wellington region thematic summary*

- An underlying perception change is needed, in terms of individual and systemic perceptions of and attitudes towards Māori learners. Every learner needs to be treated and supported equally. – *excerpt from Waikato thematic summary*

- Tamariki and rangatahi Māori experience unconscious and conscious bias, low expectations, as well as deficit language from a young age, which affects their confidence, progress and achievement. – *excerpt from Tairāwhiti thematic summary*

Quotes from fono regarding deciles, labelling and negative stereotypes:

a. *"Get rid of decile - gives schools a bad name, parents move their children to other schools with more resources. High decile schools charge fees and there is pressure on parents to make a donation. Schools in Cannons creek run on a deficit because their children leave to other schools and they don't ask for donations."*

b. *"[We] Need to get rid of zoning and decile system."*

c. *"Stop institutional racism and bias! We as Pacific are successful, value us and our children."*

d. *"Move away from deficit thinking about our students…"*

Annex 2: Exemplar funding notices using presentation options

The following tables are examples of what each presentation option would look like on a school's funding notice. Please note:

- *All of the figures provided below are for indicative purposes only and are not based on a real school.*
- *"Equity Resourcing" is not the finalised title for this component, this has just been used as an example.*

Current funding notice example

Component	Category/Roll	Quarter 4 entitlement
Targeted Funding	Decile 3, Rate 1	27,916.87
Special Educ Grant	Decile 3	8,869.21
Careers Info Grant	Decile 3	4,163.60

Option 1 – School level Equity Index outputs are released as generated:

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	52%	40,949.68

Option 2 – School-level Equity Index outputs are calculated on a different numeric scale

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	346	40,949.68

Option 3 – Banding school level outputs into more bands with less school coverage in each

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	Band 6 (50-59%)	40,949.68

Option 4 – Banding school level Index outputs into fewer bands with wider school coverage in each

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	Band 3 (40-59%)	40,949.68

Option 5 Completely withhold information relating to school level outputs

Component	Category/Roll	Quarter 4 entitlement
Equity Resourcing	N/A	40,949.68

Annex 3: A3 Options analysis – criteria-specific analysis

	Option 1 School level Equity Index outputs are released as generated. E.g. School level outputs range from 0-80% of students in a school.	Option 2 School level Equity Index outputs are calculated on a different numeric scale E.g. School level outputs are calculated on a scale, with a median of 400 and a standard deviation of 50	Option 3 Banding school level outputs into more bands with less school coverage in each E.g. School level equity output is known within a band, e.g. 0-10%, 10-20%, etc	Option 4 Banding school level Index outputs into less bands with wider school coverage in each E.g. School level equity output is known within a broad band, e.g. 0-20%, 20-40%, etc	Option 5 Completely withhold information relating to school level equity outputs E.g. school knows it is eligible for supports/services and that it receives $x in equity resourcing, but not why.
Level of information detail	**High** This option provides schools with the most detailed information about their equity resourcing.	**High** Using a standardised scale still provides a detailed Index output which can be used to more accurately fund schools. This also provides an additional layer of protection through the technical presentation method.	**Moderate** Though not as informative as Options 1 and 2, banding using a higher number of bands would provide schools with moderately granular/detailed information.	**Low** Using broader bands provides less detailed information to schools on their equity resourcing.	**Low** No Index outputs would be released under this option. Schools would not know the basis of their equity resourcing calculation.
Mitigation of stigma	**Low** Completely releasing a school's disadvantage level makes it much easier to compare schools' rolls and their respective levels of disadvantage. High potential to perpetuate, and possibly exacerbate stigmatisation due to the granular nature of the Index's outputs. Increased potential for stigma may also negatively impact public perception and acceptance of the Index resourcing model.	**Moderate** This option makes it more rigorous for direct comparisons to be made across schools. This option also allows for a separation from the negative connotations associated with decile. It provides an opportunity to build a clearer narrative around a new measure to clarify what the Index is, what it does, and that it is not a proxy for quality. An output that is converted to a numeric scale will always be a relative measure that is calculated on a yearly basis. This lowers potential for a long-standing 'label' as school outputs would likely change from year to year. This is also likely to be a less accessible measure for misuse by external groups (e.g. real estate & media).	**Moderate** This option would provide bands, much like the decile rating system. Opting for this option could be perceived as a lack of action to address the issues associated with decile-based labelling of schools and communities as shown in the evidence and stakeholder feedback. A higher number of bands would also make it easier for negative comparisons to be made across schools. This would likely perpetuate the stigmatisation of schools, students and communities due to its similarities to the decile system.	**Moderate** The increased breadth of schools covered in each band may be more effective in mitigating stigma, however negative comparisons across bands is still a risk. This may repeat similar stigma issues as decile, though across a smaller number of bands.	**High** Schools can still be resourced and informed of their actual Index outputs, with legislative protection from this information being publicly misused and for schools to be labelled based on this. Targeted services, however, may become a proxy for identifying SES schools. For example, a school with a high-level of disadvantage may still be identified through allocation of free lunches, nurses, social workers etc. It would also be quite easy to OIA each school's level of equity resourcing and match this with their roll data to estimate the school's disadvantage level. This may lead to incorrect measures being used to estimate school Index outputs. This option was strongly supported by representatives from the external Sector Reference Group.
Feasibility	**High** Output(s) would be released as a percentage generated in the IDI.	**High** Simple option to implement. Output(s) would be calculated and converted in the IDI, which would then be released publicly in funding notices.	**High** Implementation for this method would be a straightforward process.	**High** Implementation for this method would be a straightforward process.	**Low** This would require legislative change to the Education Act to exclude IDI outputs from the OIA. A change like this would override fundamental constitutional norms in New Zealand. Statistics NZ has also raised concerns around this approach being contrary to the fundamental principles of transparency associated with the IDI. There is also added complexity as education-specific legislation to withhold data does not extend to Statistics NZ. This would create a loophole in the provisions of any legislative change, as Stats NZ are not bound by such change and would still be required, subject to the OIA, to provide the data they hold. This could also set an undesirable precedent for IDI data use moving forward.
Utility	**High** This option would be highly informative for schools. This information can support schools to identify specific actions to address their specific profile of disadvantage. This detailed measure also allows for greater accuracy and flexibility in resourcing schools based on their Index output. Detailed information would have high utility for agencies (MoE, OT and MOH) and NGOs to target supports/services to schools.	**High** Much like Option 1, provision of detailed Index outputs (though converted to a different numeric scale) assists schools to identify actions and allocate resourcing in ways that best support the proportion of their school roll who face greater barriers. This option still provides a coherent mechanism for use by the Ministry to resource schools more accurately. This measure could be utilised for other government agencies and NGOs in targeting services/programmes to schools.	**Moderate** This provides moderately useful information to schools for identifying/implementing supporting actions in addressing disadvantage. It is granular enough for MoE, OT and MOH to target supports/services to schools.	**Low** This method would have low utility for stakeholders. It would limit schools' ability to review resourcing allocations. This method disguises the different socio-economic experiences of schools in the same band (e.g. schools at the lower end of a band may have a considerably different disadvantage profile than a school in the upper end of the same band). Targeting of supports/services by MoE, OT and MOH would be hampered as the variance in individual school need is not reflected using this presentation method.	**Low** This option severely limits accountability for public expenditure of government funding. Schools would not receive any rationale or metric to assess their level of equity resourcing. This option would severely impact the Ministry's research functions, limiting the use of Index data to understand how the schools with different levels of disadvantage are able to support their students to achieve. This option was strongly opposed by other government agencies (OT and MOH), as this limits the ability for MOE and other agencies to target services to schools. Additionally, withholding this information may have limited impact, as schools receiving supports/services will be identifiable for receiving these services.