Deloitte.

Review of Effective Enrolment

Final Report

Northern Territory Department of Education

Deloitte
Access **Economics**

Contents

Acknowledgement

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.

We are grateful for the time and generosity provided by school leaders, educators and advocates who contributed significantly to this Review by sharing their insights and experiences across different contexts.

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Glossary

Acronym	Full name
ABS	Australian Bureau of Statistics
ADA	Average Daily Attendance
AEU NT	Australian Education Union Northern Territory
CDUNI	Charles Darwin University's Northern Institute
NT COGSO	Northern Territory Council of Government School Organisations
CY EE	Calendar Year Effective Enrolments
DAE	Deloitte Access Economics
DTTL	Deloitte Touché Tohmatsu Limited
EBA	Enterprise Bargaining Agreement
ESL	English as a second language
FTE	Full Time Equivalent
ICSEA	Index of Community Socio-Economic Advantage
LGAs	Local Government Areas
NT	Northern Territory
NTPA	Northern Territory Principals' Association
SEIFA	Socio-Economic Indexes for Areas
SES	Socio-Economic Status
SNBF	Student Needs Based Funding
SRM	School Resource Modelling
SRS	School Resourcing Standard

Effective enrolment measure (or number) – refers to the average of the two highest non-consecutive weeks of attendance in each term over four terms (one year). For the purposes of this calculation, explained absences (e.g., due to sickness) are counted as present.

Effective enrolment methodology – refers to how the effective enrolment measure is applied within the School Resourcing Model, including how the measure interacts with equity weightings, how it is applied in preliminary budgets and how it is scaled for final budget allocation.

Terminology when referring to First Nations people

In line with NT Government conventions, this report adopts the term 'Aboriginal' when referring to First Nations people. While not always explicitly stated, this term is also taken to include Torres Strait Islander peoples living in the Northern Territory.

Executive summary

The Northern Territory Department of Education (the Department) engaged Deloitte Access Economics in partnership with Charles Darwin University's Northern Institute (CDUNI) to conduct a review of the use of Effective Enrolment (the Review) in the School Resourcing Model (SRM).

Context, motivation and purpose

As set out in the Education NT 2021-2025 Strategy, the Department is on a journey towards becoming the most improving education system in Australia. Engaging every student in learning is a key system priority on the path to achieve this ambition, with a headline improvement target being to "*increase in the number of days students attend school each year by 10 days*".

School funding plays a critical role in ensuring schools have the resources they require to meet the needs of their student community in their local context. Effective funding model design can enable the system to direct resources towards driving outcomes for students, as well as signalling policy priorities to schools and communities. Although effective funding design is an essential enabler, on its own it is not sufficient to drive system-wide improvement. Other determinants include school leadership and teacher quality.

The role and optimal design of the funding model should therefore be considered as part of a broader set of interdependent policy levers that work cohesively to improve student outcomes.

### Northern Territory funding for government schools

In the Northern Territory (NT), government schools are allocated funds through the School Resourcing Model (SRM), which was implemented in 2015. A review of the SRM conducted in 2017 outlined 20 recommendations, including a recommendation regarding the way students in the NT are counted for the purposes of funding allocation.

Currently, the SRM allocates NT and Australian Government funding to schools through several channels, including through targeted funding programs, fixed funding for property management and essential services, and student needs-based variable funding (variable funding) (Figure i).

Variable funding is the largest component of the SRM, accounting for approximately 65% of total school funding in 2021. The variable funding allocation to schools is influenced by several factors, including effective enrolment (the method of student count at each school – the focus of this Review), as well as weightings for each student based on their relative needs (student-needs based weights).

In addition to the SRM, there are centrally administered programs across the NT to promote attendance and engagement, such as funding through collaborations with the Stars Foundation and Clontarf Foundation (which are funded by both the Australian and NT Governments). The role and impact of these specific programs has not been reviewed as part of this project but should be considered alongside the SRM and the findings of this Review with respect to effective enrolment.

Figure i: The NT Government School Resourcing Model
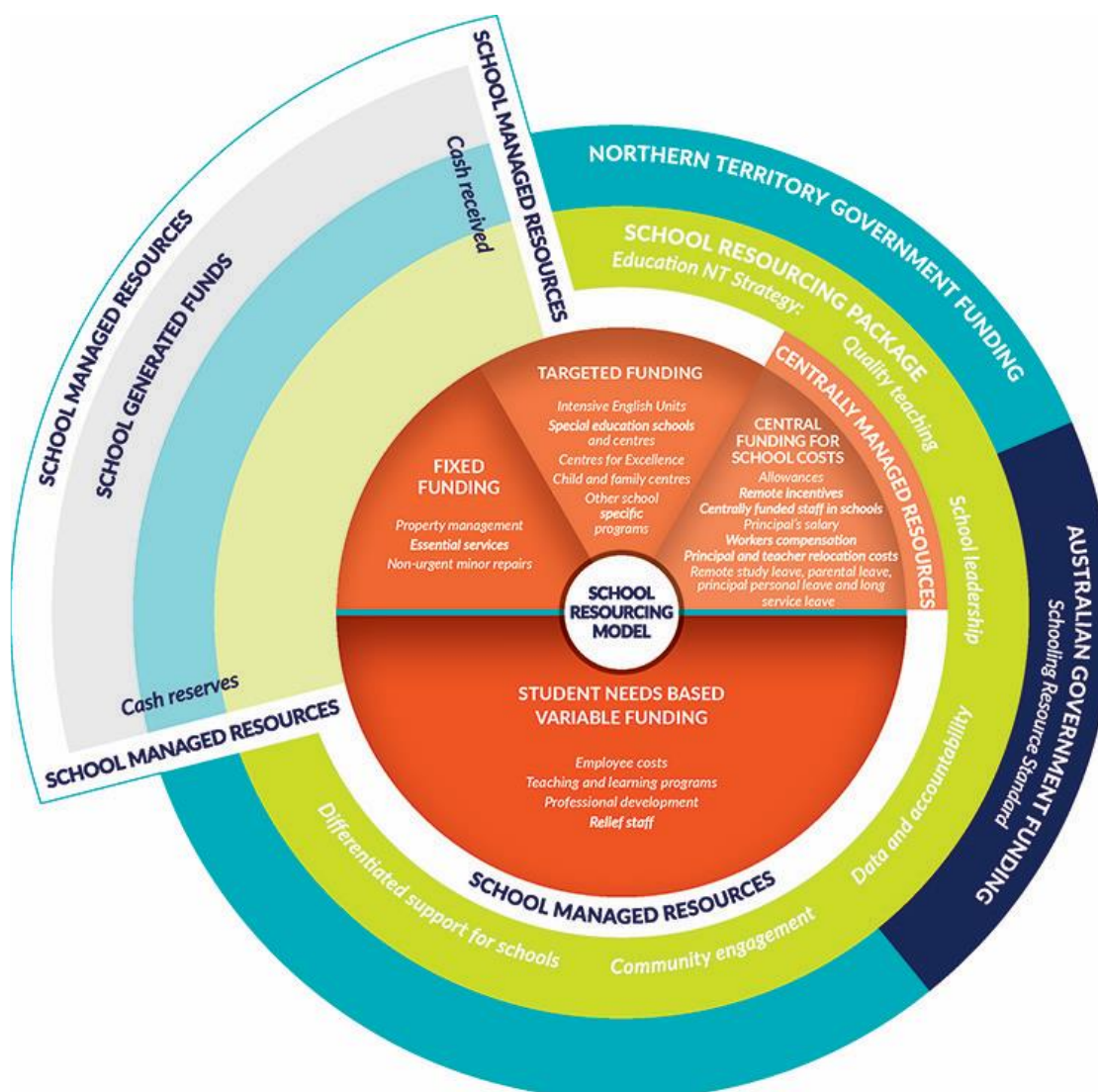
Source: NT Department of Education (2022)

Effective enrolment

Effective enrolment is a measure currently used to determine the number of 'effectively' funded students for the purposes of allocating the variable funding component of the SRM to NT Government funded schools.

Effective enrolment is calculated by averaging the two highest non-consecutive weeks of attendance in each term over four terms (one year).[1] While all measures of enrolment include some basic threshold of attendance to determine whether students are functionally enrolled at a school, at present the NT is the only jurisdiction in Australia that uses a combination of school enrolment and attendance data to pro-rate school enrolments for the purposes of allocating student needs-based funding resources.

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[1] For the purposes of this calculation, explained absences (e.g., due to sickness) are counted as present.

The 2017 review of the SRM recommended to "*continue with the effective enrolment measure as the most efficient way to distribute the current levels of finite funding.*"[2] It was also acknowledged that the application of the effective enrolment measure is perceived to add an element of uncertainty around school funding. Although the recommendation to retain effective enrolment was accepted by the Department, there was also a commitment to reviewing the effective enrolment methodology in the future once sufficient data was gathered over time since the introduction of the SRM.[3,4]

Purpose of this Review

In this context, this Review performs an independent analysis of the effective enrolment methodology component within the SRM. In particular, this analysis includes an assessment of (see Appendix A for detailed scope specifications):

- the current effective enrolment measure and its appropriateness as a means of allocating a funding pool equitably, subject to budget parameters
- the current approach to the application of the effective enrolment measure within the SRM and its impacts on funding variability
- how the effective enrolment methodology interacts with other components of the SRM, such as the various weightings for equity factors in the Student Needs Based Funding (SNBF) model, and the small school supplement.

In addition, this Review aims to provide options on alternative methodologies to allocate a funding pool to schools based on student numbers as part of the broader SRM allocation. In analysing and proposing alternative methodologies, this Review acknowledges the role of other policy levers in system improvement – such as regional supports, workforce strategy, accountability mechanisms, and improvement initiatives – and that recommendations made as part of the Review may have implications on these policy levers too.

It is important to note that the effective enrolment methodology is a small component of a broader school funding model (refer to Figure i). While the effective enrolment methodology may contribute to some unfavourable outcomes of funding allocation (such as funding volatility), it is not the sole reason for these outcomes. For example, this Review shows that funding volatility is mostly caused by year-on-year changes in enrolment, which would occur regardless of whether the effective enrolment mechanism was in place.

Further, there are additional issues related to the funding model that are unrelated to the effective enrolment mechanism, such as capability of small schools to manage budgets, and issues related to staff recruitment in remote areas. To solve these issues, there may be a need to make adjustments across the entirety of the SRM and broader education policy framework, as alterations to the effective enrolment mechanism will not, by themselves, solve all unfavourable outcomes of the SRM. Findings from and recommendations of this Review should be considered with this context in mind.

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[2] Ernst & Young, *Review of the Global School Budgets Funding Model* (report commissioned by Department of Education Northern Territory Government, September 2017)
<https://education.nt.gov.au/__data/assets/pdf_file/0005/464792/Report-from-the-Review-of-the-Global-School-Budgets-Funding-Model.pdf>.
[3] NT Department of Education, *Investing in Government School Education - Action Plan in Response to the Review of the Global School Budget Funding Model*, (2017)
<https://education.nt.gov.au/__data/assets/pdf_file/0008/464786/DOE-Response-to-GSB.pdf>
[4] It should be noted that at the time of the 2017 review of the SRM, the funding landscape was different, with some schools not funded under SRM, or transitioning to the SRM. Further, since the 2017 review, there have been additional changes to the SRM, including the inclusion of student-needs weights for English as a second language, and NCCD funding for students with disability.
Work is also underway to develop needs-based components for SWD as part of the SRM.

Approach and guiding principles

This Review's approach combines a desktop review of policy documentation and other relevant literature, detailed data analysis and modelling, as well as engagement with schools, policymakers, representatives of peak body organisations, other jurisdictions and subject matter experts.

The approach is guided by a policy framework, against which both the Review is conducted, and recommendations made. The framework and its application is anchored in a number of policy objectives and principles outlined in the Department's brief for the project.

This, for instance, includes considering that the SRM was implemented in 2015 "*with the aim of providing schools with more autonomy and resourcing arrangements that were simpler, transparent and flexible and based on the needs of students and schools*". It is recognised that the Department seeks to refine the SRM "*to ensure that the model meets the needs of schools and students and that the model allocates funding in an equitable, transparent and efficient manner (…) [and] improve funding certainty for schools to provide schools with the confidence to plan for staffing and operations in the longer term*". Another consideration is to ensure that modelling of potential alternative methodology options aims to "*allocate the school funding pool to schools based on student numbers that would ensure equity, funding certainty, stability and transparency while aligning to the Australian Government's needs-based funding arrangement requirements under the Australian Education Act 2013.*"[5]

These policy considerations give rise to the following five guiding principles for this Review:[6]

1. *Effectiveness*: The funding model should be calibrated to support the system in achieving its overarching equity and excellence goals.
2. *Sufficiency*: The funding model should ensure that funds are sufficient to provide an acceptable level of quality education provision for all learners.
3. *Practicality*: The funding model should facilitate effective school resourcing and planning, while being responsive to changing school needs.
4. *Continuity*: Any changes to the funding model should be implemented in a way that minimises disruptions to existing effective practice.
5. *Transparency*: The funding formula is accessible, clear and simple to understand for stakeholders.

These principles inform the development of the Review's recommendations.

Review findings

The Review's key findings are organised under two themes, which comprise the two substantive chapters of this report (Chapters 3 and 4):

1. **Appropriateness of the effective enrolment measure within the SRM** – this chapter considers effective enrolment as a measure within the needs-based resourcing allocation to NT Government schools and its impact on an equitable distribution of funding and student engagement.
2. **Application of the effective enrolment measure within the SRM** – this chapter focuses on the way the effective enrolment measure is applied within the SRM and its implications on funding volatility and school understanding of the methodology.

The Review's key findings under these themes, and resulting recommendations and considerations, are directed at refining the SRM to ensure that it supports the Department in achieving its Education NT 2021-2025 Strategy and the Education Engagement Strategy 2022-

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[5] See Appendix A
[6] The above principles were co-designed by Deloitte Access Economics, CDUNI, and the Department, tested with three peak body organisations, and informed by literature on effective school funding design. Peak body organisations included Northern Territory Principals' Association (NTPA), the Northern Territory Council of Government School Organisations (NT COGSO), Australian Education Union Northern Territory (AEU NT).

2031. Implementation considerations, strategic interdependencies, and budget constraints are taken into account at the relevant junctures throughout the analysis.

Theme 1: Appropriateness of the effective enrolment measure within the SRM

The NT government schooling system operates in Australia's most challenging socio-economic and geographic context, requiring significant expertise and resources to deliver quality education for all.

The NT government schooling system is made up of 153 schools, 146 of which are funded through the variable funding component of the SRM (these schools are impacted by the effective enrolment methodology).[7] Over 70 per cent of schools are located in remote or very remote regions, and 27 per cent of schools had less than 50 enrolments in 2021.[8] Due to the dispersal of population over vast distances, service delivery is costly. While other Australian jurisdictions have similarly remote and small schools, the relative concentration of such schools in the NT context is unique.

As a result of these characteristics, the NT Government provides the highest amount of funding per student in the country at over $15,100 on average in 2020.[9] Total net recurrent income, which includes Australian Government funding and other sources of income, was on average $23,500 per student in 2020 – also the highest in Australia. [10] However, NT Government schools are funded at the lowest proportion of their estimated Schooling Resource Standard (SRS) in the country – approximately 78 per cent of $29,800 in 2020, of which 55 percentage points represents NT Government funding. [11]

Although the NT Government is the only jurisdiction in Australia that allocates school funding based on an attendance-weighted metric, there are examples of other attendance-based approaches internationally. A literature scan of jurisdictions, and targeted engagement with select international systems, indicates that the use of attendance as a measure to determine school funding allocation is usually underpinned by either or both of the following:
- as an activity-based measure of resource use to prioritise resource allocation (often at a region or district level, rather than a school level)
- as an incentive or an accountability mechanism for schools to increase student attendance.

The evidence collected as part of this Review suggests that the effective enrolment methodology has limitations both as a resource prioritisation mechanism and an incentive, with impacts on equity within the system. As such, the Review finds that alternative enrolment-based methodology options should be considered.

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[7] Special schools and targeted education programs such as the NT Music School and the Alice Springs Language Centre are not funded through the SNBF.

[8] School remoteness is classified by ABS remoteness classifications of 'Remote' or 'Very Remote'.

[9] ACARA, School income and capital expenditure for government and non-government schools (accessed 7 June 2022) < https://www.acara.edu.au/docs/default-source/default-document-library/school-income-and-capital-expenditure-for-government-and-non-government-schools-dataset9c2c2f404c94637ead88ff00003e0139.xlsx?sfvrsn=2fb84c07_0>

[10] Senate Standing Committees on Education and Employment No. SQ20-000151. (2020) <https://www.aph.gov.au/api/qon/downloadattachment?attachmentId=0b08e9a1-817f-4b34-aaeb-63aa240987c7>

[11] The SRS is a standard that estimates how much funding schools need to meet students' educational needs. ACARA, School income and capital expenditure for government and non-government schools (accessed 7 June 2022) < https://www.acara.edu.au/docs/default-source/default-document-library/school-income-and-capital-expenditure-for-government-and-non-government-schools-dataset9c2c2f404c94637ead88ff00003e0139.xlsx?sfvrsn=2fb84c07_0>

Effective enrolment as a resource prioritisation mechanism for variable funding[12]
Key finding 1: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

  i.   *Higher levels of educational need is strongly linked with low school attendance.*
  ii. *On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.*
  iii. *Effective enrolment measure does not align well with schools' resourcing needs.*

The link between lower attendance rates and socio-economic disadvantage is well evidenced. Analysis of student data consistently shows that low attendance rates across the NT government schools are associated with higher student-need proxies (Chart i).

Chart i: The relationship between school attendance rates and average student needs-based weighting as determined in the SRM
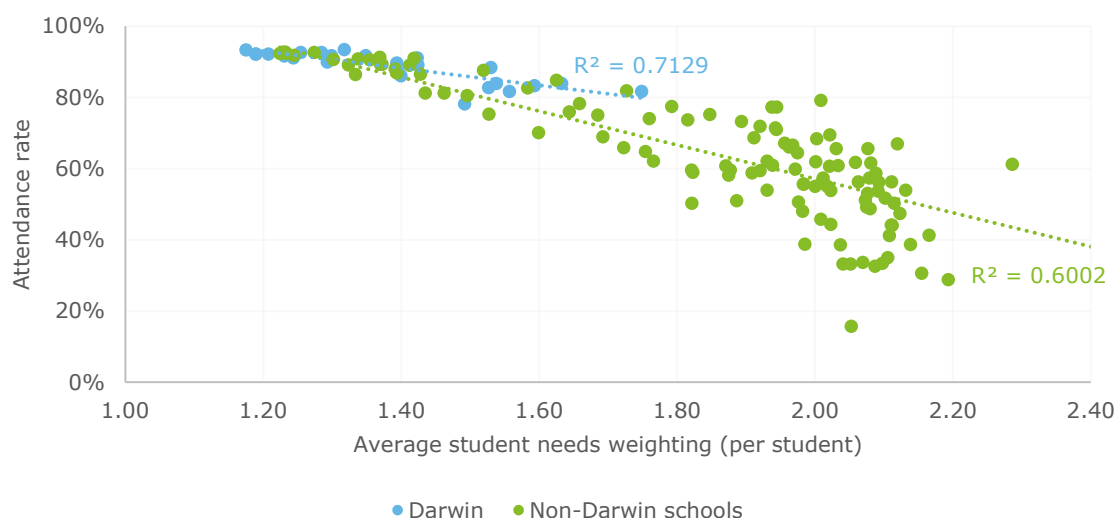
Source: Deloitte Access Economics analysis using NT education data (2022)
Notes: a) Attendance rates are an average of 2020 and 2021 for Term 1. b) student needs weightings are derived from the SNBF formula in the SRM c) Darwin refers to the NT school region, which includes Darwin and surrounding suburbs.

Schools can, in some circumstances, influence attendance in their community through additional targeted programs and supports; programs that often require a multi-agency response. The NT Department of Education does centrally fund programs that respond to student needs such as engagement programs, bi-lingual programs and allied health staff. Absences often occur for reasons that are beyond schools' control, such as housing issues, employment programs, and population mobility – factors which tend to be associated with students with higher educational needs.

The Commonwealth's Australian Education Act (2013) subsection 78(5) states that a needs-based funding arrangement must provide weights to students and schools with additional needs to support student achievement. While the SRM does have mechanisms to allocate greater levels of funding to students with higher needs through need-based weights, the impacts of these mechanisms on variable funding within the SRM, on average, across the system, are largely offset by the effective enrolment measure due to average lower rates of attendance of students with higher needs.

For example, in 2021, enrolled Aboriginal students attracted similar amounts of funding (approx. $10,800) to non-Aboriginal students (approx. $10,400). However, if funding was based on

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[12] As highlighted, effective enrolment only impacts a component of variable funding (student-need based funding). This section only assesses the appropriateness of funding components impacted by effective enrolment. Within and outside the SRM there are other funding components targeted to public-funded schools that are not impacted by effective enrolment, and therefore are not considered in-scope for this Review.

enrolment, Aboriginal enrolled students would, on average, attract 1.3 times the funding a non-Aboriginal student would attract, or approximately $3,000 more assuming current base rate per FTE (Chart ii).

Chart ii: The impact of effective enrolment on the average variable funding received per student; Aboriginal students versus other students
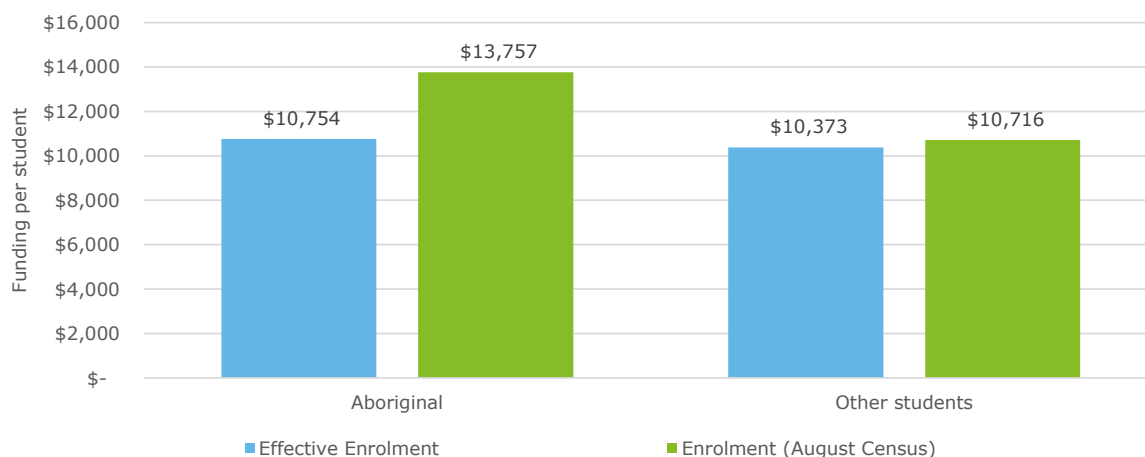
Source: Deloitte Access Economics analysis using NT education data

Notes: a) Per student values were calculated at a school-level first and then apportioned to demographic characteristics based on the student profile of each school. This includes the small schools grant. b) Per student rate was calculated by dividing total allocation (under the two methods) by the August Age Grade Census 2020 enrolment count. c) This analysis assumes the base rate per FTE of $7,200 and no budget constraints. d) This analysis only considers variable funding impacted by effective enrolment. Variable funding not impacted by effective enrolment, as well as other targeted and grant funding provided within and outside of the SRM is not considered in this analysis.

This Review also assessed the potential mitigating impact of targeted funding on the alignment of school funding with student need. Targeted funding that was considered was funding that could potentially be distributed via a student-needs based funding methodology, including targeted funding that was directed towards education related to specific student needs (such as ESL) and additional curriculum activities (such as funding for music or early education programs).

While these targeted funding programs do tend to be allocated towards schools with higher needs students, the quantum of targeted funding (captured as part of this Review) is found to not be sufficient to meaningfully counter the effect of effective enrolment. However, it is recognised that the Department provides additional support to schools, apart from targeted funding, such as grants and programs outside of the SRM to support student attendance and engagement (utilising both Australian and NT Government funding). This Review did not assess whether these additional programs and supports materially offset the impact of the effective enrolment measure.

Insights from consultations with schools and peak body organisations highlighted several reasons the effective enrolment methodology does not align well with school resourcing needs. These reasons can be summarised under four themes:

1. The primary effort and therefore cost driver for schools is the number of unique students teachers are responsible for, rather than peak average attendance
2. Acknowledging that while there are programs outside of the SRM that engage students, attendance-based funding reduces the ability of schools to effectively invest in student re-engagement
3. It is difficult for a school to realise any cost savings from student absences
4. The current methodology does not have a minimum and therefore does not recognise minimum provision requirements in different contexts, except for a small school supplement.

More broadly, the system does not have a clearly defined expectation of minimum acceptable education service provision standards for its particular contexts of schools and services (e.g., homeland learning centres). While the current design of the SRM does have an explicit level of minimum funding for small schools (through the small school supplement), this minimum amount is based on a primary school provision model. As a result, the above issues tend to be particularly acute in the context of schools that need to provide a diverse curriculum (e.g., secondary schools), or provide education across multiple campuses (e.g., homeland learning centres).

It also notable that recent experiences with the effects of COVID-19 on student learning have placed significant pressure on the effective enrolment methodology, as attendance is more complex to define and measure when students are able to engage in learning outside the classroom.

Effective enrolment as an incentive or an accountability mechanism to increase student attendance

Key finding 2: Based on survey findings from schools and stakeholders, there is limited evidence that the effective enrolment methodology acts as an effective incentive or accountability mechanism to improve student attendance.

  i.   *It is not clear whether the effective enrolment measure is intended as an incentive for attendance.*
  ii.   *School absences are often beyond the control of teachers and school leaders, due to other social determinants.*
  iii. *Effective enrolment is believed to negatively impact incentives and behaviours by school principals.*

In jurisdictions where they are utilised, attendance-based funding models are occasionally described as an incentive to encourage schools and districts to increase attendance and comply with local attendance laws (although examples of attendance-based models introduced in recent decades are rare).

When the Global School Budget (now the SRM) was introduced in 2015, the effective enrolment methodology was designed as a way to distribute and prioritise a finite pool of resources to "*schools with children attending and in front of the teacher*"[13],[14] rather than an incentive to improve attendance. However, the coinciding increase in school autonomy and responsibility to manage their own budgets meant that the effective enrolment methodology was perceived by many stakeholders as designed to incentivise schools to focus on attendance.

Insights from consultations with schools and peak body organisations highlighted a number of reasons the effective enrolment methodology does not serve as an effective incentive or an accountability mechanism for improving student attendance. These reasons can be summarised under four themes:

1. The methodology is perceived as a punitive mechanism targeted at socio-economic factors that are often seen as outside of schools' control.
2. The methodology is seen to encourage 'band-aid' solutions to boosting attendance, rather than investments in engagement which is complex and often requires long-term commitment. This can take attention away from investing in quality education delivery and can disincentivise schools to engage at-risk disengaged students.
3. When in conjunction with other systemic barriers to attendance, the potential incentives related to attendance-based funding are not being realised.
4. Some schools agree that the effective enrolment measure encourages positive behaviours, such as building community relationships. However, the majority of schools identified that they had insufficient resources to do this effectively.

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[13] Ernst & Young, *Review of the Global School Budgets Funding Model* (report commissioned by Department of Education Northern Territory Government, September 2017) <https://education.nt.gov.au/__data/assets/pdf_file/0005/464792/Report-from-the-Review-of-the-Global-School-Budgets-Funding-Model.pdf>.

[14] Minister for Education Peter Chandler, Media release (25 June 2013) <https://territorystories.nt.gov.au/10070/582896/0/0>.

Alternative enrolment-based methodology considerations

Key finding 3: Although enrolment-based student count methodologies would be better aligned to system strategy and objectives, defining enrolment for the purposes of funding allocation in the NT context is not straightforward.

   i.   *The intent of the effective enrolment measure is in dissonance with the Department's policy goals, notwithstanding the fact that there are programs funded outside of the SRM that support schools to engage with students.*

   ii. *Capturing an accurate picture of enrolments in NT schools is not straightforward due, for example, to student mobility and attendance by students at multiple schools. It therefore requires careful design and consideration. Further work would be required to develop enrolment count criteria with integrity and accuracy.*

The intent of the effective enrolment methodology to prioritise school funding within the SRM towards attending students is in dissonance with the Department's other policy goals which recognise the importance of investment in student and community engagement beyond the classroom. While it is recognised that the Department does have programs that specifically aim to improve engagement and attendance across NT schools, this Review finds that the current effective enrolment measure can, in some instances, limit a school's ability or even disincentivise schools from engaging at-risk students. It is not clear the extent to which these additional programs effectively offset this effect. Nonetheless, the Department's strategic plan and objectives clearly indicate the need to improve on current levels of engagement and attendance across the system.

Enrolment, rather than attendance-based student count methodologies, would better align to system-wide strategies and objectives of the Department. However, due to the complicated nature of mobility and attendance patterns across schools within the NT, an enrolment count for the purposes of funding allocation is difficult to measure. This is due to challenges including (but not limited to):

- **allocation of funding for highly mobile students** – with high levels of population mobility it is not always practical for funding to 'follow' the student
- **determining the appropriate point in time to count students** – some schools face seasonal enrolment fluctuations; these patterns are not consistent across the system and therefore any point in time count will inevitably be a less accurate estimation of resourcing need for some schools
- **enrolment duplications** – there are instances of duplicated enrolments due to dual enrolment in distance education, administrative errors and non-compliance with policy
- **students no longer enrolled without notifying schools** – there are instances of enrolment records of non-attending students that should no longer be enrolled (e.g., moved interstate or to the non-government sector, or to another community) but are still on the current roll in NT government schools
- **determining the right channels of support** – some students that are difficult to engage require alternative channels of support through non-school settings. While the Department does provide non-school supports to engage students through engagement officers and the Remote School Attendance Strategy (RSAS) – which are funded by the Australian Government - it appears that these programs and supports, and their relationship to the Department's enrolment policies, may not be well understood by schools.

The magnitude of the last challenge listed above is significant. At its peak, the number of students not attending any schools in the NT for at least 20 days in a row can exceed 1,000. Additionally, resource challenges arise when the pattern of attendance is unpredictable, as it is with many students throughout the NT, who tend to attend schools on a part-time basis at multiple schools. While the Department supports and implements several programs outside of the SRM (such as the RSAS, and programs with the Stars Foundation and Clontarf foundation which are funded by the Australian Government), the NT context is unlike any other jurisdiction in Australia in terms of student mobility and challenges to school attendance which result in attendance issues being sustained over time.

If the Department's SRM was to become enrolment-based, enrolment count eligibility for the purposes of school funding allocation needs to be clearly defined alongside procedures supporting the integrity of that count. This definition should also align with the system's expectations of the role of schools in supporting these students, especially those students who are chronically disengaged.

The starting point for the enrolment count eligibility for the purposes of funding allocation should be the Department's Enrolment Policy and associated guidelines. To include an enrolment in the count of funded students, some additional eligibility criteria might be required to ensure that the student count aligns well with the expected resourcing requirements of a given school (e.g., similar to student circumstance and attendance criteria used for the purposes of the August Age Grade Census conducted by the Australian Government).

Determining the preferred the timing of the student count requires taking into account a number of considerations. Given the seasonal mobility and attendance patterns in NT government schools, no single point-in-time enrolment count will perfectly capture schools' resourcing requirements throughout the year. As these issues have a close relationship to funding variability and school resource planning, the timing of the student count is discussed further in the following section.

Theme 2: Application of the effective enrolment methodology within the SRM

Schools within the Northern Territory operate under highly uncertain budgets. While general enrolment variability is the main driver of funding variability over time for NT schools, this Review finds that the design and implementation of the effective enrolment measure does contribute to added funding variability.

Generally speaking, improving budget certainty has potential to provide schools with confidence to plan for staffing and operations in the longer term. Although budget certainty is by no means sufficient to improve staffing continuity and performance, it is an important enabler of effective planning and implementation.

Contribution of the effective enrolment methodology to funding variability

Key finding 4: Funding variability, primarily driven by enrolment fluctuations, combined with a poor understanding of how effective enrolment works, leads to budget uncertainty for schools.

  i.   *Government schools in the NT can experience fluctuations in their year-on-year funding, which is mainly driven by fluctuations in enrolments each year.*
  ii. *The effective enrolment student count method contributes to, but is not the primary driver of, variability in SRM variable funding.*
  iii. *In many instances, year-on-year variability in final funding cancels out over time. This means that final funding fluctuates around a more constant average trend of enrolments over time, potentially due to student mobility in remote regions. This indicates that schools could be supported to manage their budgets over time to reduce the impact of volatility on school resource planning.*
  iv. *The effective enrolment methodology does not have a mechanism that establishes a minimum funding standard for education delivery. Therefore, there is no effective limit to the amount that funding can decline on a year-on-year basis for most schools (outside of the small school supplement). However, it is acknowledged that the Department provides supports to schools through an early school support program, which supports schools in circumstances where education delivery is negatively impacted by factors such as declines in funding.*

Over the past four years, one in ten NT Government schools (10 per cent) experienced final funding variation of more +/- 25 per cent; for one in three (38 per cent) it was a variation of more +/- 10 per cent, on the previous year. For these schools, in absolute terms, a fluctuation of larger than +/- 10 per cent is equivalent to a budget change of between $44,960 and $1.3 million (equivalent to between 0.5 and 16 FTE classroom teachers at Level 2, depending on school size).

While education funding in all jurisdictions across Australia experiences year-on-year volatility, funding variability in the NT has a unique set of drivers. This is largely due to the context of the NT education system, which is characterised by a large amount of small, remote schools, and the

widespread nature of student mobility across remote regions which causes additional variability in enrolment levels across years, as well as within a given year. NSW and Queensland, which have schools with broadly similar characteristics, do not experience as material issues with variability as schools are directly allocated FTE staff allocations based on ranges of school size, and so are less responsive to enrolment variability.

A variety of factors can drive total school funding variability including (but not limited to) the number of enrolments (captured in Week 4 of Term 1), the number of effective enrolments (i.e., student attendance patterns), the base rate per FTE, the composition of student needs profile, eligibility for targeted funding, and the level of external grants a school receives from both the Australian Government and Northern Territory Government.

The analysis conducted to inform this report shows that the greatest contributor to funding variability is fluctuations in enrolment numbers. Fluctuations in effective enrolments year-to-year are only partially contributing to funding variability. Replacing effective enrolments with enrolments in the methodology will therefore not remove budget uncertainty fully, as the greatest source of funding variability in the current model stems from year-to-year Week 4 Term 1 enrolment count adjustments (Chart iii).

Chart iii: Contribution of select variables to funding variability (2019-2021)
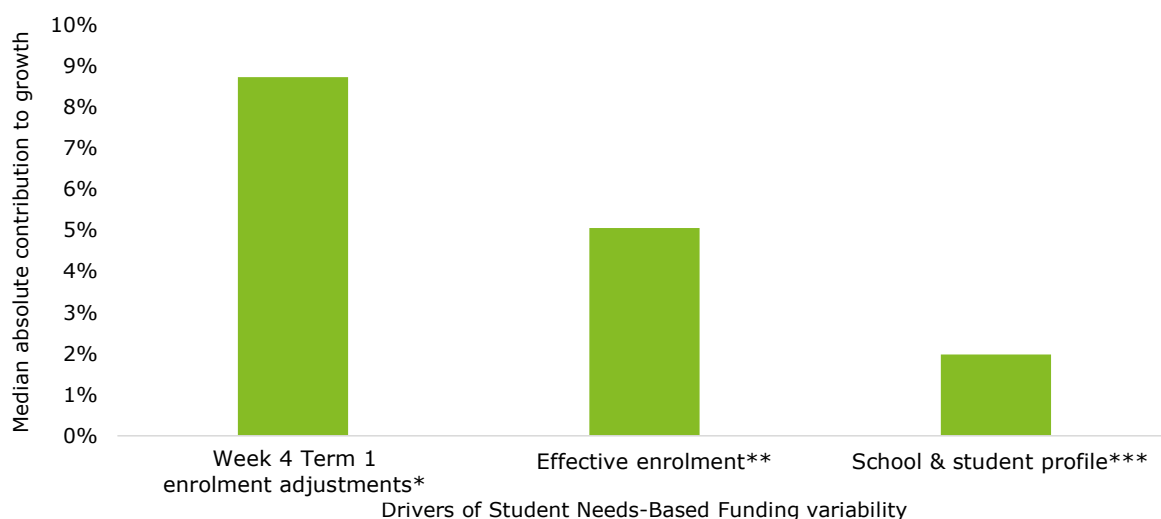
Source: Deloitte Access Economics (2022).
Notes: Each column represents the median impact of each funding component, in absolute terms, year-to-year final funding variability, across government schools in 2019-2020, and 2020-2021.
Drivers of final SNBF variability reflect key individual components of the SNBF and are defined as follows:
*Week 4 Term 1 enrolment adjustments - considers changes in Term 1 Week 4 enrolment between current and previous year
** Peak attendance - considers changes in the calendar year effective enrolment numbers between previous year and the year before.
*** School & student profile – considers the per student rate, determined by the base rate per FTE and additional equity weights.
Other components of the formula, such as the small school supplement, were omitted as they have a negligible effect on funding variability. The analysis excludes schools that are not funded under the SNBFF, as well as those with characteristics that were manually adjusted by the Department during the funding finalisation process.

In many instances, year-on-year variability in final funding cancels out over time. For example, from 2018-21, in 58 per cent of cases an increase in school funding in one period was followed by a decrease in the following period and vice versa. This suggests that the existing funding model may be responding to fluctuations in student numbers which do not reflect sustained changes in the number of students a school is servicing. As such, with the right supports, schools could potentially manage a portion of funding variability by undertaking over-time resource planning, with the expectation that funding variability will cancel-out over time.

Further, as stated, the effective enrolment methodology does not have a mechanism that establishes a minimum funding standard for education delivery across school contexts, other than

for very small schools through the small school subsidy. Therefore, there is no effective limit to the amount that funding can decline on a year-on-year basis for most schools. Findings from consultations with school principals indicate that the inability to predict the severity of year-on-year funding variability causes schools to be more cautious with resource planning. However, it is acknowledged that the Department provides supports to schools through an early school support program, which supports schools in circumstances where education delivery is negatively impacted by factors such as declines in funding.

Impacts of budget certainty on quality education provision

Key finding 5: Budget uncertainty combined with schools' autonomy to manage aspects of their resources concentrates financial risk at a school-level and could lead to additional workforce attraction and retention issues, separate from supply-side constraints to workforce.

 i. *Combined with a poor understanding of how effective enrolment works, funding variability leads to additional budget uncertainty for schools.*
 ii. *Budget uncertainty can negatively impact schools' ability to effectively engage in long-term strategic workforce planning.*
 iii. *Budget uncertainty has been reported by schools to be a contributing factor to higher levels of staff turnover and a reliance on short-term contracts by school principals.*
 iv. *While existing budget policies grant schools a level of autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this. This is particularly impactful on small, remote schools.*

It is not the funding variability on its own that leads to budget uncertainty for schools. Rather, it is funding variability combined with a poor understanding of how effective enrolment works.

While most schools consulted for the purposes of this Review understood the effective enrolment methodology at a high level, very few school leaders were confident in their understanding. There is a strong appetite from schools for a simpler formula that can be estimated by schools in-house and be more easily explained to staff and families. School leaders generally:

- did not understand the model beyond it being a method that combines enrolment and attendance; they asked for further upskilling on the methodology
- if they understood the mechanics of the model, they reported not having sufficient clarity on how specific absence scenarios translate into effective enrolment calculation
- struggled to do their own reconciliation of the calculation and estimate what their effective enrolment might be for the purposes of planning
- struggled to explain the methodology and its application within the SRM to families and members of the school representative bodies.

This uncertainty impacts the ability of schools to plan resource needs and recruitment contracts over a longer period. Most schools that were engaged with as part of the Review reported that they either do not attempt to complete longer-term planning exercises or have very little confidence in the plans that they do produce. This is particularly an issue in remote areas and for small schools which are more likely to be impacted by variations in student enrolment and attendance.

Budget uncertainty combined with schools' autonomy to manage their resources, concentrates financial risk at the school-level and can lead to workforce attraction and retention issues (noting supply challenges). Greater budget certainty has the potential to support longer term planning and stability for staff, which could contribute to improved student outcomes over time.

This Review found that this issue is particularly concentrated in small, remote schools, which are most impacted by funding volatility, and often have limited resources to undertake effective budget planning over time.

In response to this financial risk, schools reported engaging in precautionary saving to build-up their cash reserves to protect themselves against a potential future funding decline. However, reasons for cash reserve accumulation are many and appear to also be related to highly specific

school and student contexts (e.g., strategic cash accumulation for a significant investment; schools struggling to fill vacancies due to hard to fill roles or shortages).

Finally, it appears that some of the drivers of risk aversion and precautionary savings are related to the rules around submitting budgets in deficit or incurring deficits. While schools consistently agreed that submitting a budget projecting a cash deficit is not allowed, there was some confusion regarding what schools can expect if they do incur a budget shortfall, as well as a lack of awareness of the NT Department's early schools support program to support schools to manage budget issues.

While not being a direct focus of this Review, the Department may wish to consider whether there is scope to further clarify and formalise the rules that govern cash reserves accumulation, deficit recovery planning, support available for unexpected budget deficits and potential deficit write off, including the early schools support program.

Implications of budget uncertainty on the measurement of enrolment
Key finding 6: Point-in-time measures of enrolment tend to be more variable over time and are less representative of resource needs of a school over a school year. The preferred approach to applying a measure of enrolment for the purposes of funding is one that balances the need for funding to be responsive to school needs while minimising exposure to excessive funding variability and being practical to administer.

Throughout jurisdictions across Australia, resourcing needs for an upcoming school year are based on enrolment counts at the start of a school year (usually between week 2 to 4 of a school year).[15] However, reviews of education systems across Australia find two drawbacks with this method, including:[16]

- Enrolment counts at the beginning of the school year are poor measures of resource needs for schools with highly transient populations (particularly an issue in remote schools in WA)
- Enrolment counts at the beginning of the school year are not conducive to school resource planning, which primarily occurs over the period October to December in the prior year (and even commences earlier in some schools).

These issues are particularly relevant for the context of the NT, which is categorised by a large proportion of small, remote-located schools with a highly transient population. As shown throughout this Review, a large proportion of schools tend to experience significant unexpected funding variability which impacts resource planning within schools. Further, many schools experience peak enrolment post week 4, term 1 due to student mobility.

There is a careful balance to be struck in the determination of how enrolments are measured for the purposes of allocating funding. Funding allocations should be contemporary, to reflect the needs of students facing schools at a point in time, while also minimising exposure to excessive funding variability and support effective budget planning.

In this regard, options for the determination of the enrolment count sit on a spectrum of timing (i.e., the extent to which the count is leading or lagging), and whether the count is determined at a single point of time or averaged over time.

- At one extreme is an option which is fully contemporaneous, with funding allocated based on week 4 Term 1 enrolments at the start of year, with the potential for funding to be revised based on enrolments at the August Age Grade Census in that year.
- At the other extreme is a lagged, over-time, model based on historical enrolments, which could be constructed to predict, as best as possible, expected future enrolments (for example, a weighted three-year average calibrated to minimise funding variability).

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[15] Some jurisdictions also incorporate enrolment projections for upcoming terms, such as South Australia.
[16] Nous. (2018). Evaluation of the Student-Centred Funding Model (Western Australia)

The preferred approach represents a trade-off between the principles of sufficiency, effectiveness, practicality and transparency, and will depend on the nature and effectiveness of the other mechanisms and supports that exist around the implementation of the SRM.

Through this Review, stakeholders (especially those in more remote and small schools) significantly preference the certainty, transparency and practicality of the funding model, over its responsiveness/contemporaneity. On this basis, an over-time and partly lagged measure of enrolment is considered preferable for the purposes of allocating variable funding under the SRM.

While a weighted three-year average is considered to be the most effective in limiting funding variability, this approach is considered to be overly complex. It is also noted that other supports can be (and have been) put in place to assist with budget management in the face of enrolment and funding variability (as previously discussed). As such, the Review has identified a preferred approach to determining enrolment, which builds on the current approach to determine school funding and changes which have been made to support school planning and budgeting in recent years. This would comprise the following calculations for the preliminary and final funding determinations:

- **Preliminary funding:** The average of enrolment at week 4, term 1 in the previous school year and the Department's measure of enrolment at the time of the August Age Grade Census of the previous school year.
- **Final Funding:** The average of enrolment at week 4, term 1 in the current school year and the Department's measure of enrolment at the time of the August Age Grade Census of the previous school year.

With this approach, any changes to funding between preliminary and final funding are due to changes in week 4, term 1 from the previous to current year. This measure of student count is considered to be the most effective because it:

- **Improves a school's ability to plan compared to point-in-time measures:** The measure is more conducive to school planning than simply using a point-in-time measure at week 4, term 1 of the current school year as it provides schools with some certainty on the funding levels in August (when the majority of school planning occurs). Further, an average of week 4, term 1 and August Age Grade Census enrolments reduces year-on-year funding variability compared to point-in-time measures of student count.
- **Improves the measure of student count over the course of a school year:** Using an average of week 4, term 1 and August Age Grade Census enrolments allows for a measurement of student count over two points throughout a school year (term 1 and Term 3). Analysis shows that this measure of student count slightly improves the alignment of student count for funding purposes to average enrolment levels throughout the year, particularly for schools that experience enrolment surges later in the school year.
- **Improves alignment to school funding allocation received by the Australian Government:** Using August enrolment figures to partly inform funding levels improves the alignment of school funding distributed by the NT to schools, with funding received by the NT Department of Education by the Australian Government.

Review recommendations

The findings from this Review demonstrate that the current effective enrolment methodology for allocating variable funding to NT government schools has limitations both as a resource prioritisation mechanism and an incentive, with impacts on the equitable allocation of resources within the system. Further, it contributes to budget uncertainty, which negatively impacts school planning and in part, the schools' ability to hire and retain adequately skilled teaching staff.

In summary, this Review recommends moving towards an enrolment-based methodology in line with that used in other Australian schooling jurisdictions, with additional school supports to manage funding variability. Detailed recommendations, designed to address the Review findings, are outlined in Table i below.

It is acknowledged that the recommended model represents a departure from the current methodology and will require careful planning and design to ensure system continuity, as there are significant interdependencies between school funding through the variable funding component of the SRM, and other funding components inside and outside of the SRM. Further, without an increase in the overall budget envelope, and/or the re-allocation of funding from other sources, these changes could result in an overall decrease in a base rate of funding per FTE enrolment and/or a substantial re-distribution of funds away from schools with current higher rates of attendance.

While additional funding for disadvantaged and remote schools may play an important role in supporting improved attendance and outcomes, in line with the Department's Engagement Strategy, there are also legitimate concerns about these schools' ability to use additional funding effectively in the short term due to issues related to staffing supply issues, availability of government housing in rural areas, among other factors. This is reflected, in part, by current cash balance levels held by some of these schools.

Efforts need to be made to support more effective resource use systematically, including through mechanisms such as place-based resource sharing across schools where multiple schools exist in close proximity to one-another, alongside any changes in how funding is distributed to schools to incentivise greater resource sharing (drawing on experiences from historical approaches and current resource-sharing arrangements that exist in certain communities). While not being an explicit focus of this Review, consideration may be given more generally to the way that very small and remote school budgets are managed and resourcing decisions made, with the potential for greater central or regional support for these schools where this is considered appropriate and advantageous by local communities.

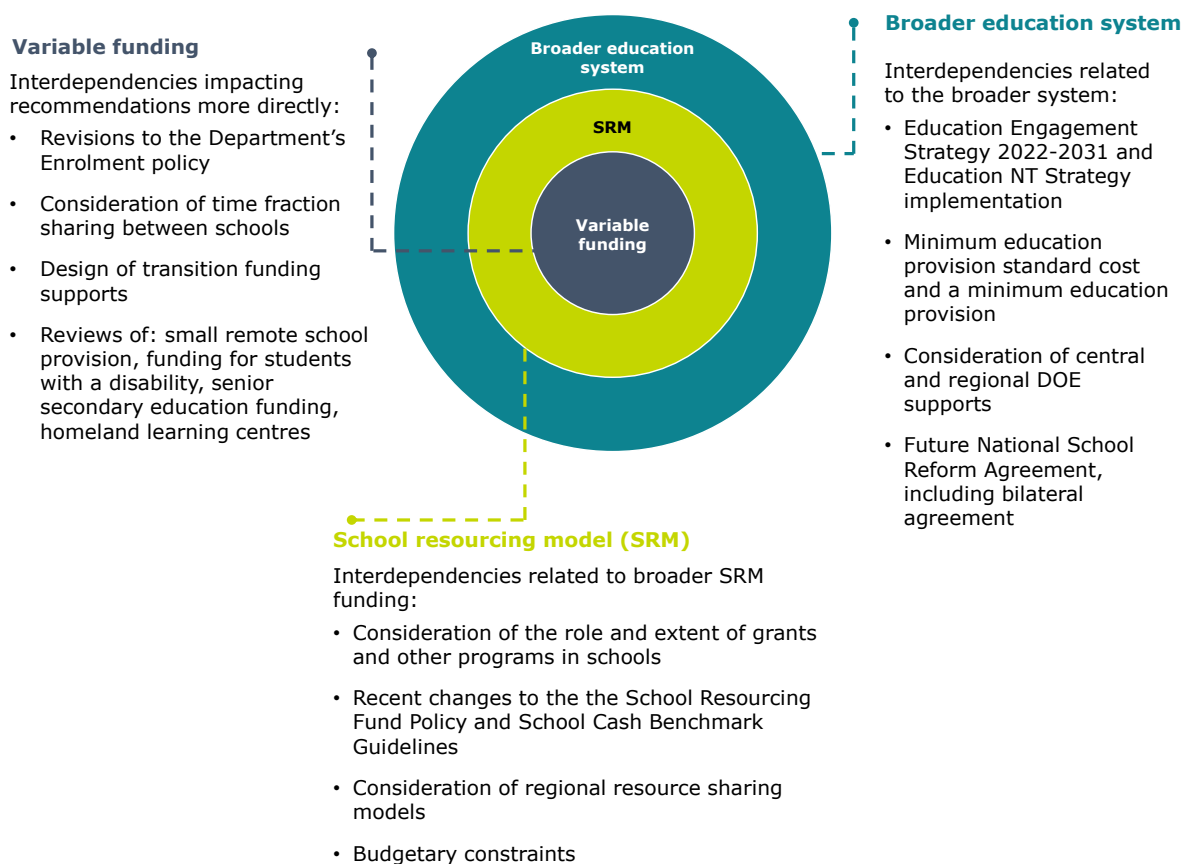**Interdependencies to consider alongside the recommendations**
Although the Review has focused primarily on the effective enrolment methodology component of the SRM, the proposed changes should not be considered in isolation to other funding components, reforms to service delivery models and other elements in the broader SRM and system.

Many of the identified challenges with the current model stem from complex and often intertwined issues that extend beyond the funding model alone. Transitioning to a revised funding methodology will take time and require considerations of interdependencies with other:

- elements of the variable funding design
- components of the SRM
- broader system levers and policy reforms.

For instance, revisions to funding of small schools, senior secondary provision, homeland learning centres, and students with disability will all be critical to ensuring that the funding model meets the needs of schools and students. Any changes to the funding model will need to be supported by policy developments that ensure that the additional funding is spent on supports and initiatives that make a difference to student outcomes in different contexts, including contexts of high disengagement.

Figure ii: Policy and funding model factors that interact with a transition to a revised funding model

Variable funding

Interdependencies impacting recommendations more directly:

- Revisions to the Department's Enrolment policy

- Consideration of time fraction sharing between schools

- Design of transition funding supports

- Reviews of: small remote school provision, funding for students with a disability, senior secondary education funding, homeland learning centres

Broader education system

Interdependencies related to the broader system:

- Education Engagement Strategy 2022-2031 and Education NT Strategy implementation

- Minimum education provision standard cost and a minimum education provision

- Consideration of central and regional DOE supports

- Future National School Reform Agreement, including bilateral agreement

School resourcing model (SRM)

Interdependencies related to broader SRM funding:

- Consideration of the role and extent of grants and other programs in schools

- Recent changes to the the School Resourcing Fund Policy and School Cash Benchmark Guidelines

- Consideration of regional resource sharing models

- Budgetary constraints

Source: Deloitte Access Economics (2022).

Considerations for the sequencing of this Review's recommendations

Table i below outlines this Review's recommendations and the associated implementation considerations, organised according to the two themes of findings adopted above. At the heart of these recommendations is recognising that schools should be funded to align with drivers of school resourcing needs (including those related to student engagement), with allocations that are more certain and predictable, and which bring the funding model in line with the broader policy and strategy of the Department.

In this regard, a first step for the Department would be to articulate the intention to move away from the current attendance-based methodology to an enrolment-based methodology, acknowledging the complex interdependencies that need to be addressed and the steps that will be taken to transition to an enrolment-based model over time.

The steps that would support this transition are outlined below and summarised in Table i, organised by Review theme. Each recommendation is graded by its priority in terms of when it could occur across four levels:

- **Immediate:** within the next 6 months
- **Short term:** 6 months to 2 years
- **Medium term:** 2 to 5 years
- **Long term:** 5 years or more

In planning for the implementation of these recommendations, prioritisation should not merely be guided by what is easiest. Consideration must be given to the sequence of actions that will maximise the likelihood of achieving the end goal of transitioning to a more equitable and effective model of school funding.

In this context, it is notable that this Review recommends a range of additional policy review and research be undertaken to lay the foundations for the transition to a revised model based on an alternative measure of enrolment (as outlined under Theme 1). This includes assessment of funding and programs outside of the SRM that support student engagement, as well as the development of minimum service delivery standards and funding levels for small schools (with a focus on secondary schools). This further research and policy design work will take time but is necessary to the successful final design and implementation of a revised model.

Notwithstanding this, it is clear that schools would benefit significantly from reforms that improve budget certainty and planning in the near term (for example, through the implementation of a minimum funding guarantee). As such, there is an opportunity to implement more immediate changes to the way the funding model is implemented that drive greater certainty (as outlined under theme 2), ensuring that in doing so, the transition to final end-state enrolment-based model is not undermined. These changes are expected to be less dependent on other policy designs and reviews that are required to be undertaken.

Further detail on the **steps required to implement the recommendations** under the two themes are summarised below.

Theme 1: Appropriateness of the effective enrolment measure within the SRM
Recommendations that impact the effective enrolment measure include replacing the current effective enrolment measure of student count with an enrolment-based measure. This recommendation will take time to implement due to its fiscal implications and the range of interdependencies, both occurring currently and scheduled to occur in the future, that will impact the evidence based, and eventual structure of the enrolment-based measure of student count.

1. *Move towards an enrolment-based measure as a methodology to distribute variable school funding within the SRM*
In the immediate term, the Department should signal its intent to move towards an enrolment-based measure as a methodology to distribute variable school funding within the SRM (Recommendation 1). In doing so, the Department should clearly communicate the reasons for this action, as well as an indicative timeline on when the funding methodology will be fully implemented.

2. *Determine funding envelope to support implementation of an enrolment-based measure*
Alongside this, the Department should identify the projected funding available over the medium term to support the implementation of, and transition to an enrolment-based measure. This will include a review of targeted funding, and grants and program funding outside the SRM that support student engagement and attendance, to determine funding that is more appropriate to be allocated through the variable funding component of the SRM under an enrolment-based measure (Recommendation 2).

Projected funding available for the delivery of the enrolment-based funding model will be dependent on future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department. Further, the review of targeted funding, and grants and program funding outside the SRM, will be dependent on ongoing reviews of Homeland learning centres, funding for students with a disability, and senior secondary education funding.

3. *Develop the methodology and systems to guide the implementation of the enrolment-based measure*
The next phase of implementation of recommendations associated with the effective enrolment measure includes the development of the model methodology and enrolment count procedures. The Department should develop and implement detailed enrolment count procedures and eligibility criteria for inclusion in the count for the purposes of funding, to improve the confidence in and integrity of enrolment counts at week 4, term 1 and August Age Grade Census (Recommendation 3). The recently revised Enrolment Policy will have direct implications on this work.

The development of the methodology of the enrolment-based measure will include the establishment of key parameters, including how preliminary and final funding are determined, the base rate of funding per student needs-weight, the measurement of enrolment for funding

purposes (based on an average of enrolment at week 4 term 1, and August Age Grade Census - as per Recommendation 10), and the timeline and structure for implementation (Recommendation 5). The development of this methodology is dependent on the projected fiscal environment, as well as ongoing reviews of Homeland learning centres, funding for students with a disability, and senior secondary education funding. Once established, this methodology should be made accessible to all schools and stakeholders across the sector.

As part of the development of the methodology of the enrolment-based measure, the Department should develop transition supports to ensure that negative impacts of the model transition are limited. This would be informed by detailed impact modelling of the implementation of an enrolment-based measure on individual schools. The exact structure of transition supports should align with Department goals around impact to schools during the transition, and the timeline and approach to implementation of the enrolment-based measure. Impacts of the transition to an enrolment-based measure should be clearly communicated to schools in advance of the implementation of the enrolment-based measure.

In this context, it is important to note that, despite the impact of the effective enrolment measure on the equitable distribution of school funding across student demographic characteristics, there is no evidence to suggest that particular Government schools in the NT (including schools with high rates of attendance, and low levels of disadvantaged) are systematically overfunded in absolute terms (including with reference to the Commonwealth SRS, or comparable funding for similar schools in other jurisdictions).

4. Develop school supports to optimise the implementation of the enrolment-based measure
Prior to implementing the enrolment-based measure, the Department should ensure that schools have sufficient supports in place to optimise the implementation of the methodology. This Review recommends that the Department consider the following steps in this regard:

- Explore the opportunity to improve the appropriateness of the funding methodology to small schools. This should consider barriers to spending faced by remote schools, practices related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy), budget planning and management capability gaps, workforce recruitment and retention issues, and examples of effective place-based resource sharing solutions (Recommendation 8)
- Develop and implement a minimum funding guarantee, supports for schools to manage funding variability over time, and a re-designed minimum funding floor, as per Recommendations 6, 7 and 9.

5. Implement and monitor the enrolment-based measure
In the medium term, the Department should completely transition to an enrolment-based measure of enrolment for funding purposes, alongside any additional school supports to assist the transition to the revised funding methodology (Recommendation 5).

The student count methodology employed in the SRM should be based on an average of week 4 term 1 in the current school year, and August Age Grade Census in the previous year (Recommendation 10). The Department should continue to monitor how the revised methodology impacts individual schools and identify potential areas for improvement and further calibration to avoid systematic under- or over-funding of schools.

Over the long term, the Department should continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

Theme 2: Application of the effective enrolment methodology within the SRM
Recommendations that impact the broader effective enrolment methodology include the development of school supports to manage funding variability, a minimum funding guarantee and the review of the small school supplement with the intent of re-designing the methodology to consider other contexts, such as a minimum funding floor for secondary schools, and larger

remote schools. The majority of these recommendations can be made immediately, and potentially independently of recommendations made under Theme 1.

1. Review and re-design the minimum funding floor

In the short term, the Department should review the small school supplement with the aim of re-designing a minimum funding floor that is applicable across multiple school contexts, including secondary schools and larger remote schools. The objective of this minimum funding floor is to provide all schools with additional certainty on the minimum funding that they are guaranteed to receive each year, based on their enrolment levels and school context (Recommendation 6).

2. Develop and implement school supports that assist schools to manage budgets over time.

The Department should develop and implement supports that assist schools to manage budgets over time (Recommendation 7). This should include a range of factors, including:

- continue to administer the early school support program to assist schools in managing variation in student funding over time (Recommendation 7.a)
- develop practices and guidance related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy) to support schools in managing funding variability over time (Recommendation 7.b)
- develop and implement an allowance for schools experiencing an exceptional surge in student numbers (Recommendation 7.c).
- Explore the opportunity to improve the appropriateness of the funding methodology to small schools (Recommendation 8).

3. Develop and implement a minimum funding guarantee

Alongside the development of school supports, the Department should develop and implement a minimum funding guarantee to improve certainty of final funding levels within a funding cycle. This will include the development of parameters of the guarantee, and how they are adjusted annually to reflect changing budgets. The methodology of the minimum funding guarantee should be made accessible to stakeholders throughout the sector (Recommendation 9).

4. Monitor and adjust school supports over time

Over the medium to long term, the minimum funding guarantee, surge allowance allocation, and a re-designed minimum funding floor should continue to be monitored and adjusted over time. Specifically, the supports should be adjusted to align to the implementation of the enrolment-based measure.

Conclusion

While the recommendations presented in this report represent a significant departure from the current approach and have the potential to cause disruption to schools during implementation, the benefits from their implementation stand to be significant. The benefits will arise from a more equitable distribution of resources that is aligned to the Department's strategic goals; that provides greater certainty and stability for schools; and, ultimately, supports improved student outcomes.

The Government has a clear strategy to improve student attendance, engagement in learning and learning outcomes. By moving from the current model of effective enrolment to a model based on enrolment, there would be greater alignment of funding to educational need – i.e., towards students and schools that require the greatest level of support to drive the outcomes sought by Government.

It is clear that this cannot be achieved in a budget neutral way as there is not a strong case from the evidence available to this Review that schools with higher levels of attendance are over-funded. The redistribution of funding that would be required to maintain budget neutrality therefore has the potential to risk undermining service delivery and outcomes in settings that currently experience higher levels of attendance.

Finally, it should be emphasised that the model of funding distribution alone is not sufficient to drive improvements in attendance and student engagement. Rather, it is the strategies and

practices that are put in place around it – and the extent to which funding enables these to be effectively implemented.

While there is evidence that funding constraints are a barrier to some schools implementing more effective strategies for student engagement, this does not mean that greater investments guarantee improved outcomes. Additional strategies and improved practices will be required if the potential benefits of a more equitable distribution of resources are to be realised. The outcomes of these strategies and practices would extend beyond just attendance at school, but also towards meaningful engagement in learning more generally, as well as higher rates of achievement of sustainable pathways from school.

Table i: Summary of recommendations

Finding	Recommendation	Priority
Theme 1: Appropriateness of the effective enrolment measure within the SRM		
Recommendations that impact the effective enrolment measure include replacing the current effective enrolment measure of student count with an enrolment-based measure. This recommendation will take time to implement due to its fiscal implications and the range of interdependencies, both occurring currently and scheduled to occur in the future, that will impact the evidence based, and eventual structure of the enrolment-based measure of student count.		
Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy. • Higher levels of educational need is strongly linked with low school attendance. • On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM. • Effective enrolment measure does not align well with schools' resourcing needs. However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.	**Recommendation 1: Communicate the intent to move towards an enrolment-based, rather than attendance-based, methodology as the basis for allocating needs-based funding to schools.** The department should be clear and effectively communicate that it intends to implement an enrolment-based methodology as the basis for allocating needs-based funding to schools. Further, the Department should outline an indicative timeline for when milestones of implementation will be reached, such as when the methodology of the enrolment-based methodology will be released.	Immediate / ongoing
Supporting evidence: While outside of the scope of this Review, there is clear evidence that the remit of funding allocations provided through targeted funding programs, and grants and programs funded outside of the	**Recommendation 2: Identify and implement opportunities for the inclusion of targeted funding, and other grants and programs into the SRM.**	Short term

SRM will need to change under an enrolment-based model.

The objective of this process would be to determine if funding allocated through these mechanisms would be more appropriately allocated via the student-needs based funding model of the SRM, under an enrolment-based methodology.

The outcome of this would inform the projected budget envelope to be allocated through an enrolment-based methodology, alongside outcomes from the future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- Review of homeland learning centres
- Review of funding for students with a disability
- Review of senior secondary education funding.

Supporting evidence: Although enrolment-based student count methodologies would be better aligned to system strategy and objectives, defining enrolment for the purposes of funding allocation in the NT context is not straightforward.

- The intent of the effective enrolment measure is in dissonance with the Department's policy goals and programs funded outside of the SRM.
- Capturing an accurate picture of enrolments in NT schools is not straightforward due to for example student mobility and attendance by students at multiple schools therefore requires careful design and consideration. Further work would be required to develop enrolment count criteria with integrity and accuracy.

Recommendation 3: Develop detailed enrolment count procedures and eligibility criteria for inclusion in the count for the purposes of school funding allocation.

Short term

This should include (but is not limited to):

- clarity on whether and how potential time fractions are determined (if students are enrolled part time or dual enrolled)
- procedures supporting the integrity of the student count.

Over the long term, the Department should continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the recently revised Enrolment Policy.

Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

- Higher levels of educational need is strongly linked with low school attendance.
- On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
- Effective enrolment measure does not align well with schools' resourcing needs.

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Recommendation 4: Develop a detailed methodology of the enrolment-based funding approach.

The development of the methodology of the enrolment-based measure will include (but is not limited to):

- the enrolment count method
- the timing of funding allocation (such as preliminary and final funding)
- the base rate funding amount to be allocated to schools
- detailed description of additional school supports provided to support budget management
- detailed impact modelling of the implementation of an enrolment-based measure on individual schools
- providing clearer guidance on the expectations regarding the type of expenditure and supports that are provided by the Department outside of the SRM. This guidance should align with the system's expectations of the role of schools in supporting students with different needs.

The Department should ensure that the methodology is explained clearly and in a way that allows schools to replicate it for the purposes of their internal planning. This includes ensuring that the naming convention reflects the nature of the methodology and is interpreted correctly by schools.

Once established, this methodology should be made accessible to all schools and stakeholders across the sector. In particular, the impact of the transition to the revised funding model should be clear to all schools.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the projected fiscal environment (informed by Recommendation 2 and future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department)
- NT Education Engagement Strategy (2022-2031)
- Review of homeland learning centres
- Review of funding for students with a disability
- Review of senior secondary education funding.
- Recommendations 6 to 10.

Short term / medium term

Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

- Higher levels of educational need is strongly linked with low school attendance.
- On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
- Effective enrolment measure does not align well with schools' resourcing needs.

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Recommendation 5: Transition fully over time to a methodology based on enrolment count, as part of SRM (i.e., without attendance components), alongside any additional school supports to assist the transition to the revised funding methodology. Monitor and adjust this model over time.

The Department should completely transition to an enrolment-based measure of enrolment for funding purposes. This includes:

- develop and deliver budget planning tools to support schools to plan resources with the enrolment-based funding model
- continue to monitor how the revised methodology impacts individual schools and identify potential areas for improvement and further calibration to avoid systematic under- or over-funding of schools
- continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

The Department should continue monitoring schools' perceptions of the model and whether it results in any unintended incentives.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- Recommendations 1 to 4.

Medium term / long term

Theme 2: Application of the effective enrolment methodology within the SRM

Recommendations that impact the broader effective enrolment methodology include the development of school supports to manage funding variability, a minimum funding guarantee and the review of the small school supplement with intent of re-designing the methodology to consider other contexts, such as a minimum funding floor for secondary schools, and larger remote schools. The majority of these recommendations can be made interdependently of recommendations within theme 1.

Supporting evidence: The current methodology does not have a minimum and therefore does not recognise minimum

Recommendation 6: Re-design the minimum funding floor

Short term

provision requirements in different contexts, except for a small school supplement.	The Department should re-design the small school supplement to make it applicable across multiple school contexts, including secondary schools and larger remote schools. The objective of this minimum funding floor is to provide all schools with additional certainty on the minimum funding that they are guaranteed to receive each year, based on their enrolment levels and school context.	

Supporting evidence: Budget uncertainty combined with schools' autonomy to manage aspects of their resources concentrates financial risk at a school-level and could lead to additional workforce attraction and retention issues, separate from supply-side constraints to workforce.

- Combined with a poor understanding of how effective enrolment works, funding variability leads to additional budget uncertainty for schools.
- Budget uncertainty can negatively impact schools' ability to effectively engage in long-term strategic workforce planning.
- Budget uncertainty has been reported by schools to be a contributing factor to higher levels of staff turnover and a reliance on short-term contracts by school principals.
- While existing budget policies grant schools a level of autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this. This is particularly impactful on small, remote schools.

Recommendation 7: Develop and implement school supports that assist schools to manage budgets over time.

Short term

The Department should continue to administer the early school support program to assist schools in managing variation in student funding over time.

The Department should develop practices and guidance related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy) to support schools in managing funding variability over time.

The Department should develop and implement an allowance for schools experiencing an exceptional surge in student numbers (surge allowance). The development of this allowance should include:

- Develop eligibility criteria for a surge allowance for different types of schools based on quantitative (e.g., number of late enrolments) and qualitative evidence (e.g., written justification of a resourcing need).
- Determine the process for applying and obtaining surge allowance support. This should include automatic funding allocations instigated by the Department, as well as applications that schools can submit if they require additional funding.
- Model the likely demand for surge allowance based on the agreed criteria and historical data and determine the size of the surge allowance support pool.

Interdependencies:

The implementation of these recommendations is dependent on the following:

- the School Resourcing Fund policy
- Early School Support Program
- Recommendation 6.

Supporting evidence: Small, remote schools tend to be most impacted by funding variability and resource planning issues within the current funding model. This was largely due to the unique nature of the NT context, rather than the effective enrolment methodology.

While existing budget policies grant schools with autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this.

Recommendation 8: Explore the opportunity to improve the appropriateness of the funding methodology to small schools.

Short term

This should consider:

- actions that reduce barriers to spending faced by remote schools
- practices related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy)
- supports for budget planning and managing capability gaps
- supports for workforce recruitment and retention issues
- effective place-based resource sharing solutions, such as the Group Schools model.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the School Resourcing Fund policy
- Recommendation 6.

Supporting evidence: Budget uncertainty and variability within the budget cycle (i.e., from preliminary to final budgets) is viewed by schools as an inhibitor of effective resource planning for schools.

While the Department has made changes to improve budget certainty, there is a need to strengthen school confidence in budget stability to support effective resource planning, particularly in remote contexts.

Recommendation 9: Develop and implement a minimum funding guarantee

Short term

Any alternative methodologies include a funding guarantee provided as part of the preliminary budget to support more effective planning. The funding guarantee should cover at least a year.

The development of the minimum funding guarantee should include:

- Develop minimum funding guarantee levels for different school types by defining what constitutes a *significant variation* in funding between preliminary and final funding allocation. The definition of a *significant variation* should consider what level of negative funding variation is significantly disruptive to school planning and resourcing decisions, and what level of certainty would reduce excessive risk aversion practices by schools.
- Determine how parameters that inform minimum funding guarantee levels are adjusted annually. Annual parameter adjustments should consider changes in variation of funded student counts over time, as well as changes in the index rate of the budget envelope.
- Implement the minimum funding guarantee, with clear guidelines on minimum funding guarantee levels of each school each year, how levels are determined, and how levels are adjusted each year.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- Recommendation 6

|		
Supporting evidence: The largest driver of funding variability is caused by enrolment movements both within a school year, and over time, largely due to student mobility. Point-in-time measures of enrolment tend to be more variable over time and are less representative of resource needs of a school over a school year.	**Recommendation 10: Move towards a student count methodology that is based on an average of week 4 term 1 in the current school year, and August Age Grade Census in the previous year.** This approach to enrolment count would balance the need for greater budget certainty for schools, with the inherent responsiveness of a student-driven needs-based resourcing model. The implementation of this approach to enrolment count could occur prior to, or in conjunction with, the recommended move away from effective enrolment to an enrolment-based methodology for the purpose of allocating variable funding through the SRM. **Interdependencies:** The implementation of this recommendation is dependent on the following: - the recently revised Enrolment Policy - Recommendation 3.	Short term

Deloitte Access Economics

Section 1 | Introduction

About this Review

- purpose of the Effective Enrolment Review
- methodological approach
- structure of this report
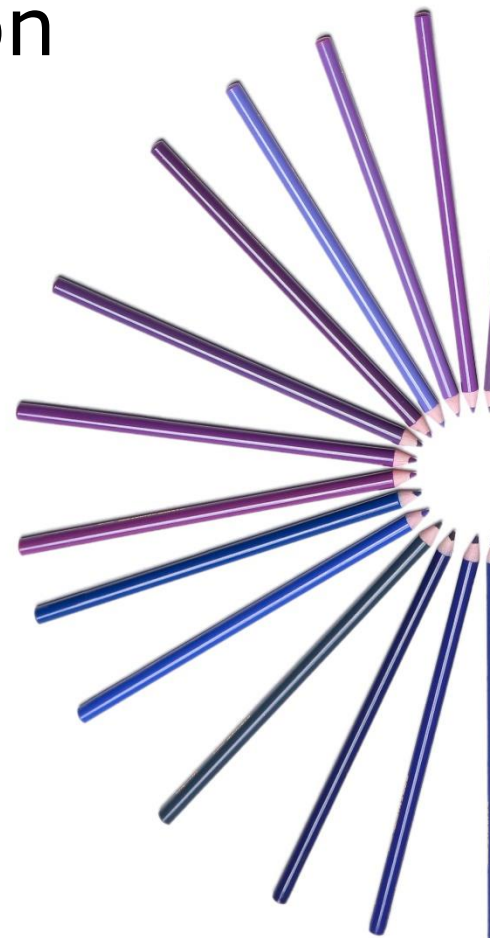
1 Introduction

The Northern Territory Department of Education (the Department) engaged Deloitte Access Economics in partnership with Charles Darwin University's Northern Institute (CDUNI) to conduct a review of the effective enrolment methodology (the Review) used in the School Resourcing Model (SRM).

## 1.1 Motivation and purpose of this Review

As set out in the Education NT 2021-2025 Strategy, the Department is on a journey towards becoming the most improving education system in Australia. Engaging every student in learning is a key system priority on the path to achieve this ambition, with a headline improvement target being to "*increase in the number of days students attend school each year by 10 days*".

School funding plays a critical role in ensuring schools have adequate resources to meet the needs of their student community in their local context. Effective funding model design can enable the system to direct resources towards driving outcomes for students, as well as signal its policy priorities to schools and communities. However, although an essential enabler, effective funding design on its own is not sufficient to drive system-wide improvement. Funding design should be considered as part of a broader set of interdependent policy levers that work cohesively to improve student outcomes.

In the Northern Territory (NT), government schools are allocated funds through the School Resourcing Model (SRM), which was implemented in 2015. A review of the SRM conducted in 2017 outlined 20 recommendations, including a recommendation regarding the way students in the NT are counted for the purposes of funding allocation. Currently, the SRM allocates NT and Australian Government funding to schools through several channels, including through targeted funding programs, fixed funding for property management and essential services and student needs-based variable funding (variable funding) (Figure i).

Variable funding is the largest component of the SRM, accounting for approximately 65% of total school funding in 2021. The variable funding allocation to schools is influenced by several factors, including effective enrolment (the method of student count at each school – the focus of this Review), as well as weightings for each student based on their relative needs (student-needs based weights). Further, in addition to the SRM, there are additional programs that are centrally administered across the NT to promote attendance and engagement, such as funding through collaborations with the Stars Foundation and Clontarf Foundation (which are funded by the Australian Government). The role and impact of these programs has not been reviewed as part of this project but should be considered alongside the SRM and the findings of this Review with respect to effective enrolment.

Figure iii: The NT Government School Resourcing Model
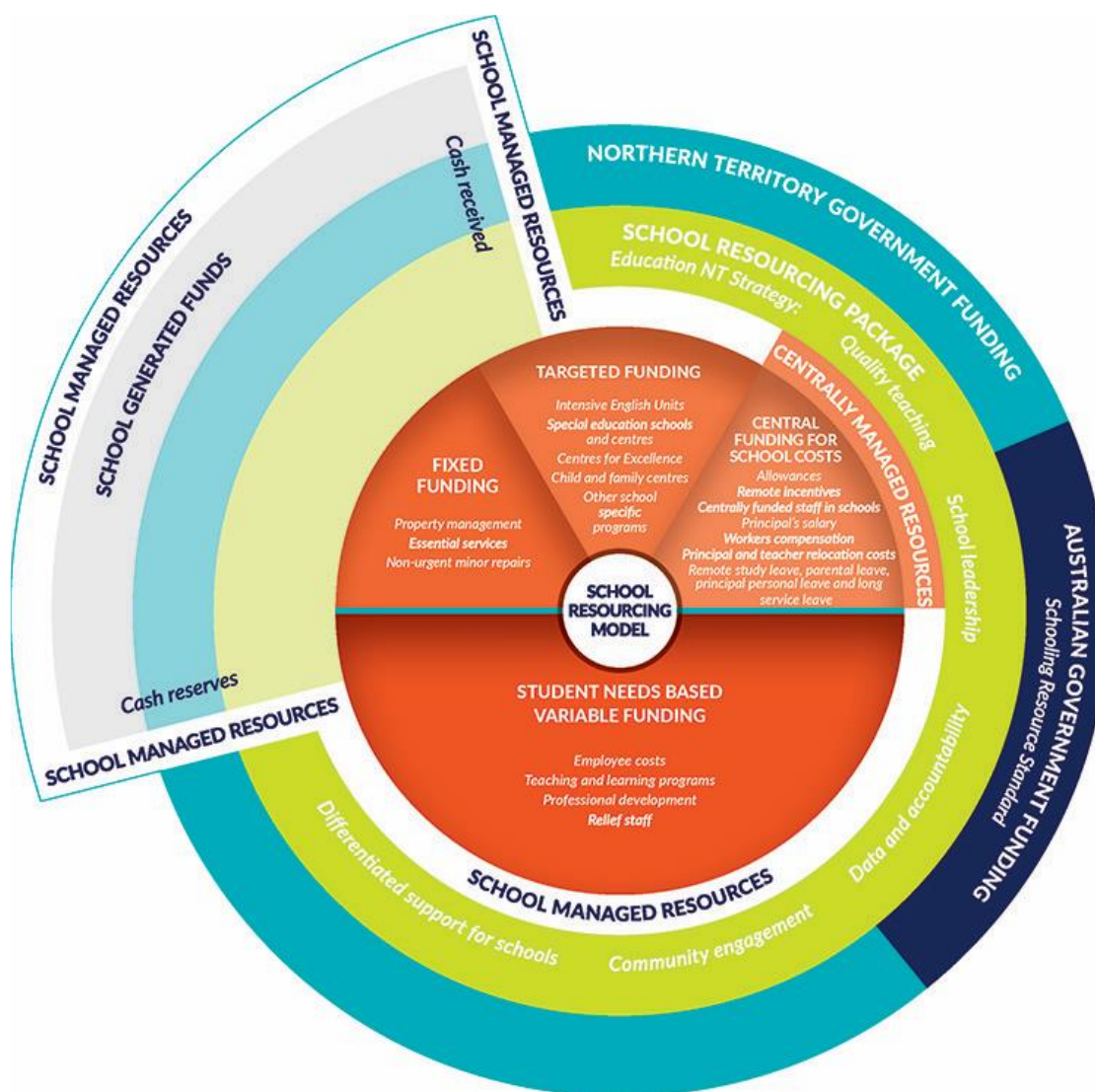

Source: NT Department of Education (2022)

Effective enrolment is a measure currently used to determine the number of funded students for the purposes of allocating the variable funding component of the SRM to NT Government funded schools. Effective enrolment is calculated by averaging the two highest non-consecutive weeks of attendance in each term over four terms (one year).[17] While all measures of enrolment include some basic threshold of attendance to determine whether students are functionally enrolled at a school, at present the NT is the only jurisdiction in Australia that uses a combination of school enrolment and attendance data to pro-rate school enrolments for the purposes of allocating student needs-based funding resources.

The effective enrolment measure is used in the SRM as the main mechanism to determine variable funding for government schools in the NT. Through this funding allocation, each school has a different per student funding rate that is a function of its student cohort profile, with each student attracting a consistent base rate per FTE and additional weightings depending on their characteristics (see Figure 1.1). Variable funding allocation within the SRM is calculated by

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[17] For the purposes of this calculation, explained absences (e.g., due to sickness) are counted as present.

multiplying the per student funding rate by the effective enrolment number. [18] For schools below a certain size, a small school supplement is provided, also based on the effective enrolment number.

Figure 1.1: Overview of the variable funding allocation method within the SRM
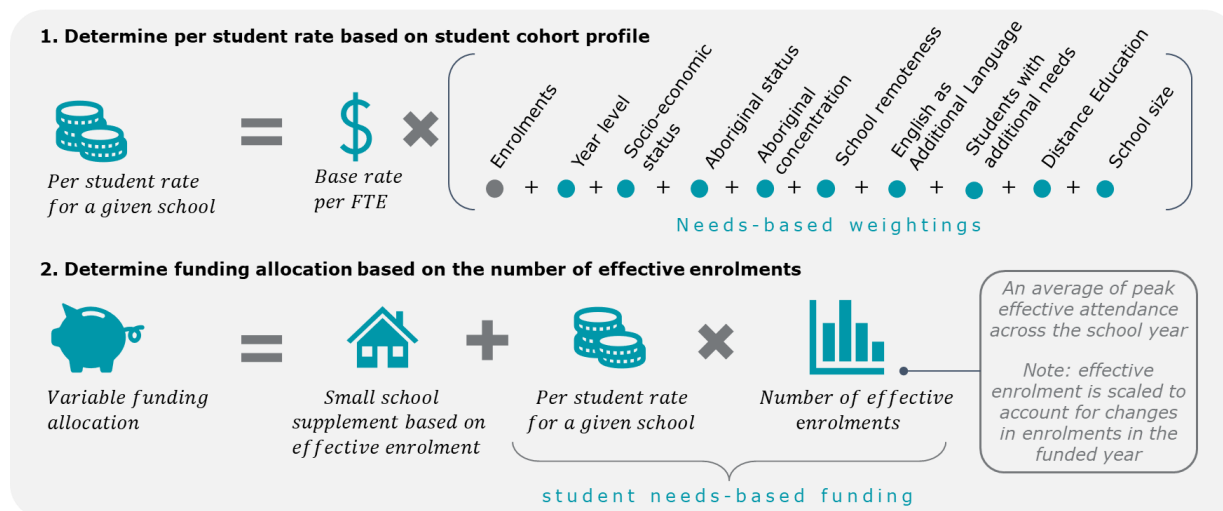
Source: Deloitte Access Economics (2022).

The use of school attendance to inform resource allocation to schools in the Northern Territory pre-dates the effective enrolment methodology, with methods such as single day student count being used in the past. However, at present, the NT is the only jurisdiction in Australia using a combination of school enrolment and attendance data as a component of base funding allocation.

In this context, the purpose of this Review is to perform an independent analysis of the effective enrolment methodology currently used as part of the Department's SRM. In particular, the key components of the analysis include (see Appendix A for detailed scope specifications):

- the current effective enrolment measure and its appropriateness to allocate a funding pool equitably, subject to budget parameters
- the current methodology to apply effective enrolment within the SRM and its impacts on funding volatility
- how the effective enrolment methodology interacts with other components of the SRM, such as the various weightings for equity factors in the Student Needs Based Funding (SNBF) model, and the small school supplement.

In addition, the Review aims to provide options on alternative methodologies to allocate a funding pool to schools based on student numbers as part of the broader SRM allocation. In analysing and proposing alternative methodologies, this Review acknowledges the role of other policy levers, centralised grants and programs in system improvement – such as regional supports, workforce strategy, accountability mechanisms, and improvement initiatives – and that recommendations made as part of the Review may have implications on these policy levers too.
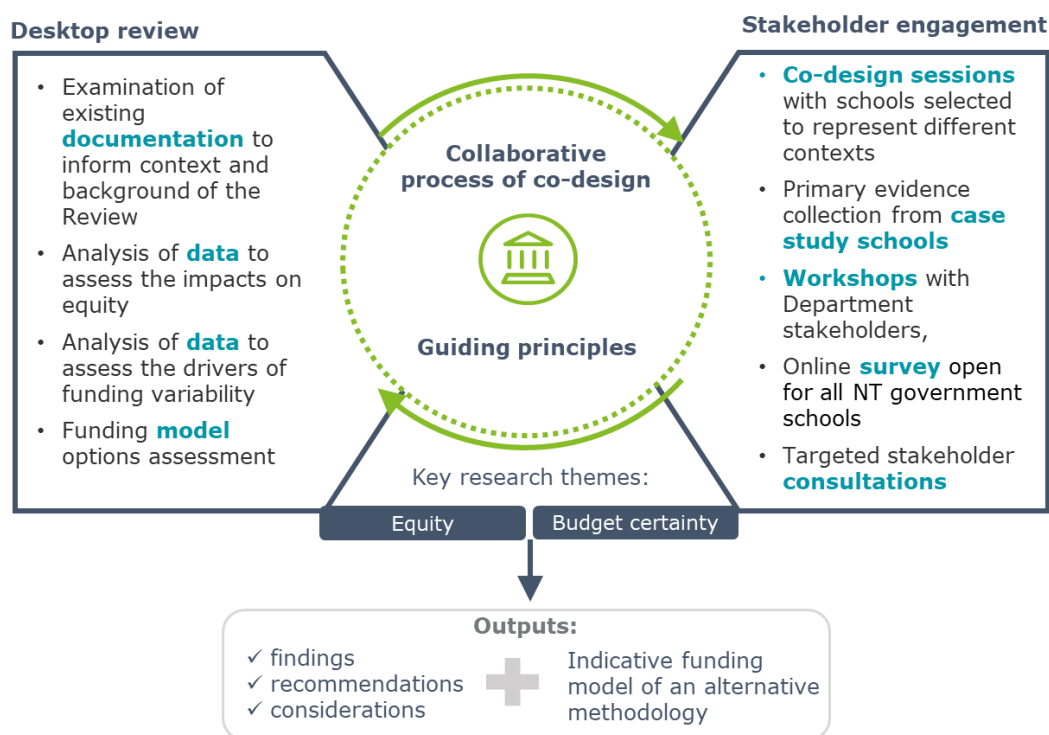
1.2   Approach

Deloitte Access Economics in partnership with the Northern Institute at CDU, conducted the Review between January and May 2022.

This Review followed a mixed-methods approach to the assessment of the effective enrolment methodology used in the SRM. This incorporated a number of discrete research components shown in Figure 1.2 below, including a desktop review of policy documentation, detailed data analysis and modelling, and an extensive stakeholder engagement process. Ongoing results from each

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[18] The final number of funded students is based on effective enrolments adjusted for any changes in enrolments from prior to current year Week 4 of Term 1 enrolments. This is done to ensure that the effective enrolment number (calculated using past calendar year data) reflects enrolments in the current funded year.

component were applied to informing an ongoing collaborative process of designing potential alternative methodologies.

Figure 1.2: Overview of the methodological approach

Source: Deloitte Access Economics (2022).

1.2.1   Guiding Principles

The approach is guided by a policy framework, against which both the Review is conducted, and recommendations made. The framework, and its application, is anchored in a number of policy objectives and principles outlined in the Department's brief. This, for instance, includes considering that the SRM was implemented in 2015 "*with the aim of providing schools with more autonomy and resourcing arrangements that were simpler, transparent and flexible and based on the needs of students and schools*". It is recognised that the Department seeks to refine the SRM "*to ensure that the model meets the needs of schools and students and that the model allocates funding in an equitable, transparent and efficient manner (…) [and] improve funding certainty for schools to provide schools with the confidence to plan for staffing and operations in the longer term*". Another consideration is to ensure that modelling of potential alternative methodology options aims to "*allocate the school funding pool to schools based on student numbers that would ensure equity, funding certainty, stability and transparency while aligning to the Australian Government's needs-based funding arrangement requirements under the Australian Education Act 2013*." [19]

These policy objectives and principles subsequently gave rise to the following five guiding principles for this Review:[20]

- **Effectiveness** - The funding model should be needs-based and calibrated to support the system in achieving its overarching equity and excellence goals.
- **Sufficiency** - The funding model should ensure that funds are sufficient to provide an acceptable level of quality education for all learners.

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[19] See Appendix A

[20] The above principles were co-designed by Deloitte Access Economics, CDUNI, and the Department, tested with three peak body organisations, and informed by literature on effective school funding design. Peak body organisations included Northern Territory Principals' Association (NTPA), the Northern Territory Council of Government School Organisations (NT COGSO), Australian Education Union Northern Territory (AEU NT).

- **Practicality** - The funding model should facilitate effective school resourcing and planning, while being responsive to changing school needs.
- **Continuity** - Any changes to the funding model should be implemented in a way that minimises disruptions to existing effective practice.
- **Transparency** - The funding formula is accessible, clear and simple to understand for stakeholders.

These key principles, along with their implications for the Review are presented in Appendix A.

1.2.2 Stakeholder engagement
Stakeholder engagement was central to the Review process and consisted of:

- **Co-design sessions with schools:** co-design workshops with a group of twenty schools (advisory group) selected to represent different contexts within the NT.
- **Case study data collection:** in-depth consultations with school principals and business managers of eight schools to develop a deeper understanding of how schools manage their budgets, allocate their resources and respond to student needs.
- **System-wide survey:** A system-wide voluntary survey for all Government schools designed to collect systematic data across the system on cost drivers, budget management, and identify most pressing gaps in provision (see Appendix G for response rate detail).
- **Department workshops:** two workshops with nominated Department staff with expertise relevant to the Review were held. The purpose of the workshops was to develop the guiding principles for the Review, present preliminary results of the modelling and data analysis, and to seek feedback on model parameters and underlying assumptions.
- **Targeted consultations:** additional targeted consultations with representatives from:
  - the Department of Education, the Department of Treasury and Finance, and the Department of the Chief Minister and Cabinet
  - peak body organisations including the Northern Territory Council of Government Schools (NT COGSO), the Australian Education Union (AEU), Northern Territory Principals Association (NTPA), the Association of Teachers of English to Speakers of Other Languages (ATESOL), the North Australian Aboriginal Justice Agency (NAAJA)
  - subject matter experts.
- **Knowledge sharing sessions**: knowledge sharing sessions with other jurisdictions, including Western Australia, California (US), Alberta (Canada) and Manitoba (Canada).

It is acknowledged that the timing of the Review coincided with the largest COVID-19 outbreak in the NT recorded to date, during which the Department imposed restrictions on engagement with schools for research purposes. As a result, any in-person school and community engagement, such as engagement with school representative bodies, or extensive engagement with broader school staff was not feasible within the project timeframes.

To address this limitation, insights collected as part of the Engagement Strategy community engagement process were considered as part of this Review.

1.2.3 Desktop review and data analysis
In addition to stakeholder engagement, the Review analysed relevant documentation and data. The analysis was guided by three key objectives:

- **Inform context and background of the Review:** analysis of policy documentation and secondary data to inform the understanding of the policy background, build on existing evidence and inform primary data collection activities.
- **Review the effective enrolment methodology and its impacts:** analysis of primary and secondary data to understand the impacts of the current methodology, focusing on system equity and budget certainty.
- **Alternative options assessment:** a dynamic funding model was developed to assess the proposed alternative methodology against the effective enrolment methodology.

Section 2 | Background

Context to this Review

- policy background
- needs-based funding in Australia
- the School Resourcing Model in the Northern Territory
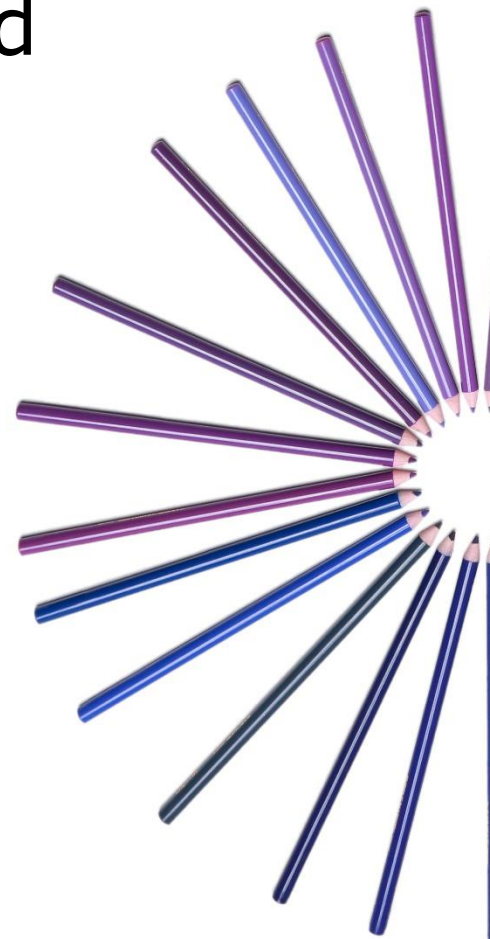
2 Background

2.1 Policy background

2.1.1 Goals and objectives of the NT schooling system

The evaluation of resource allocation methods within any system should be conducted with respect to the system's objectives, and policy and legislative frameworks. The following documents in particular set out the goals for school education in the Northern Territory:

- Alice Springs (Mparntwe) Education Declaration 2019
- Northern Territory of Australia Education Act 2015
- Northern Territory Department of Education 2021-2025 Strategy
- Northern Territory Government's Education Engagement Strategy 2022-2031.

National goals for schooling reform in Australia are outlined in Education Declarations signed by all Australian Education Ministers. The most recent being the **Alice Springs (Mparntwe) Education Declaration** signed in 2019, which sets out the vision and commitment of all State and Territory governments to an education system that promotes excellence and equity. While the overarching goals are similar to those in the preceding 2008 Melbourne Declaration, the Mparntwe Declaration places additional emphasis on improving outcomes for Aboriginal and Torres Strait Islander students.

Governance of education provision in the Northern Territory is set out in the **Northern Territory of Australia Education Act 2015** (the NT Education Act). Students of compulsory school age (six to seventeen years of age) are required to attend school, and it is the responsibility of parents to ensure school attendance. The role of the Minister (and therefore the Department of Education) is to assist parents in meeting their responsibility to educate their children and to make schools available to them.

Beyond the outline of responsibilities, the NT Education Act's objects and principles establish a vision on the purpose of education and a clear commitment by government to providing quality education for all children and young people in the Territory (see Appendix C for a full list). Education is not only seen as a means of enabling students to reach their potential, but also as the foundation for social and economic advancement. Community and family contexts are acknowledged as playing important roles in student engagement and achievement at school.

More recently, in 2018, the NT Department of Education has outlined a plan to become the most improving education system in Australia. The Department's **Education NT 2021-2025 Strategy** is fundamentally built around equity in educational access and outcomes. The Strategy outlines seven system priorities that put the 'child and the student at the centre' and ensure, among other things, that the system 'engage(s) every child and student in learning', recognising that student engagement in education is critical to supporting positive learning outcomes. One of the headline improvement measures used to monitor progress and evaluate the Department's efforts against the Strategy is an "*increase in the number of days students attend school each year by 10 days*".

Alongside the Department's overall strategy, the **Education Engagement Strategy 2022-2031** sets out four sets of goals and actions for reform over the coming decade centred around:

1. relationships
2. culture and identity
3. wellbeing and inclusion
4. beliefs and motivation.

The goals and actions go beyond a focus simply on student attendance and get to the heart of student and community attitudes towards education, including how cultural, social, and linguistic diversity is valued, celebrated, and embedded in learning to support inclusion. They also emphasise the importance of working with families and communities to create and engage students in learning

programs that meet their needs and ensure that students' beliefs, interests, and aspirations are at the centre of their learning.

This includes building the capacity of teachers and school leaders across the Territory to re-engage students in education and to accelerate and expand programs, development opportunities and pathways that attract, retain, and promote Aboriginal educators.

Among other things, the Department has outlined actions to work with communities to identify ways cultural learning can be recognised in and through the curriculum, and to embed Aboriginal language and cultural knowledge and perspectives in education, including through bilingual education.

The assemblage of principles, goals and objectives outlined in the documents described above forms the basis on which the guiding principles for this Review were developed (see Section 1.2.1):

- providing quality education for all children and young people in the Territory
- promoting excellence and equity, and in particular improving outcomes of Aboriginal and Torres Strait Islander students
- assisting parents to meet their responsibility of ensuring that their children attend school (unless alternative education settings are agreed)
- recognising that student engagement in education is critical to supporting positive learning outcomes and that this extends beyond student attendance at school.

2.1.2   Education needs within the NT government schools
The NT government schooling system is diverse and complex, which provides unique and specific challenges to achieving the goals and objectives summarised in Section 2.1.1.

With 34,000 students in 153 government-funded schools, spread across 1.35 million square kilometres, the NT's schooling sector is characterised by vast distances between schools and a high number of remote or very remote students.

Further, remote regions of the Northern Territory are characterised by significant diversity and multidimensional needs of students.[21] For example:

- 65 per cent of school aged children in remote areas are Aboriginal compared to 39 per cent in remote areas in Australia generally (accounting for 37 per cent of school aged Aboriginal children throughout remote Australia)
- 52 per cent of school aged children in remote areas of the Northern Territory speak a language other than English in the household (compared to 20 per cent in remote Australia)
- On average, 34 languages are spoken per remote or very remote community in the Northern Territory, compared to 23 throughout remote Australian communities. Further, there are over 100 confirmed Aboriginal languages or dialects spoken throughout the Northern Territory[22,23]
- Mean household income in very remote areas of the Northern Territory is approximately 45 per cent lower than the mean household income across Australia.[24]

These gaps reflect the complex nature of the landscape of the Northern Territory where families often occupy multiple disadvantaged demographic categories. The intersectionality of disadvantage may compound in a way that is not purely additive in its impact upon outcomes (i.e., educational need resulting from multiple disadvantages may be greater than a sum of its parts). Aboriginal families often reside in remote areas, experience inter-generational trauma, have lower household incomes, have poorer health and access to health services, and speak English as a second language in the Northern Territory.[25]

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[21] Statistics are sourced from ABS Census 2016

[22] https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/IQS7

[23] https://nt.gov.au/community/interpreting-and-translating-services/aboriginal-interpreter-service/aboriginal-languages-in-nt

[24] ABS Census 2016. Communities are identified as ABS statistical area 2 regions.

[25] https://health.nt.gov.au/professionals/aboriginal-and-torres-strait-islander-health

Improving educational opportunities and outcomes of students in the NT is therefore critical to achieving the vision of the National Agreement on Closing the Gap to "*overcome the entrenched inequality faced by too many Aboriginal and Torres Strait Islander people so that their life outcomes are equal to all Australians*".[26]The educational gap between Aboriginal and other students is wider in the Northern Territory than elsewhere in Australia. This is driven largely by poorer educational outcomes in remote communities in the NT, relative to Australia (see Chart 2.2). Improving effectiveness of the NT government schools is particularly important for helping Aboriginal students, who accounted for 39.1 per cent of NT enrolments in 2019, reach their full potential. Educational outcomes for Aboriginal students in the NT are consistently lower compared to their peers throughout the rest of Australia, with a smaller proportion of students at or above national minimum standards, with just 49 per cent of Aboriginal meeting the national minimum students for Year 3 reading, compared to 84 per cent of Indigenous students throughout Australia.[27]

Moving the needle on educational outcomes for Aboriginal students in the NT is of national significance. More than one in three (37.6 per cent) Aboriginal students living in remote or very remote locations across Australia are located in the NT.[28] One of the headline Closing the Gap targets is to increase the proportion of Aboriginal people (age 20-24) attaining year 12 or equivalent qualification to 96 per cent. Aboriginal young people in the NT are approximately 50 per cent less likely to complete year 12 or equivalent, compared to non-Aboriginal people.[29] This gap tends to be wider for the Northern Territory communities (particularly remote communities) than the majority of communities throughout Australia (Chart 2.1).

Chart 2.1: Proportion of people aged between 20 and 25 years within each ABS statistical area 2[30] who have completed Year 12 schooling or equivalent, by Indigenous status
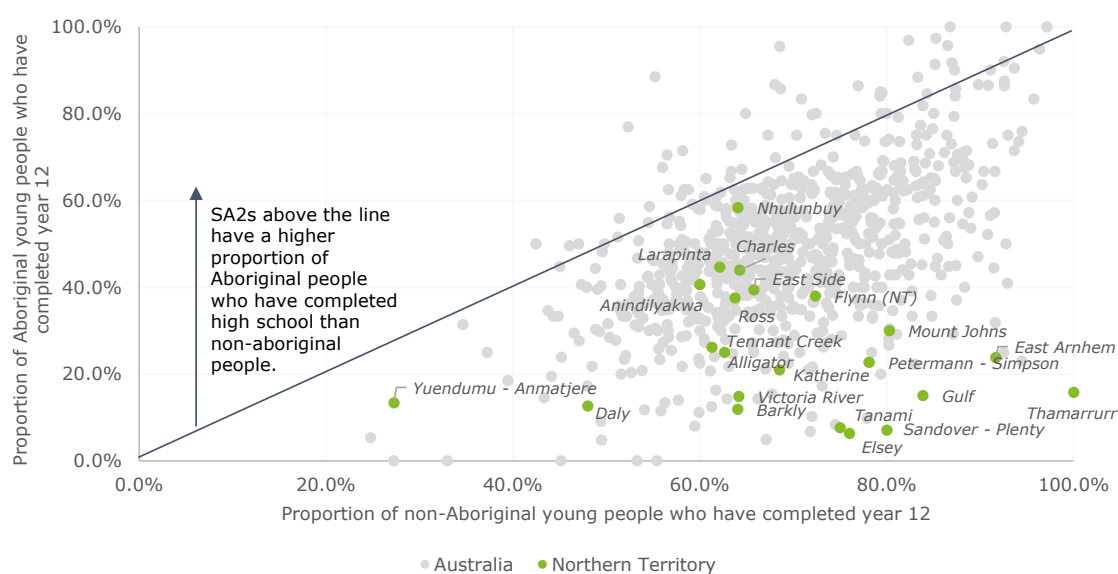
Source: Deloitte Access Economics analysis using population data from ABS Census 2016

Notes: a) The diagonal 45-degree line represents parity between two demographic groups within an ABS statistical area 2. If an ABS statistical area 2 is below the diagonal line, higher proportion of non-Indigenous people have completed Year 12 education than Aboriginal people.

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[26] Source: < https://www.closingthegap.gov.au/national-agreement/national-agreement-closing-the-gap/3-objective-and-outcomes>
[27] Australian Government, An Ongoing Journey: Working Together.
https://www.pmc.gov.au/sites/default/files/reports/closing-the-gap-2018/education.html
[28] Source: Census 2016 - Aboriginal people aged between 5 and 19 years and living in remote or very remote areas located in the NT at the last Census
[29] Source: Census 2016 – proportion of Aboriginal and non-Aboriginal people aged between 20 and 25 years that had completed a year 12 education, within each ABS statistical area 2
[30] An ABS statistical area 2 is social geography, developed to reflect the location of people and communities.

The educational gaps are also reflected in NAPLAN results. Overall, in Australia, Aboriginal students, students located in remote regions, students that speak English as a second language, and students whose parents did not complete year 12, achieve lower NAPLAN results than their peers. However, educational gaps across these demographic factors are worse in the NT than throughout Australia (Chart 2.2).

Chart 2.2: Proportion of students that had a NAPLAN score for reading at Year 3 of at or above the national minimum standard
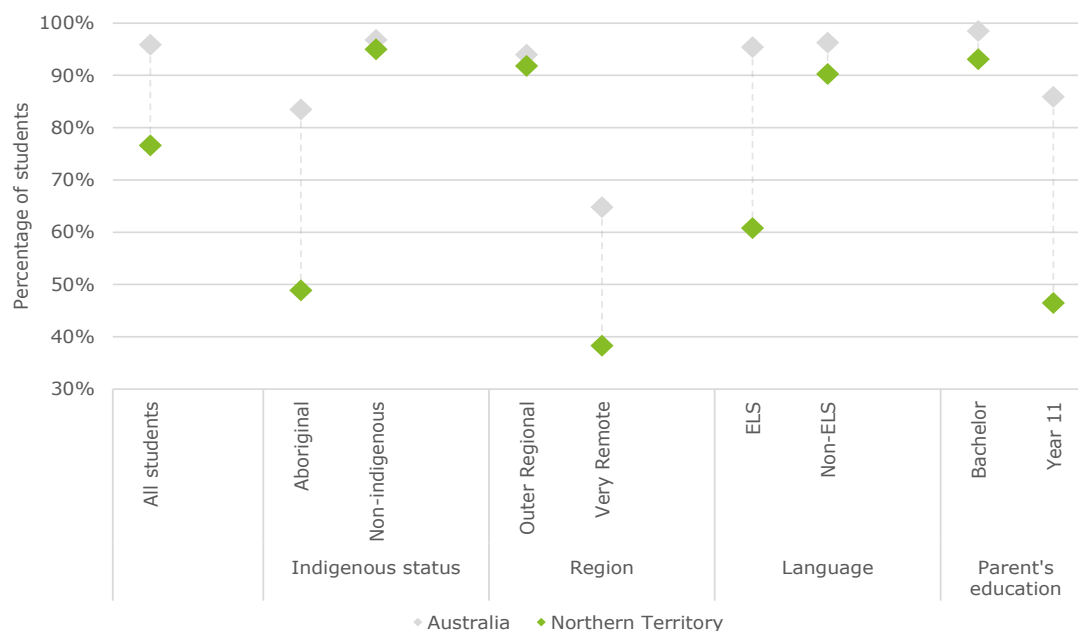
Source: Deloitte Access Economics analysis using Australian Curriculum Assessment and Reporting Authority 2021

Notes: NAPLAN results are for reading at the Year 3 level.

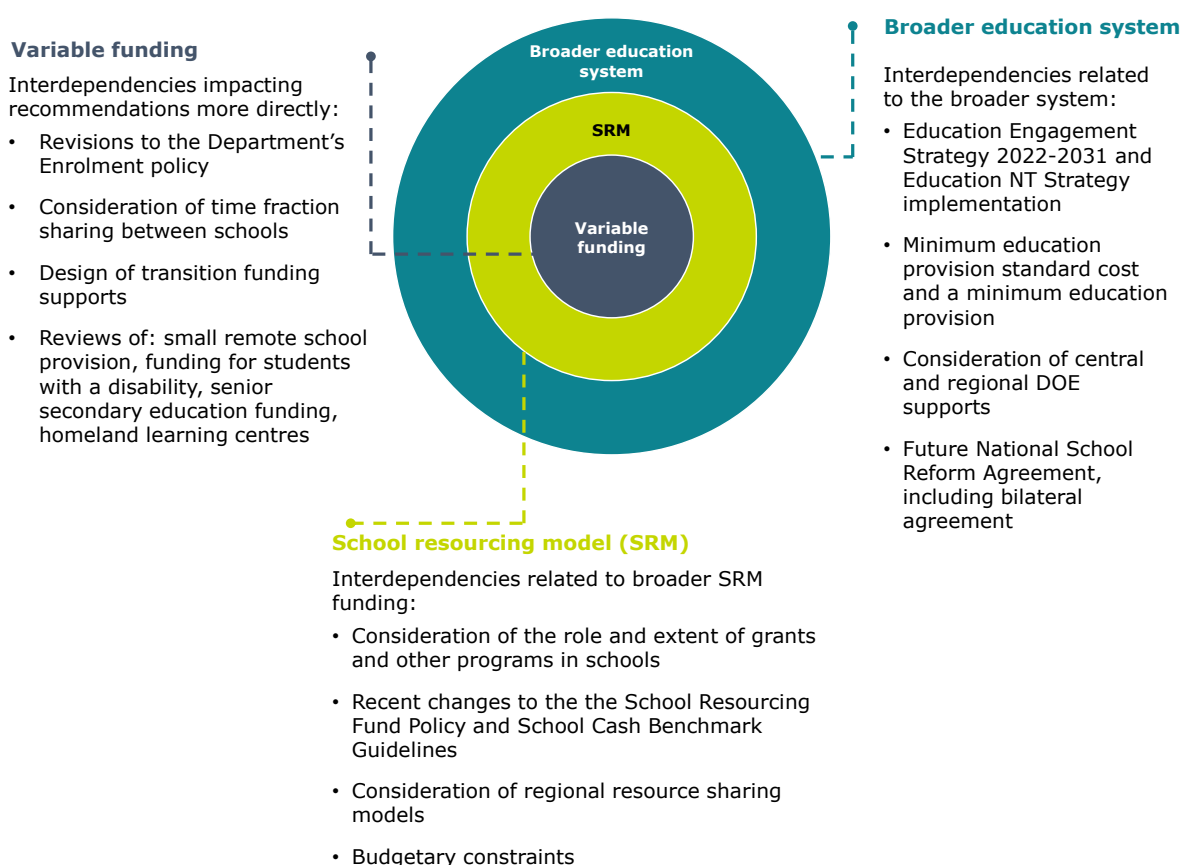## 2.2   Needs-based school funding in Australia

2.2.1   Funding design as a policy lever

In conceptualising how school funding can best support the system's ability to achieve its goals it is necessary to understand the broader governance environment within which schools make decisions about delivery education. School funding plays a critical role in ensuring schools have adequate resources to meet the needs of their student community in their local context. Funding models can also create incentives for schools to invest in certain resources and to organise their teaching and learning programs in certain ways.

However, funding alone is not sufficient to drive improvement in educational outcomes. Many factors contribute to variation in learning outcomes, including how schools use funding (which is subject to a degree of school autonomy), school cultural, teacher characteristics, access to specialist staff and resources, and broader regional context, such as socio-economic status etc. Funding model design is one of many system levers that are being used to respond to the challenges identified by the system and realise its vision.

Figure 2.1 provides an overview of the policy and programs that are interdependent with the variable funding component of the SRM. The implications of this Review should be considered with the limitation of the role of school funding in mind in achieving outcomes for students, as well as the broad range of interdependent factors that would need to alter for improved student outcomes to be achieved.

Figure 2.1: Examples of factors and policy levers that influence how school funding design can support the system's ability to achieve its goals

Variable funding

Interdependencies impacting recommendations more directly:

- Revisions to the Department's Enrolment policy

- Consideration of time fraction sharing between schools

- Design of transition funding supports

- Reviews of: small remote school provision, funding for students with a disability, senior secondary education funding, homeland learning centres

Broader education system

Interdependencies related to the broader system:

- Education Engagement Strategy 2022-2031 and Education NT Strategy implementation

- Minimum education provision standard cost and a minimum education provision

- Consideration of central and regional DOE supports

- Future National School Reform Agreement, including bilateral agreement

School resourcing model (SRM)

Interdependencies related to broader SRM funding:

- Consideration of the role and extent of grants and other programs in schools

- Recent changes to the the School Resourcing Fund Policy and School Cash Benchmark Guidelines

- Consideration of regional resource sharing models

- Budgetary constraints

2.2.2   Needs-based recurrent school funding in Australia

Although schooling provision is primarily the role of the NT government, the Australian Government plays a key role in the funding of schools. The Australian Education Act 2013 (the Act) is the main legislation governing Australian Government funding to government schools and is supported by bilateral agreements with States and Territories. Section 1.3.8 of the Act outlines that:

Australian schooling will place the highest priority on:

a) *identifying and addressing the needs of school students, including barriers to learning and wellbeing; and*
b) *providing additional support to school students who require it.*

Australian Government recurrent funding, provided to States and Territories to then be allocated to schools, must be distributed "*in accordance with a needs-based funding arrangement*" (subparagraph 73(3)). Under the Act, States and Territories can distribute Australian Government funding to schools according to the Schooling Resource Standard (SRS) or based on their own needs-based funding arrangements. System-developed arrangements must comply with ongoing needs-based funding requirements as specified in subparagraph 78(5) (see Appendix C.2).

Importantly, under a student needs-based funding system, NT government schools generally require higher levels of funding and expertise relative to the rest of Australia, with more students living in remote or very remote areas, combined with comparatively high levels of disadvantage. This is reflected in the NT's SRS (approx. $29,000 per student in 2020), which is considerably higher than every other state or territory (with the second highest per student rate of $19,000 being in Tasmania). [31]

By 2029, the Australian Government expects to fund 20 per cent of SRS costs for Australian public schools, with the remaining 80 per cent paid for by state and territory governments. In moving towards this target, the NT Bilateral Agreement, signed in December 2018 as part of the National School Reform Agreement,

> **The Schooling Resource Standard**
>
> The SRS estimates the level of funding that schools need in order to meet their students' educational needs. It was first introduced in 2014, in response to recommendations from the 2011 Review of Funding for Schools (the "Gonski Report"). It is used by the Federal Government to determine the Commonwealth's share of school funding to be allocated to Approved System Authorities (e.g., NT Department of Education). These Approved System Authorities distribute funding to schools based on their own needs-based funding arrangements (e.g., SRM).
>
> The SRS represents a benchmark estimate of how much resourcing Australian schools need to educate a child. The SRS is calculated using a base amount and additional weights aimed at capturing student needs and school disadvantage, as determined by school size and socioeconomic disadvantage of the school's location. The parameters and amounts, which are adjusted each year in line with wages and consumer price inflation, were selected after examining schools where students had regularly achieved NAPLAN results above the national minimum standard.

outlined an increasing share of the Territory's SRS to be paid for by the NT Government (see Table 2.1).

Table 2.1: Share of funding contributions to government schools in the NT as per the bilateral agreement

Level of government	2018	2019	2020	2021	2022	2023
NT Government	55.2%	56.0%	57.0%	58.0%	58.5%	59.0%
Australian Government	23.5%	23.1%	22.7%	22.3%	21.9%	21.6%

Source: NT Bilateral Agreement, Senate Standing Committees on Education and Employment No. SQ20-000151.

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[31] Senate Standing Committees on Education and Employment No. SQ20-000151. (2020) <https://www.aph.gov.au/api/qon/downloadattachment?attachmentId=0b08e9a1-817f-4b34-aaeb-63aa240987c7>

Recurrent funding from the NT Government for schooling is the highest in Australia at approximately $15,100 per student in 2020 (see Chart 2.3).[32] Total net recurrent income (which includes Australian Government funding and other sources of income) is on average $23,500 per student – also the highest amount in Australia. However, the NT schools are also funded at the lowest proportion of their estimated SRS in the country (approx. 78per cent of $29,800).

Chart 2.3: Estimated school funding and SRS per student by state/territory, 2020:
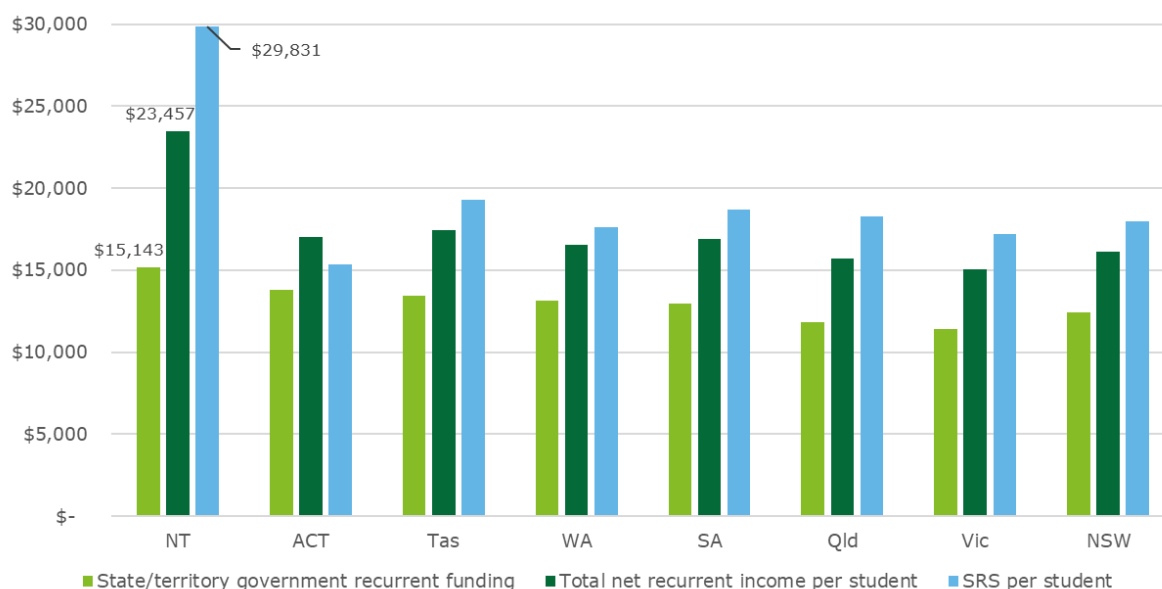
Source: ACARA,[33] Senate Standing Committees on Education and Employment No. SQ20-000151. [34]
Notes: Net recurrent income per student includes all income received by a school (minus government investment in capital grants and student deductions) divided by the number of enrolments at a school.

The SRS has well known limitations and is by no means a perfect measure of schools' resourcing needs. For example, a key limitation of the SRS is that the sample of schools used to estimate appropriate funding amounts based on student and school characteristics did not include any government schools from the NT. This raises further uncertainty as to whether the SRS is an appropriate measure of school funding requirements in the NT, where geographic and socio-economic characteristics are significantly different from the rest of Australia (see Appendix D for more details). However, despite these limitations, the discrepancy in school funding compared to the SRS (Chart 2.3) raises questions around the sufficiency of school funding in the system as a whole to meeting the complexity, disadvantage and needs of students in the NT.

2.3 The School Resourcing Model in the NT
2.3.1 Student Needs-Based Funding
In the NT, government schools are allocated funds annually through the SRM to supporting resourcing of schools. Under the SRM schools receive four categories of funding:

- Variable funding – *the largest component which relies on the effective enrolment methodology*

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[32] ACARA, School income and capital expenditure for government and non-government schools (accessed 7 June 2022) < https://www.acara.edu.au/docs/default-source/default-document-library/school-income-and-capital-expenditure-for-government-and-non-government-schools-dataset9c2c2f404c94637ead88ff00003e0139.xlsx?sfvrsn=2fb84c07_0>
[33] ACARA, School income and capital expenditure for government and non-government schools (accessed 7 June 2022) < https://www.acara.edu.au/docs/default-source/default-document-library/school-income-and-capital-expenditure-for-government-and-non-government-schools-dataset9c2c2f404c94637ead88ff00003e0139.xlsx?sfvrsn=2fb84c07_0>
[34] Senate Standing Committees on Education and Employment No. SQ20-000151. (2020) <https://www.aph.gov.au/api/qon/downloadattachment?attachmentId=0b08e9a1-817f-4b34-aaeb-63aa240987c7>

- Fixed (facility) funding
- Targeted funding
- Central funding for school costs.

Further, there are additional programs that are centrally administered across the NT to promote attendance and engagement, such as funding through collaborations with the Stars Foundation and Clontarf Foundation (which are funded by the Australian Government).

The intent of the variable funding component is to cover expenses related to core educational operations of the school, such as staff salaries, relief teaching, and professional development.

The SNBF formula, which determines a large portion of the variable funding component, is designed to recognise that these costs differ depending on school context, such as remoteness or school size. Each school has a different per student funding rate that is a function its student cohort profile, with each student attracting consistent base rate per FTE and additional weightings depending on their characteristics (see Figure 2.2). The SNBF is calculated by multiplying the per student funding rate by the student count measure, called the '*effective enrolment*', which captures average peak attendance across the school year.[35]

For schools below certain size, the SNBF formula would result in an allocation below the minimum funding for small schools. To address this gap, a small school supplement is provided. The small school supplement depends on the number of effective enrolments a school has.

Figure 2.2 below provides a simplified illustration of how variable funding is allocated.

Figure 2.2: Simplified illustration of the Student Needs Based Funding formula within the NT SRM
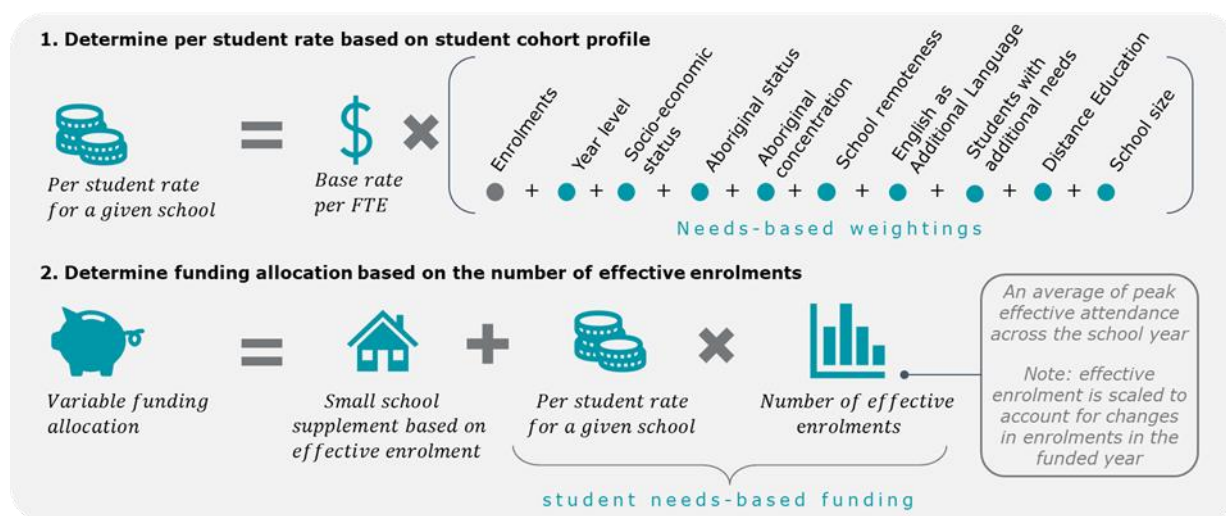
Source: Deloitte Access Economics (2022).

2.3.2 Introduction of the effective enrolment methodology

The use of attendance in the NT for the purposes of resource allocation pre-dates the effective enrolment methodology. Before the introduction of the effective enrolment method for allocating variable school funding, the Department allocated human resources to schools based on staff-to-

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[35] Effective enrolment is calculated by averaging the two highest non-consecutive weeks of effective attendance in each term over four terms (one year). Final student number is based on effective enrolments adjusted for any changes in enrolments from prior to current year Week 4 of Term 1 enrolments. This is done to ensure that the effective enrolment numbers (calculated using calendar year data) reflect enrolments in the current funded year.

student ratios, which relied on student count on one day of the year. These ratios were based on school provision models that relied on enrolments with some moderation based on attendance.[36,37]

The effective enrolment measure, which utilises each school's two highest, non-consecutive weeks of attendance, was positioned to be "*fairer, taking account of changes over the whole year*", and as a way to distribute and prioritise a finite pool of resources to "*schools with children attending and in front of the teacher*". [38,39]

As part of this change, schools were adjusting to newfound autonomy, possessing greater control of their school's budget and resourcing decisions. This move was partly motivated by the 2011 Gonski Report, whose authors wrote that "schools are best placed to make decisions about how to best use resources", citing research that showed "that school leaders who are able to make decisions, including decisions about hiring staff and over the school budget, do well in terms of student achievement, providing there are measures of school accountability".[40]

The evidence on the impacts of school autonomy on system performance and student outcomes is mixed.[41] While there are examples of case studies where autonomy over school funding allocation was linked to student achievement,[42] a number of resulting challenges for the system have been evidenced, such as higher financial risk exposure for schools, reduced centralised support, variability in school leaders' ability to realise the benefits of autonomy, and greater variation in education provision quality across schools.[43] Further, international research finds limited evidence that a school leaders' increased autonomy with managing resources is linked to impacts on student outcomes.[44]

Prior reviews of the NT's SRM found that schools are supportive of the move to increased autonomy, which allows school leaders to tailor school programs to best meet school and student needs.[45] However, the move to the SRM, and the associated increased autonomy received by schools occurred at a time when total Government funding for public schools in the NT was experiencing a slight decline (on a per FTE enrolment basis) (Chart 2.4).

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[36] Where attendance was very low, schools were staffed on a minimum of 60% attendance.

[37] Northern Territory Department of Education, *School Autonomy Project Steering Committee Brief*, Meeting date: 28 September 2016. Item No: 3.8.

[38] Ernst & Young, *Review of the Global School Budgets Funding Model* (report commissioned by Department of Education Northern Territory Government, September 2017)

<https://education.nt.gov.au/__data/assets/pdf_file/0005/464792/Report-from-the-Review-of-the-Global-School-Budgets-Funding-Model.pdf>.

[39] Minister for Education Peter Chandler, Media release (25 June 2013)

<https://territorystories.nt.gov.au/10070/582896/0/0>.

[40] Australian Government, *Review of Funding for Schooling Final Report* (December 2011)

<https://www.dese.gov.au/school-funding/resources/review-funding-schooling-final-report-december-2011>.

[41] Suggett, D. *School autonomy: Necessary but not sufficient. Evidence Base*, 2015(1): 1-33, <doi 10.4225/50/57C4E88DF2A4E>

[42] Caldwell, *Impact of school autonomy on student achievement: cases from Australia*, International Journal of Educational Management, Vol. 30 No. 7, pp. 1171-1187 (2016)

<https://www.emerald.com/insight/content/doi/10.1108/IJEM-10-2015-0144/full/html>

[43] Keddie, A., MacDonald, K., Blackmore, J., Wilkinson, J., Gobby, B., Niesche, R., Eacott, S., & Mahoney, C. (2022). *The constitution of school autonomy in Australian public education: areas of paradox for social justice*. International Journal of Leadership in Education, 25(1), 106–123.

<https://doi.org/10.1080/13603124.2020.1781934>

[44] Yong Tan. C, Dimmock. C and Walker. A, 'How school leadership practices relate to student outcomes: Insights from a three-level meta-analysis' (December 3, 2021) *Educational Management Administration & Leadership* <https://doi.org/10.1177/17411432211061445>.

[45] Ernst & Young, *Review of the Global School Budgets Funding Model* (report commissioned by Department of Education Northern Territory Government, September 2017)

Chart 2.4: Estimated school funding per FTE enrolment for NT public funding schools, by source
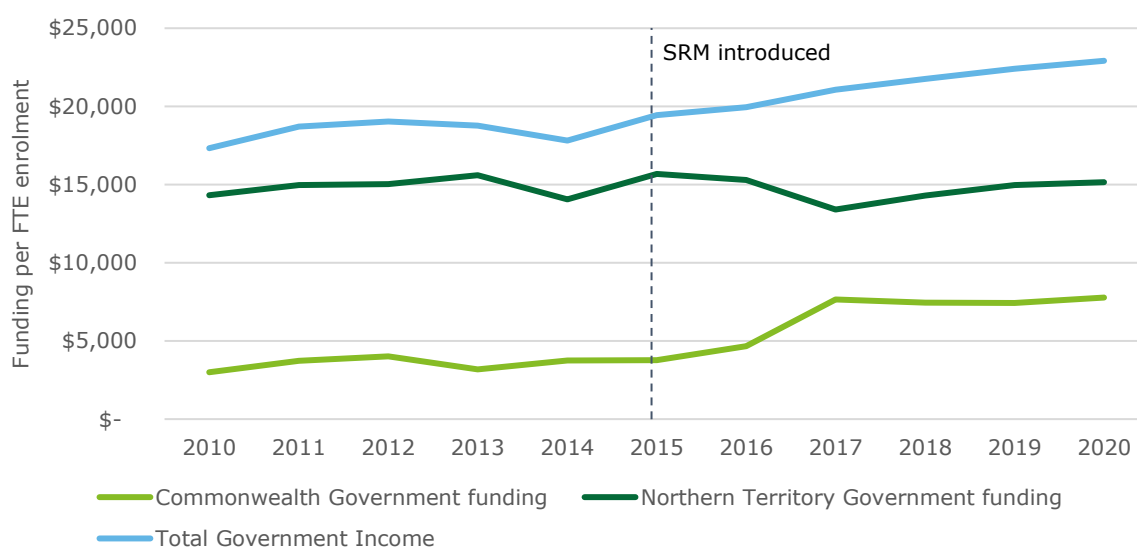
Source: ACARA,[46]

These dynamics led to stakeholders within the public school system to potentially conflate the impact of the introduction of effective enrolment with a range of other changes occurring at the same time, with many schools perceiving the move to the SRM and effective enrolment measure as the source of funding declines. Further, greater school autonomy provided by the SRM system contributed to greater budget uncertainty of schools due to the transition to the new model (as highlighted throughout this Review). This increase in autonomy may have contributed to a decline in teaching FTE staff per student as schools looked to proportionally increase teaching support staff in replace of full-time teaching staff (Chart 2.5).

Chart 2.5: Teachers (FTE) per 100 students (FTE) in NT Government-funded schools; 2006 to 2021
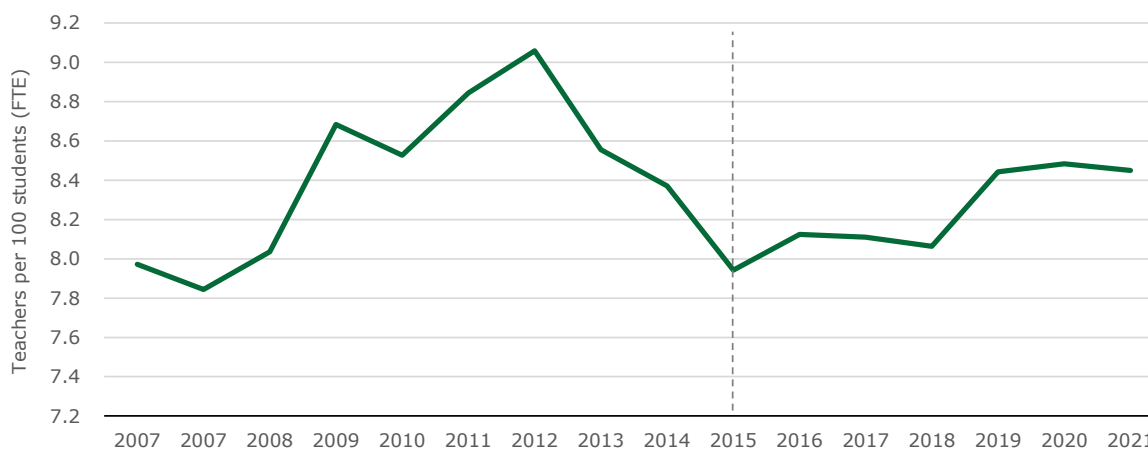
Source: Deloitte Access Economics analysis using ABS Schools Data 2021

Notes: Teachers includes classroom teaching staff only.

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[46] ACARA, School income and capital expenditure for government and non-government schools (accessed 7 June 2022) < https://www.acara.edu.au/docs/default-source/default-document-library/school-income-and-capital-expenditure-for-government-and-non-government-schools-dataset9c2c2f404c94637ead88ff00003e0139.xlsx?sfvrsn=2fb84c07_0>

2.3.3   Student count methodologies in other jurisdictions

Within Australia, the NT is the only jurisdiction that considers student attendance when allocating school funding. The NT's use of effective enrolment stands out as major difference when comparing NT school funding to funding models throughout the rest of Australia, as well as the Commonwealth SRS. Attendance-based school funding models are also relatively uncommon in other countries similar to Australia.

Internationally, the rationale behind funding schools based on student attendance is usually one of two reasons: either as an incentive to boost attendance or as the only practical way for a reliable measure of system activity.

In preparation of this report, workshops were held with other jurisdictions that include (California), or don't include (Alberta and Manitoba) measures of attendance in school funding decisions. In contrast to the manner in which the NT Government allocates funding, all three jurisdictions allocate funding to regional districts, who then distribute funds to individual schools based on a variety of methods. This is comparable to the school funding arrangements between the Commonwealth and the Northern Territory Government.

California (see box below) is an example of a jurisdiction that allocates funding based on attendance. To reduce funding variability, the funding formula utilises either the current or previous year's average daily attendance. Appendix F.3 provides further detail on California's approach to allocating student needs-based funding.

California is one of seven states in the United States that funds its school districts on Average Daily Attendance

Context of California: Approximately 6 million students across 11,000 schools with 60 per cent of students from low-income backgrounds.

Funding formula

- Funding is distributed to local districts based on a student needs-based formula
- Student count method used is called Average Daily Attendance, defined as total days of student attendance divided by the total days of the school year.
- School districts are funded on the greater of the current or previous year ADA. This reduces funding variability and facilitates longer-term planning within schools.

Additional funding: Targeted assistance is also provided, such as the Necessary Small School (NSS) Allowance and a Concentration Grant to support schools with large percentage of disadvantaged students.

Recent/potential changes: As a result of COVID disruptions, California is considering alternative methods where student count could be the greater of attendance from the previous year, current year or a three-year average.

Furthermore, in the wake of the COVID-19 pandemic there is now conversation in the Californian Department of Education to either, fund schools on enrolments, or the greater of attendance from the previous year, current year or a three-year average. California is one of only seven states in the USA to fund schools based on attendance, much like the NT which is the only state in Australia to do so.[47]

"Covid has sparked a conversation about lower attendance rates. There is a push to fund in enrolments."

In Alberta and Manitoba funding is based on enrolments at the school district level. This allows school districts to confidently plan ahead knowing that each student will be funded while also having the capacity and funding to implement outreach programmes to at-risk students who have

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[47] Kristin Blagg, 'How Are States Funding School Districts in the Wake of Changing Enrollments Caused by COVID-19?', *Urban Institute* (February 26 2021) <https://www.urban.org/urban-wire/how-are-states-funding-school-districts-wake-changing-enrollments-caused-covid-19>.

high rates of non-attendance. Further learnings from research and consultation with each jurisdiction are found in each of the breakout boxes, as well as in Appendix F.[48]

Manitoba (Canada) funds local school boards based on an enrolment-based method

Funding formula: Funding is distributed to local school boards based on enrolment at the commencement of the school year. Funding per-student is based on a base rate of funding per-students. This funding is additionally supported by supplements for small schools support, rural education delivery support, curricular materials, IT, library services, student services, building occupancy supports.

Additional funding: Targeted assistances is also distributed to school divisions through several mechanisms to support school needs and provide flexibility for the divisions to spend this equitably. This includes funding to support transportation, special needs, and targeted curriculum changes.

Alberta (Canada) funds local school boards based on a three-year moving average enrolment

Funding formula: Funding is distributed to local school boards based on a three-year weighted moving average of enrolment from the previous year, current year and the upcoming funded year (based on enrolment projections submitted by schools).

The use of a three-year moving average of enrolments was established in 2019 to reduce funding uncertainty. Previously, funding was allocated based on annual enrolments.

Additional funding: Targeted assistance is also provided through grants, which was recently restructured to provide school authorities with additional autonomy.

While funding models that include student attendance exist outside of Australia, examples of attendance-based systems being introduced in recent decades are rare. Instead, education systems are increasingly aware of the link between higher student needs and low attendance, with the implication being that schools should be adequately resourced to offer a safe and inviting classroom that encourages student engagement. However, it is important to note that there are many drivers of low student attendance that are outside of a school's control, including housing issues, employment, and population mobility.

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[48] The Government of Manitoba and Alberta distribute funding to school districts based on a per-enrolment basis, which then reallocate funding to individual schools. The method used to distribute funding to individual schools differs across school districts. Financial planning tends to occur at the school district level.

Section 3 | Effective enrolment measure

This chapter considers effective enrolment as a measure used to determine needs-based resourcing allocation to NT Government schools, including:

- effective enrolment as a resource prioritisation mechanism
- effective enrolment as an incentive
- alternative enrolment-based methodology considerations
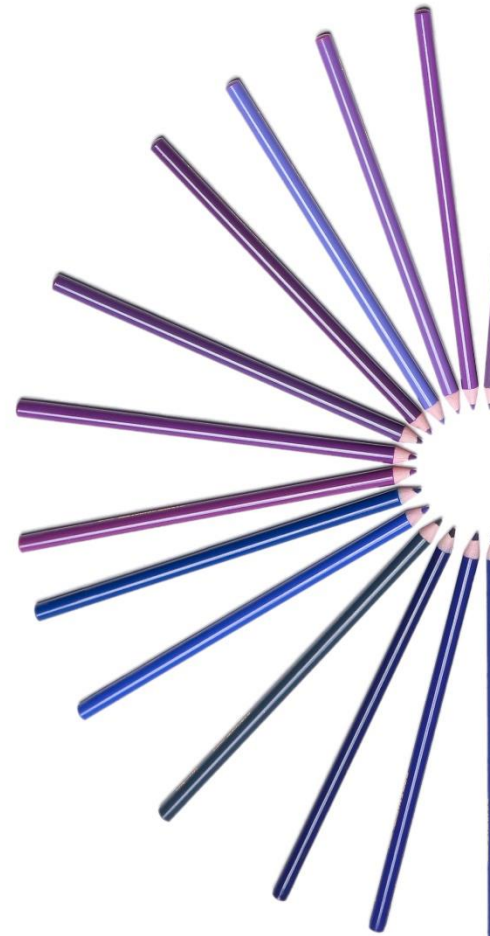
3 Appropriateness of the effective enrolment measure within the SRM

Internationally, the use of attendance as a measure to determine school funding allocation is usually underpinned by either or both of the following:

- as an activity-based measure of resource use to prioritise resource allocation
- as an incentive or an accountability mechanism for schools to increase student attendance.

This section examines the effective enrolment measure from these two perspectives and explores its impacts on the system's ability to meet its objectives.

As noted, the effective enrolment measure is the method of measuring student count for the purposes of allocating variable funding within the broader SRM. It is important to note that the effective enrolment meausure only impacts a component of school funding within the NT. Further, the Department provides other grants and program funding outside of the SRM to support engagement with students. Therefore, the findings in this chapter should be interpreted with this context in mind. See section 2.3 for more details.

3.1 Effective enrolment as a measure of resource use

Key finding 1: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

    i.   Higher levels of educational need is strongly linked with low school attendance.
    ii.   On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
    iii.   Effective enrolment measure does not align well with schools' resourcing needs.

3.1.1 Higher level of educational need is strongly linked with low school attendance.

School attendance is well recognised as a critical step in closing the gaps in educational outcomes for disadvantaged students.[49;50] Low attendance limits the amount of time students spend in the classroom and is often associated with low performance on standardised tests, such as NAPLAN (see Chart 3.1).

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[49] Australian Institute for Teaching and School Leadership, *Spotlight: Attendance matters* (2019) <https://www.aitsl.edu.au/research/spotlight-attendance>
[50] The Smith Family. *Attendance lifts achievement: Building the evidence base to improve student outcomes* (2018) < https://www.thesmithfamily.com.au/research/reports/attendance-lifts-achievement>

Chart 3.1: The relationship between NAPLAN scores and attendance rates across publicly funded schools in the Northern Territory
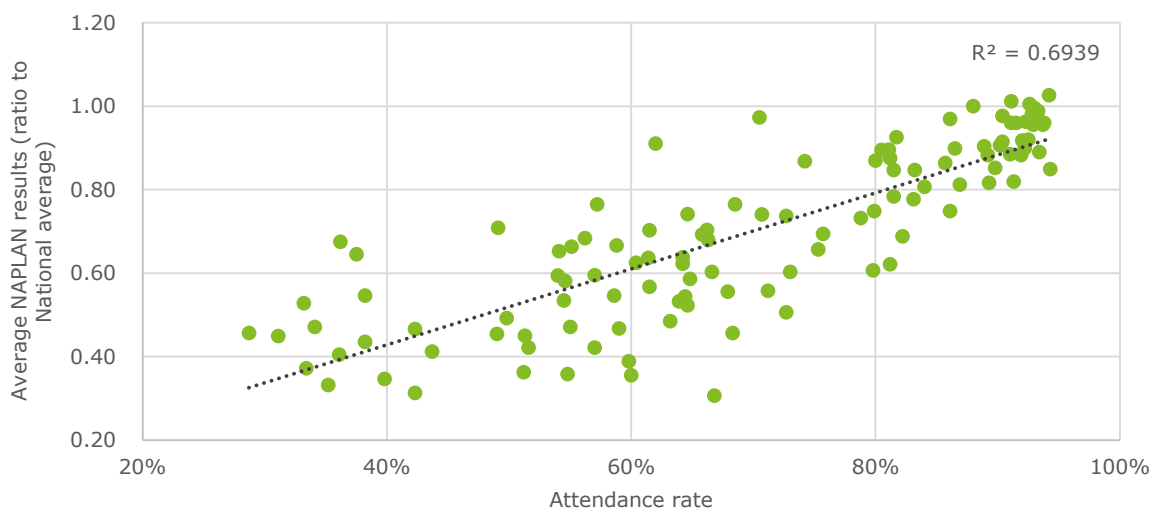
Source: Deloitte Access Economics analysis using NT education data and My School data
Notes: Attendance rates are an average of 2020 and 2021 for Term 1. NAPLAN results are school average scores for writing as a ratio of the Australian average in 2021. A score of above 1 means that the school had a higher average score than the Australian average.

Indeed, lifting school attendance was agreed to be a key outcome by all Commonwealth, state and territory governments in the 2018 National Schools Reform Agreement with the commitment to the following sub-outcome: "*increase the proportion of students attending school 90 per cent or more of the time, including students from priority equity cohorts*".[51] Improving attendance is also a focus of the Education NT 2021-2025 Strategy and the Engagement Strategy as described in Section 2.1.1.[52,53] Focus on attendance in the NT is particularly important given that the attendance rates in the NT across years 7 to 12 tend to be approximately 30 per cent lower than Australian average.[54]

Analysis of student data consistently shows that low attendance rates across Northern Territory public funded schools are associated with higher student-need proxies, such as Aboriginal status, English as a second language (ESL) and lower socio-economic advantage (Chart 3.2).

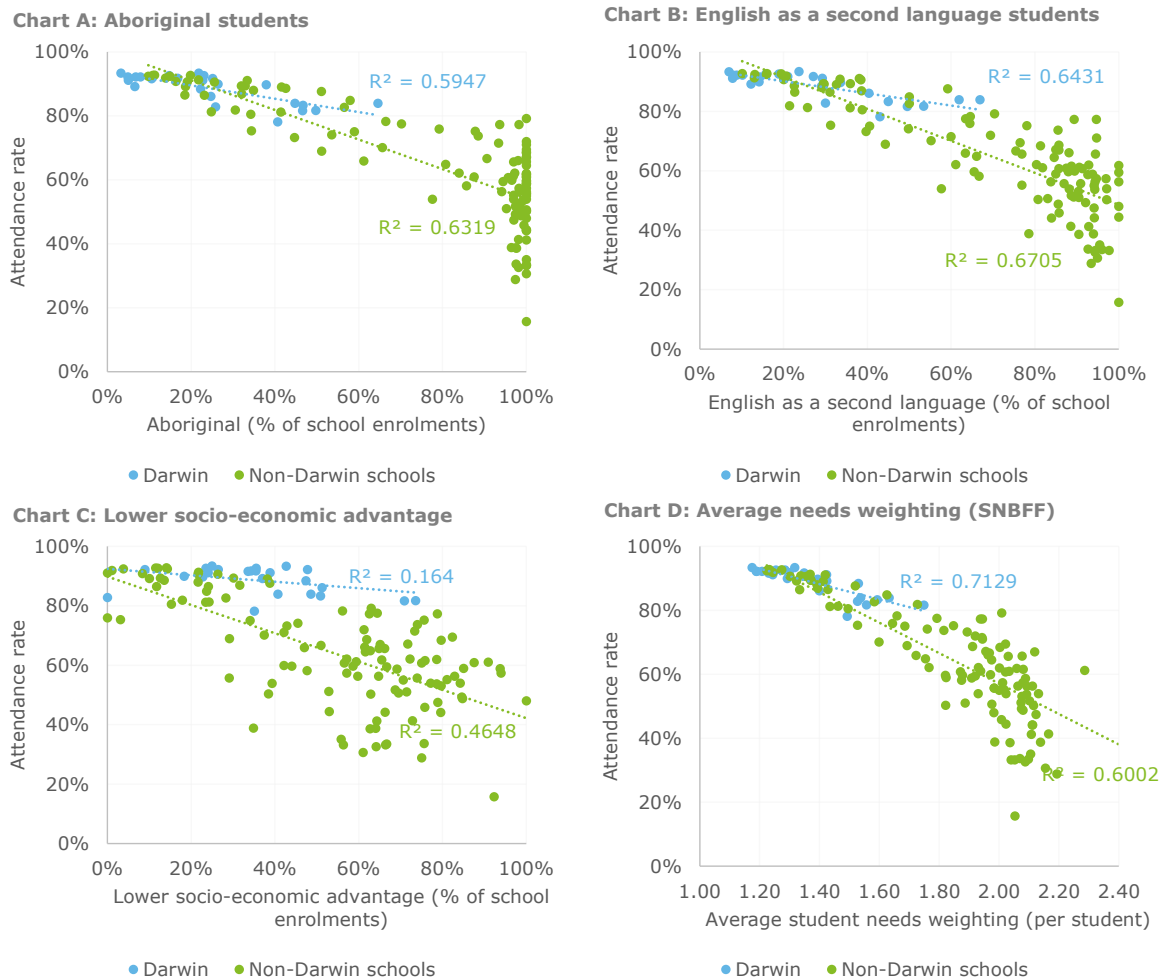[51] Council of Australian Governments, *National Schools Reform Agreement,* 2018
<https://www.dese.gov.au/download/4342/national-school-reform-agreement/23688/document/pdf>
[52] Department of Education. *Northern Territory Education Engagement Strategy*, 2022-2031
[53] It should be noted that attendance is a necessary, but not sufficient measure of student engagement. This Review focuses on attendance as it is a core component of the effective enrolment methodology. However, it is acknowledged that improving student engagement extends beyond a focus on improving student attendance.
[54] https://ctgreport.niaa.gov.au/school-attendance

Chart 3.2: The relationship between school attendance rates and student demographic characteristics

Chart A: Aboriginal students

R² = 0.5947

R² = 0.6319

Attendance rate

Aboriginal (% of school enrolments)

● Darwin ● Non-Darwin schools

Chart B: English as a second language students

R² = 0.6431

R² = 0.6705

Attendance rate

English as a second language (% of school enrolments)

● Darwin ● Non-Darwin schools

Chart C: Lower socio-economic advantage

R² = 0.164

R² = 0.4648

Attendance rate

Lower socio-economic advantage (% of school enrolments)

● Darwin ● Non-Darwin schools

Chart D: Average needs weighting (SNBFF)

R² = 0.7129

R² = 0.6002

Attendance rate

Average student needs weighting (per student)

● Darwin ● Non-Darwin schools

Source: Deloitte Access Economics analysis using NT education data
Notes: a) Attendance rates are an average of 2020 and 2021 for Term 1.b) student needs weightings are derived from the SNBF formula in the SRM c) Darwin refers to the NT school region, which includes Darwin and surrounding suburbs.
c) Darwin refers to the NT school region, which includes Darwin and surrounding suburbs.

As a result of the relationship between indicators of disadvantage and attendance, schools with the highest levels of need are impacted by the effective enrolment measure (which uses attendance data) the most. As illustrated in Chart 3.3, schools with a lower Index of Community Socio-Economic Advantage (ICSEA), located in remote or very remote areas, received a smaller share of their SRS in 2019.

It is important to note that the SRS methodology has several limitations that impact the degree to which the measure is informative in the NT context (see Appendix D for more detail). Therefore, schools that are receiving 100 per cent or more of their SRS should necessarily not be perceived as being overfunded, in absolute terms. Rather, this analysis demonstrates issues with the equity of resource distribution arising from the application of effective enrolment in relative terms, as it relates to student need.

Chart 3.3: School ICSEA score vs share of NT government school SRS funding, 2019:
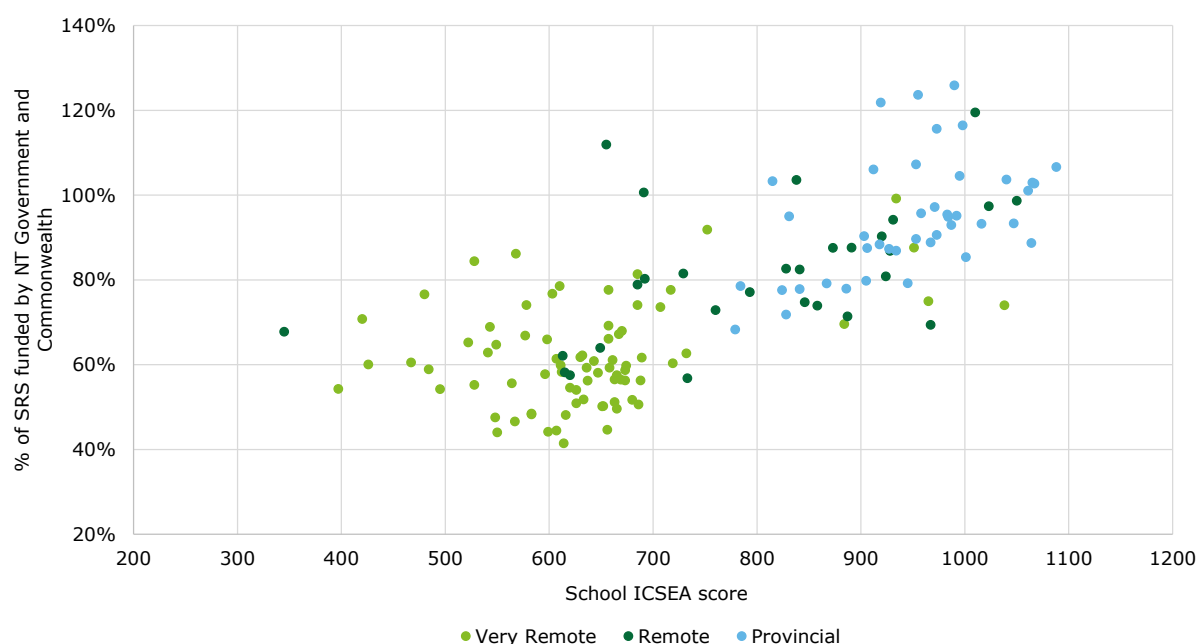
Source: NT Department of Education.

Note: Of the 18 schools that received funding above 100% of their SRS, five were special education schools and one was an open learning centre (Katherine School of the Air).

Given the limitations of the SRS methodology in the NT context (see Appendix D for more detail), funding for schools with higher needs in the NT can also be compared against schools with similar characteristics from other jurisdictions to better understand the differences in allocation of funding to schools with higher needs. Analysis of ACARA funding data highlights that NT schools in very remote locations may receive less state or territory funding compared to similar schools within Queensland and Western Australia.

Table 3.1 below highlights examples of this funding compared within a group of very remote, combined, government schools from Western Australia, Queensland, South Australia (Anangu Pitjantjatjara Yankunytjatjara Lands), and the Northern Territory. Despite similar numbers of students and higher levels of disadvantage relative to the other states, each NT school received less funding from the NT Government in 2020.

It should be noted that this comparison is for illustrative purposes. To systematically assess the comparative allocation of state funding to similar schools across jurisdictions, a larger, representative sample size is needed with additional consideration of individual schools' provision models and contexts.

Table 3.1: Funding comparison across jurisdictions of similar schools in very remote locations', 2020

School	Years	ICSEA	Students in lowest SEA quartile	Teaching Staff (FTE)	Enrolments (FTE)	Aboriginal enrolments share	Attendance rate	State funding (per student)	Total funding (per student)
WA School 1	K-12	699	91%	7.0	39	100%	78%	$49,465	$60,669
WA School 2	K-12	708	85%	13.1	100	85%	73%	$38,914	$47,786
WA School 3	K-12	814	81%	8.5	63	42%	80%	$33,898	$42,561
Qld School 1	P-10	821	73%	11.8	62	48%	89%	$32,589	$42,848

Qld School 2	P-10	859	68%	10.8	68	40%	87%	$27,945	$36,235
SA School 1	R-12	701	87%	10.0	88	80%	47%	$27,436	$36,385
SA School 2	R-12	-	-	9.8	95	100%	42%	$35,791	$45,403
SA School 3	R-12	-	-	14.6	140	92%	48%	$28,464	$36,813
NT School 1	P-12	529	95%	2.0	30	97%	56%	$26,101	$39,791
NT School 2	P-12	660	91%	5.0	61	100%	54%	$22,666	$35,380
NT School 3	P-9	613	97%	5.9	36	89%	76%	$21,977	$31,711

Source: ACARA MySchool data (2020).

Note: 'Lowest SEA Quarter' details the share of students positioned in the lowest socio-educational advantage quarter. In 2020, NT School 1 had four enrolments in the NT School of Distance Education. These students are allocated additional funds which is not reflected in the per student funding above.

Table 3.2 below highlights the funding difference among private and government-funded schools within regions with higher needs. Overall, Government funded schools receive less total funding per student. This is largely a result of higher levels of Australian Government funding for independent schools compared to the total (Commonwealth and Territory) funding allocated to government schools. This analysis highlights the impact of the NT school funding model (particularly the effective enrolment measure) on allocating variable funding to schools with higher needs, as compared to other jurisdictions and school types.

Table 3.2: Recurrent government funding comparison for neighbouring independent and government schools in very remote NT locations, 2020

School sector	LGA	Years	ICSEA	Students in lowest SEA quartile	Teaching Staff (FTE)	Enrolments (FTE)	Aboriginal enrolments share	Attendance rate	Territory funding (per student)	Total gov. funding (per student)
Gov.	LGA 1	P-9	613	97%	5.4	35	89%	76%	$21,977	$31,570
Indep.	LGA 1	T-10	614	96%	8.6	70.4	98%	51%	$4,828	$48,424
Gov.	LGA 2	P-12	666	86%	44	442	98%	48%	$17,013	$24,557
Indep.	LGA 2	1-10	607	94%	2.8	62	92%	44%	$2,288	$36,377
Gov.	LGA 3	T-12	1033	9%	4	34.8	22%	89%	$15,256	$22,719
Indep.	LGA 3	T-12	760	58%	8.4	65	100%	35%	$6,716	$62,680

Source: ACARA MySchool data (2020).

Note: 'Lowest SEA Quarter' details the share of students positioned in the lowest socio-educational advantage quarter. In 2020, NT School 1 had four enrolments in the NT School of Distance Education. These students are allocated additional funds which is not reflected in the per student funding above. Total government funding per student includes recurrent funding from the Australian Government and from the NT Government.
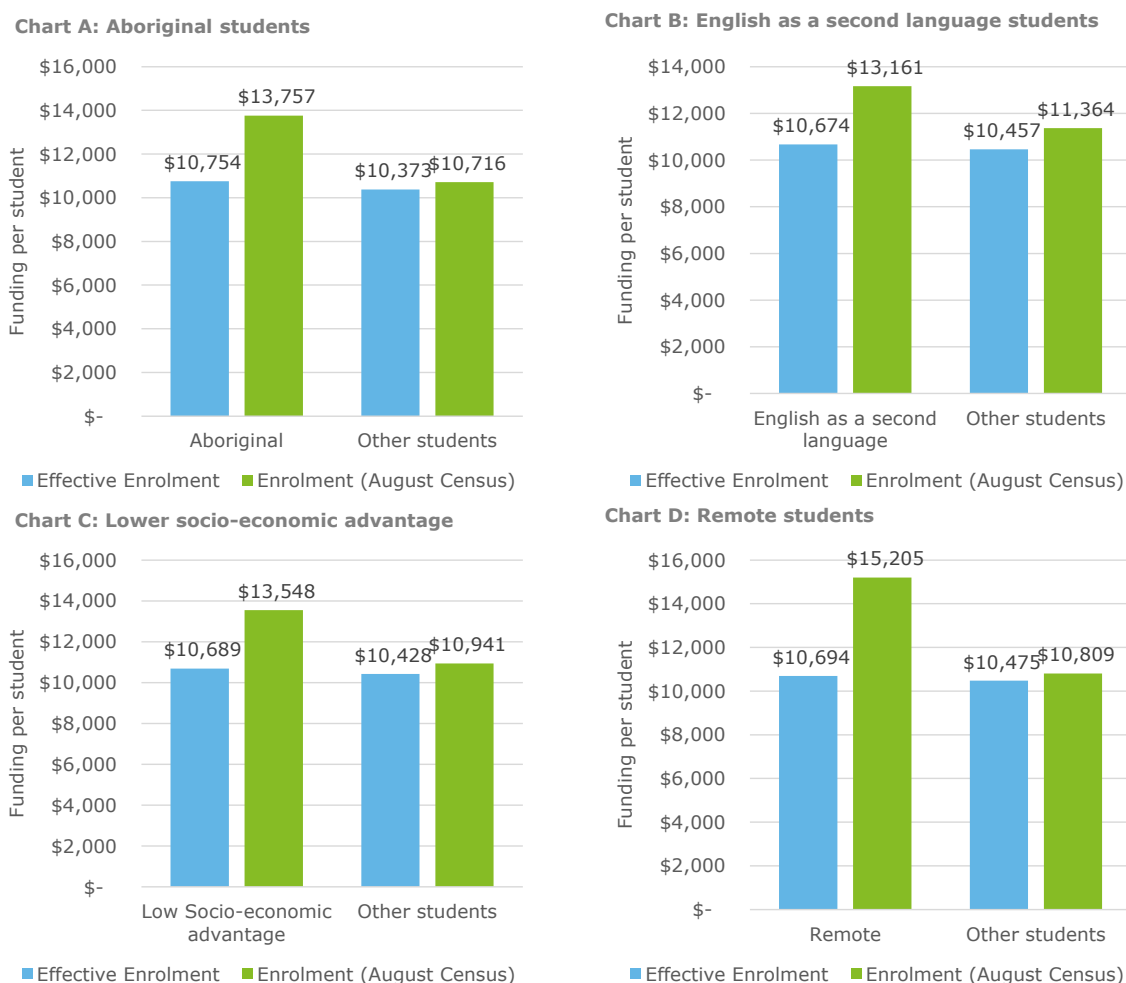
3.1.2 On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.

As explained in Section 2.3.1, needs-based weights are allocated proportionally to the student count. The use of effective enrolment impacts both the count of students and the value of needs-based weights proportionately.[55]

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[55] For instance, Aboriginal status weighting attracts 0.3 FTE in addition to 1 FTE base allocation, resulting in a total of 1.3 FTE allocation. If an Aboriginal student attends a school where the effective enrolment is 80 per cent of the total enrolment, their final allocation would be equal to 1.04 FTE (80 per cent x 1.3 FTE).

While the SRM does have mechanisms to allocate greater levels of funding to students with higher needs through need-based weights, the impacts of these mechanisms on variable funding within the SRM, on average, across the system, are largely offset by the effective enrolment measure due to average lower rates of attendance of students with higher needs. As a result, the average enrolled Aboriginal student in the Northern Territory government-funded education system attracts a similar amount of per-enrolled student funding (approx. $10,800) to non-Aboriginal enrolled students (approx. $10,400).[56] If variable funding was based on enrolment (and there is no consideration of budget constraints), Aboriginal students would on average attract $3,000 more in funding each compared to non-Aboriginal students. Similar relationships hold across other high need cohorts such as students with English as second language (see Chart 3.4).[57]

Chart 3.4: The impact of effective enrolment on the average variable funding received per student

Chart A: Aboriginal students

Chart B: English as a second language students

Chart C: Lower socio-economic advantage

Chart D: Remote students

Source: Deloitte Access Economics analysis using NT education data
Notes: Per student values were calculated at a school-level first and then apportioned to demographic characteristics based on the student profile of each school. This includes the small schools grant. Per student rate was calculated by dividing total allocation (under the two methods) by the August Age Grade Census 2020 enrolment count. This analysis

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[56] It is important to note that this is an average observation across the NT. Aboriginal students that attend schools with high levels of school attendance receive much higher levels of funding per-student relative to non-Aboriginal students that attend schools with higher school attendance as the effective enrolment method does not '*discount*' student needs weights as severely.

[57] It is important to note that this analysis holds the base rate of funding constant and therefore assumes that the budget envelope would expand to fund all enrolments. Under a fixed budget envelope (and therefore reduced base rate) the relative difference between funding methods remain the same. For instance, on average an Aboriginal student would attract approximately 1.3 times the funding a non-Aboriginal student would attract if funding on an enrolment basis, regardless of if the budget envelope is fixed or not.

assumes fixed base rate per FTE and no total budget constraints under an enrolment-based distribution method of funding.

The impact of this offsetting effect at a student level is illustrated Chart 3.5. If SRM variable funding allocation was based on enrolment, the amount that each student attracts would purely be a function of the base rate per FTE ($7,200 in 2021) and the equity weights applied based on student characteristics (expressed in FTE terms). The use of the effective enrolment measure disrupts this relationship with a 50 per cent decline per student on average as represented by the grey dots.

Chart 3.5: The relationship between needs-based weights and school funding after effective enrolment adjustment (grey) (2020)
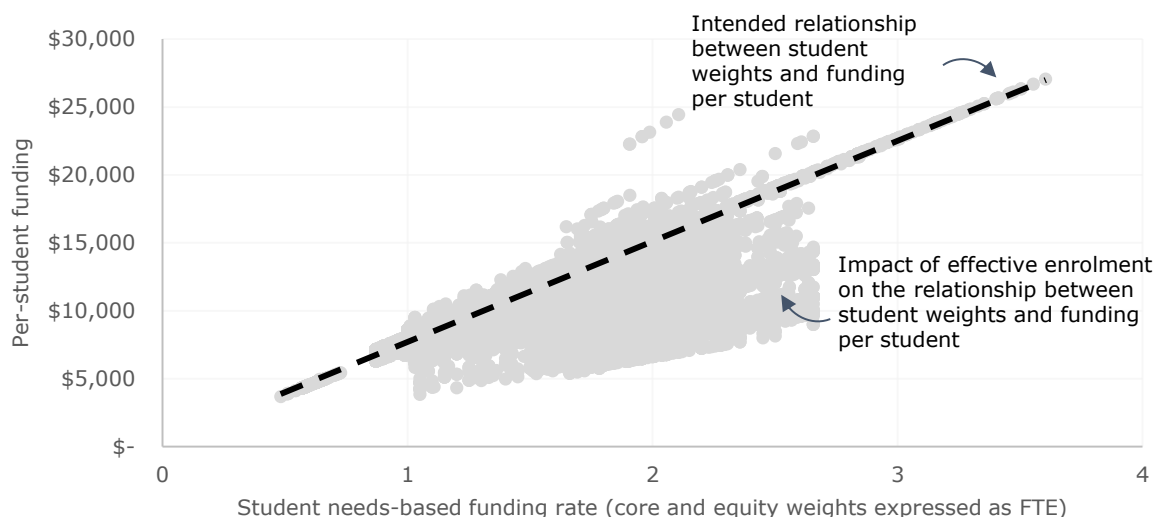
Source: Deloitte Access Economics analysis using NT education data

A closer look at how this impacts individual weights while accounting for other characteristics suggests that the following weights are affected by the effective enrolment measure the most (for further detail see Appendix E):

- Aboriginal concentration of above 80 per cent - approx. $2,200 per student offset on average as a result of the effective enrolment measure
- Remoteness - approx. $725-$1,100 offset
- Year 10-12 - approx. $350-$450 offset
- High disadvantage, i.e., bottom ICSEA quartile - approx. $400 offset.

As expected, the above effects are in line with average school attendance of these cohorts. The effects are also more pronounced for student groups that are characterised by two or more of these characteristics. For instance, on average, Aboriginal students in secondary year levels attract $1,300 less funding than their non-Aboriginal peers on per-enrolment basis (Chart 3.6).

Chart 3.6: Average variable funding received per secondary student under effective enrolment and enrolment
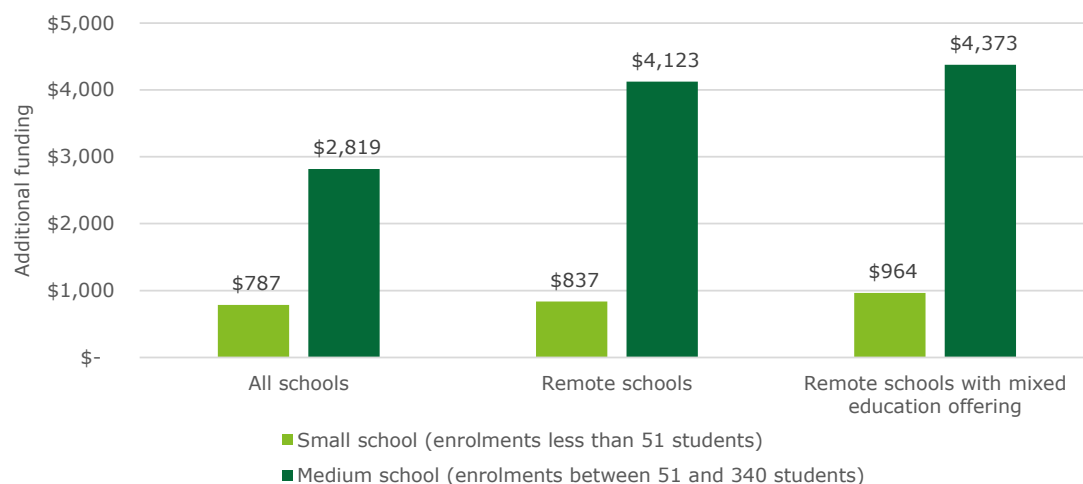
Notes: Per student values were calculated at a school-level first and then apportioned to demographic characteristics based on the student profile of each school. This includes the small schools grant. Per student rate was calculated by dividing total allocation (under the two methods) by the August Age Grade Census 2020 enrolment count. This analysis assumes fixed base rate per FTE and no total budget constraints under an enrolment-based distribution method of funding.

Compared to an enrolment-based measure, the effective enrolment measure prioritises funding towards students with higher attendance. These students tend to be non-Aboriginal, more socio-economically advantaged, and attending schools in urban locations – characteristics indicating lower educational needs.

Further, due to the relationship between student characteristics and student attendance, there are particular schools that are impacted the most by the effective enrolment measure. Chart 3.7 shows the difference between average variable funding received per secondary student under effective enrolment and enrolment for different school types. The analysis shows that small schools (those with 51 enrolments or less) are moderately impacted by the effective enrolment measure. Specifically, if variable funding was based on enrolment (and there is no consideration of budget constraints), students would on average attract $800-$900 more in funding each, across small remote schools, and small schools that offer mixed education settings. The impact of effective enrolment is largely consistent across types of small schools due to the effect of the small school supplement, which provides a minimum funding floor for these schools.

Notably, medium sized schools are more affected by the use of the effective enrolment measure on student needs-based weightings due to the absence of a funding floor. Particularly, medium-sized schools located in remote areas, particularly those that offer mixed education settings (such as primary and secondary education) would on average attract $4,100-$4,400 per-enrolled student more in funding each if variable funding was based on enrolment (and there is no consideration of budget constraints).

Chart 3.7: Additional average variable funding received per secondary student under an enrolment measure compared to effective enrolment, by school type

Notes: Per student values were calculated at a school-level first and then apportioned to demographic characteristics based on the student profile of each school. This includes the small schools grant. Per student rate was calculated by dividing total allocation (under the two methods) by the August Age Grade Census 2020 enrolment count. This analysis assumes fixed base rate per FTE and no total budget constraints under an enrolment-based distribution method of funding.

While the definition of a 'needs-based' funding model is not definitively established in a technical sense, this evidence indicates that the effective enrolment measure might not align with a needs-based intent of a student-needs based funding model. As per the Education Act (2013) subsection 78(5), needs-based funding arrangements must provide weights to students and schools with additional needs in order to support student achievement (including weights for Aboriginal students). While there is no basis in the Act to prescribe the weights amounts for systems, it is unclear whether the current model in the NT delivers on that intent for enrolled students.

3.1.3   Effective enrolment measure does not align well with schools resourcing needs

Insights from consultations with schools and peak body organisations highlighted a number of reasons for why the effective enrolment measure does not align well with school resourcing needs. These reasons can be summarised under four themes:

1. Acknowledging that while there are programs outside of the SRM that engage students, attendance-based funding reduces the ability of schools to effectively invest in student re-engagement
2. The primary effort and therefore cost driver for schools is the number of unique students teachers are responsible for, rather than peak average attendance
3. It is difficult for a school to realise any cost savings from student absences
4. The current methodology does not have a minimum and therefore does not recognise minimum provision requirements in different contexts, except for a small school supplement.

1. Acknowledging that while there are programs outside of the SRM that engage students, attendance-based funding reduces the ability of schools to effectively invest in student re-engagement

A major concern raised in consultations, especially in the context of remote schools, related to effective enrolment reduced the ability of schools to staff re-engagement programs and classes for low attending students.

Schools explained the need for greater funding to support non-attending students through practical examples of resourcing implications of student absences. The top three resourcing implications included: developing individual support plans, supporting students to catch-up and re-engage, and assessing the students' needs upon arrival (see Chart 3.8). When asked to identify the key implications of student absence, school responses (approx. 1 per cent) indicated that student absences had no impact on their costs.

Chart 3.8: Survey responses to question '*What are the key implications of the above student absence and mobility patterns on your costs?*' (up to three selections allowed per participant)
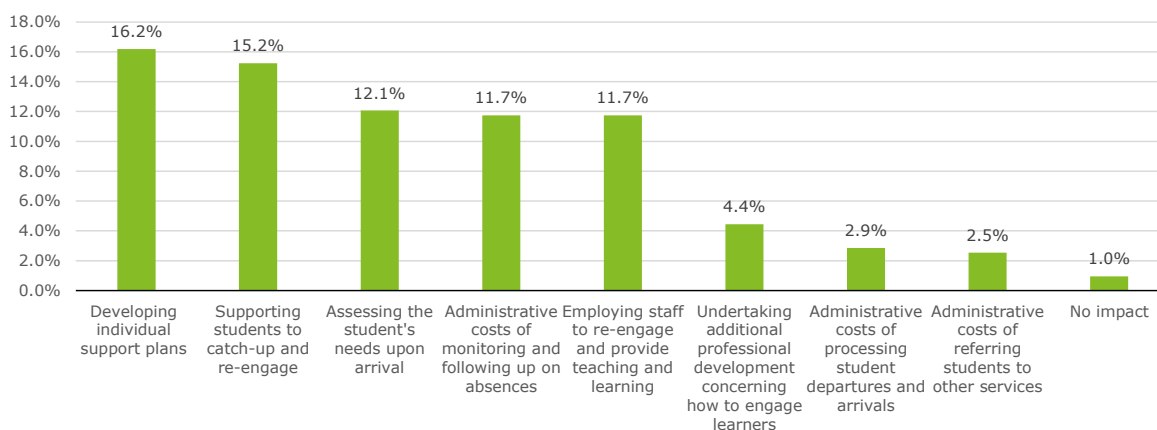
Source: NT Effective Enrolment Review School Survey (2022)

Notes: N = 95 participants, representing 82 schools

School leaders consulted as part of this Review expressed concern that they are not funded for the support they deliver to non-attending students. For example, as one school leader noted:

> "*It's not like when kids don't turn up, we just sit around and wait for them, we are constantly contacting families and reaching out to communities to try and boost attendance. Effective enrolment means we don't get money for this*"

> *School Principal (small, remote school)*

Similarly, another school leader commented on how there can be a trade-off between resourcing efforts to re-engage students, and providing a high-quality education to attending students:

> "*Effective enrolment does not acknowledge the challenges associated with re-engaging at-risk and disengaged students. It puts schools in a position where if they resource re-engagement strategies and then meet the additional needs of these students once they are back in school, they would be making a serious cut to the funding available for the active students; essentially making it impossible to provide them with a high-quality education*"

> *Survey Respondent (small, remote school)*

While the Department supports and implements several programs outside of the SRM to support student engagement (such as the RSAS, and programs with the Stars Foundation and Clontarf foundation) – which are funded by the Australian Government – the Review finds that schools perceive the effective enrolment mechanism to not be conducive to engaging high-risk students within the classroom setting.

2. The primary effort and therefore cost driver for schools is the number of unique students teachers are responsible for, rather than peak average attendance

Several schools interviewed as part of this Review argued that they must have the capacity to serve 100 per cent of their actively enrolled students on any given day whether they are

in the classroom or not. The number of unique individual students coming through the school's door – rather than average peak attendance – drives staffing and resource investment decisions for most schools.

Stakeholders explained that the effective enrolment methodology does not account for teachers needing to prepare for the possibility of each student attending, regardless of whether they show up:

> *"If my school has 50 per cent attendance, I am being paid for ten out of twenty students. But I have ten different students each day. I actually see all students. I still need to do reports for all these students so effective enrolment is not the correct measure. I still have a workload for all students – even though attendance is an issue."*

All schools reported spending resources attempting to re-engage absent students – locating them, engaging with families, and supporting students to catch up once they return.

In addition, many remote schools with attendance issues highlighted the difficulty in being able to deliver core curriculum in a way that meets their minimum obligations (e.g., as defined through guidelines in the *NT Public Sector Teachers and Assistant Teachers' 2017-2021 Enterprise Agreement*).

> *"Since the introduction of the effective enrolment model, our community and families don't see us as providing to their expectations - for instance not having PE teacher or education support staff. (…) A classroom is supposed to have 27 students maximum. We have 40 students in classrooms as a result of this model and are not meeting our obligation."*
>
> - *Consultation participant (remote, P-12 school)*

Further, it also notable that recent experiences with the effects of COVID-19 on student learning have placed significant pressure on the effective enrolment methodology, as attendance is more complex to define and measure when students are able to engage in learning outside the classroom.

3. It is difficult for a school to realise any cost savings from student absences

Many schools argued that the effective enrolment methodology assumes that the cost of serving a student falls to zero if they are not attending. This view was also echoed through the online survey. When asked whether their school can realise any cost savings (unintended and intended) as a result of student absences, 74 per cent of schools said no.

Chart 3.9: Survey responses to the question *'Is your school able to realise any (unintended and intended) savings or efficiencies as a result of student absences and mobility patterns?'*
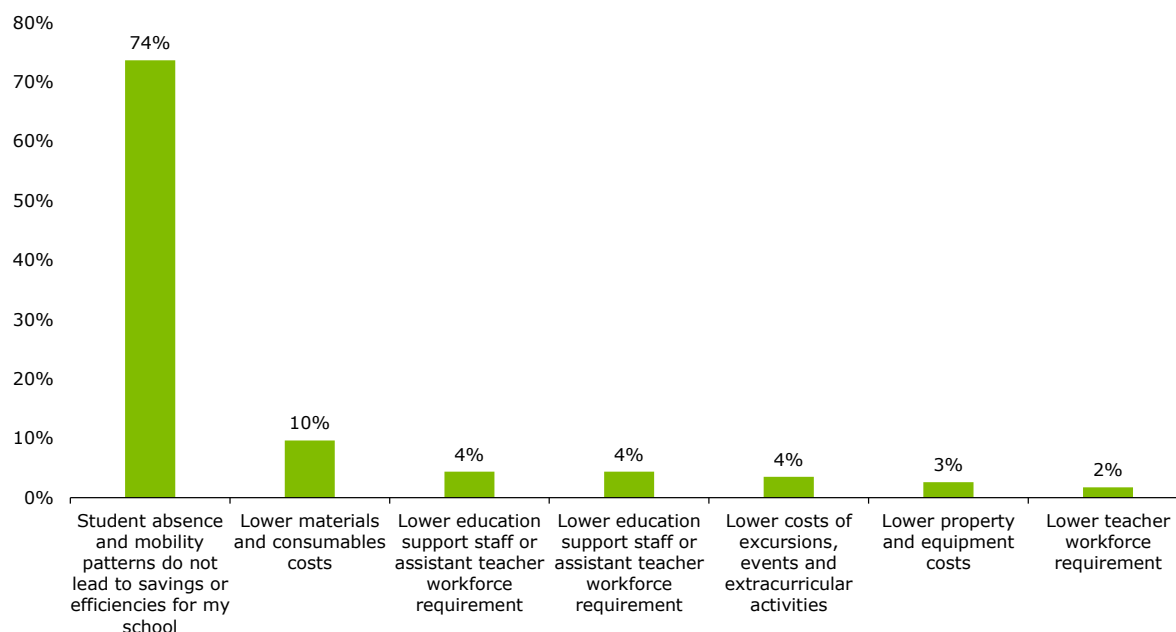
Source: Deloitte Access Economics analysis of NT Effective Enrolment Review School Survey (2022)
Note: N = 101 participants, representing 86 schools. Some respondents selected "Other" but commented that student absences did not lead to cost savings. These answers have been moved in to the "Negligible impact – Student absences and mobility patterns do not lead to savings or efficiencies for my school" category.

The inability to realise cost savings is mainly due to the fact that the majority of variable funding within the SRM goes towards staff salaries with fixed term or ongoing contracts. Provision of quality and diverse curriculum requires a stable workforce profile and cannot be easily scaled up or down with variations in attendance. As one school put it:

> "It's just not practical to lay-off staff and reorganise classes during a school year because fewer students are coming. Even if we could, invariably attendance will rise again, and we will get caught short."

4. Minimum standards of provision in different contexts are not recognised

The impacts of the effective enrolment methodology can be severe. With no theoretical minimum currently in place (a floor was trialled in 2019), funding via the effective enrolment methodology can be as low as 40 per cent of what a school would receive under an enrolment-based model.

Aside from the SRS, the NT schooling system does not have a clear understanding of the minimum acceptable resourcing standards required to deliver quality education to students across the NT, including for secondary provision, larger remote schools and schools that deliver a diverse curriculum. As a result, the above issues tend to be particularly acute in the context of schools that need to provide a diverse curriculum and specialised teachers are required to deliver specific subjects (e.g., secondary schools or bilingual schools).

Principals of secondary schools with low attendance levels were often reported to not have sufficient funding to meet minimum standards as set out in the Enterprise Agreement. The current situation with secondary education provision and staffing was described by stakeholders as worse than prior to 2015.

> "I saw a class of 45 Middle Years Indigenous boys in [a remote location] who weren't learning anything. Students in these schools also aren't being tracked, in terms of the subjects they have completed towards a NTCET. As a result, even the students who do complete subjects, are slipping through huge cracks. All of this is due to lack of staffing and deteriorating professionalism created by effective enrolment."

- *Peak body organisation representative*

Although the Small School Supplement in the SRM provides schools with an additional level of funding if their effective enrolment is below 52, the supplement is based on a primary school provision model and does not recognise separate campuses. This level of funding was seen by stakeholders as insufficient, especially in combination with insufficient fixed funding allocation (schools reported using variable funding to cover utility bills and essential services). This issue is even more severe for smaller schools that are expected to provide a broad range of services without economies of scale – provision of senior secondary pathway diversity, operating multiple campuses, and having students spread multiple year levels.

Apart from curriculum diversity, consultations highlighted that schools with a higher needs profile felt under-resourced to support their students under the current school funding model. These schools identified examples of additional education provision requirements to meet the needs of students, including (but not limited to) specialist supports for multilingual students, engagement with Aboriginal staff to support culturally appropriate education delivery, and delivery homeland learning centres.

For instance, in their submission to the *Inquiry into Adult Literacy and its Importance*, ATESOL NT reported that as a result of the effective enrolment methodology (and reduced school budgets) some schools had to remove Indigenous Assistant Teaching and tutor positions, which meant they struggled to provide a safe and stable learning environment for students, resulting in lower attendance.[58] Some consultation and survey participants also noted difficulties in teaching classes with significant variation in English fluency.

> *"In a remote school, you shouldn't be having to staff on the same student teacher ratio as in urban schools with less English as an additional language students. Current ratio is 1 to 27 students, I couldn't teach 27 ESL students at the same time. Those needs need to be considered."*

- *Senior Regional Director, Department of Education*

Finally, while detailed review of homeland learning centres is not in scope for this Review, the issue of homeland learning centres funding has been flagged as an issue. Where several homeland learning centres are supported by a school in a larger remote community, that school receives funding based on effective enrolment across all its sites. This means that the small school supplement does not apply for these homeland learning centres separately.

It should be acknowledged that schools may also apply for additional resources under various grants funded by either the NT or Australian Government. For instance, in 2020-21, approximately $10.2 million worth of grants was allocated to the government school sector, mostly focused on increasing school engagement and attendance, as well as improving Aboriginal student outcomes. This includes $2.1 million as part of the Remote School Attendance Strategy, a nationwide initiative funded by the Australian Government.

These grants might be providing valuable support, primarily targeting student engagement and Aboriginal student outcomes. For example, NT grants have been used to support chronically disengaged students in the Alice Springs region, as well employing school-based engagement officers across the Territory.

However, the way in which these grants interact with SRM variable funding, and the role of effective enrolment, may not be conducive to improving overall outcomes for the system. In a clear example of an unintended effect related to the existing funding model, one school principal even noted that they had used the SRM variable funding allocation to employ an individual whose sole role was to write external grant applications. As is discussed in later

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[58] Association of Teachers of English to Speakers of Other Languages Northern Territory (ATESOL NT) *Supplementary Submission to the Parliamentary Inquiry into Adult Literacy and its Importance* (2021) <https://www.aph.gov.au/DocumentStore.ashx?id=cfb5eb91-68f3-4c4b-97aa-bc13aabb7a56&subId=711488>

sections of this Review report, in this context, there is an opportunity for the Department to review current grants and other central supports provided to schools outside of the SRM, with a view to determining the most appropriate means to provide schools with resources to support student engagement in learning.

3.2 Effective enrolment as an incentive and an accountability mechanism

Key finding 2: Based on survey findings from schools and stakeholders, there is limited evidence that the effective enrolment methodology acts as an effective incentive or accountability mechanism to improve student attendance.

   i. School absences are often beyond the control of teachers and school leaders, due to other social determinants.
   ii. It is not clear whether the effective enrolment measure is intended as an incentive.
   iii. Effective enrolment is believed to negatively impact incentives and behaviours by school principals.

3.2.1 School absences are often beyond the control of teachers and school leaders, due to other social determinants.

In the context of the NT government schools, effectiveness of an attendance-based funding model as an incentive is limited by the fact that school absences are often beyond the control of teachers and school leaders.

There are many factors associated with high population mobility and therefore low attendance levels in schools across the NT, which vary across demographic groups and regions. These reasons change over time and can vary across communities, however, consultation findings and survey results highlighted that the most common reasons include:

- **Economic and lifestyle factors:** Both Aboriginal and non-Aboriginal families may be absent from their local community to engage in economic activities, provide necessities for their family, or engage in leisure activities. This can include a broad range of activities, including (but not limited to):
    o **Employment**: Families may need to travel to find employment or accept a new role (e.g., defence families, farm workers or jobseekers participating in government employment programs).
    o **Buying food**: Families in remote communities might need to travel significant distances to buy food at affordable prices. Depending on the availability and affordability of transport, these trips can extend to a number of days or weeks.
    o **Housing**: Families may move to obtain more affordable or higher-quality housing, or in response to a family breakdown.
    o **Mining royalties**: The timing of mining royalties is often associated with family travel across rural areas in the Northern Territory.
    o **Sporting events**: Major sporting events have been linked to movements from remote communities to the towns where they are held.
    o **Social factors**: Stakeholders commonly report leaving their community (for potentially extended periods) to visit friends or family members.
    o **Healthcare**: Families may travel to urban areas to access specialist healthcare support.
    o **Weather**: Weather events, such as flooding during the wet season can be a significant barrier for families to access schools.

- **Cultural obligations:** Consultations identified that, contrary to popular perception, cultural obligations are not a dominant driver of Aboriginal students' non-attendance. However, many Aboriginal students may be mobile and absent from school to engage in cultural responsibilities, obligations and traditional ceremony practices, including (but not limited to):

- o **Ceremony practices**: Families may travel to other communities to attend significant family or cultural events, such as ceremonies and funerals.
- o **Connecting back with Country**: Periodically, Aboriginal families will return to *Country* – the region from where they and their family are originally from – as part of a celebration and recognition of cultural and historical ties to their communities.
- o **Men's and Women's business:** Cultural obligations of Aboriginal men and women may require families to temporarily move or relocate.

In addition to student absences driven by population mobility, consultation and survey results identified other barriers to school attendance that are often outside of a schools' control. These included, general community unrest and specific issues such as substance abuse, domestic violence, poverty, literacy impacting accessing support services, intergenerational trauma, fear of schools from previous family experiences.

Some of these factors have been linked with reduced student attendance empirically. Quantitative analysis of linked datasets conducted by Menzies School of Health Research identified several socio-economic predictors of Year 1 attendance.[59] Table 3.3 outlines factors that were identified as statistically significant predictors of attendance. Students living in a community with overcrowded housing (i.e., average of more than two persons per bedroom) was by far the most impactful on student attendance with approximately 35 fewer days spent at a school in Year 1. Based on their experiences, school principals explained that absences related to overcrowded housing were usually a results of a student's inability to sleep or poor health care.

Table 3.3: Factors associated with school attendance and their impact on the number of days attended in Year 1 of school

Predictors of Year 1 attendance (all significant at 95% level)	Aboriginal students (days attending)	Non-Aboriginal students (days attending)
• Community has overcrowded housing	-35.2	9.7
• English as an additional language	-11.0	-2.1
• Changed School in 1 year	-9.1	-5.4
• Remote	-5.8	not significant
• Infectious diseases hospitalisation	-3.5	-0.3
• Low birth weight	-3.4	-2.0
• Mum smoking	-2.6	-1.6
• First child	-2.2	-0.9
• Male	-2.0	-0.1
• Carer completed Year 10	9.2	1.8
• Employed carers	10.9	3.8
• Preschool	17.8	2.0

Source: Menzies School of Health Research (2018)

Note: Estimated impact on the number of days attending was predicted using a linear regression model with standard errors clustered at the school level to account for school-level effects.

While these factors are not necessarily unique to the Northern Territory context, it is the concentration of small, remote communities with a high proportion of families living in poverty that means that these factors are likely to be more influential than in other jurisdictions. While it is not reasonable to expect schools to address these external factors,

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[59] Silburn S, Guthridge S, McKenzie J, Su J-Y, He V, Haste S, *Early Pathways to School Learning: Lessons from the NT Data Linkage Study* (2018) Darwin: Menzies School of Health Research <https://www.menzies.edu.au/icms_docs/293933_Early_Pathways_to_School_Learning_%E2%80%93_ Lessons_from_the_NT_data_linkage_study.pdf>

schools in small remote communities can play a crucial role connecting services and being the first point of contact for many students and families in need of support.

3.2.2 It is not clear whether the effective enrolment measure is intended as an incentive.

In jurisdictions where they are utilised, attendance-based funding models are occasionally described as an incentive to encourage schools and districts to increase attendance and comply with local attendance laws (see Appendix F for a case study about California, US).

When the Global School Budget (now the SRM) was introduced in 2015, the effective enrolment methodology was designed as a way to distribute and prioritise a finite pool of resources to "*schools with children attending and in front of the teacher*"[60,61] rather than an incentive to improve attendance. However, the coinciding increase in school autonomy and responsibility to manage their own budgets meant that the effective enrolment methodology was perceived by many stakeholders as designed to incentivise schools to focus on attendance. School leaders consulted as part of this Review do not always have a clear understanding of the intent of the existing funding model and some believe that it is meant to act as an accountability mechanism to improve school attendance.

School leaders' perspectives on whether the effective enrolment method incentivises schools to focus on attendance are mixed. As illustrated in Chart 3.10, approximately half of survey respondents agreed that the current model encourages schools to focus on addressing attendance issues, the other half disagreed.

Chart 3.10: Survey responses to the question '*To what extent do you believe that the usage of effective enrolment in the funding model encourages schools to focus on addressing student attendance issues?*'
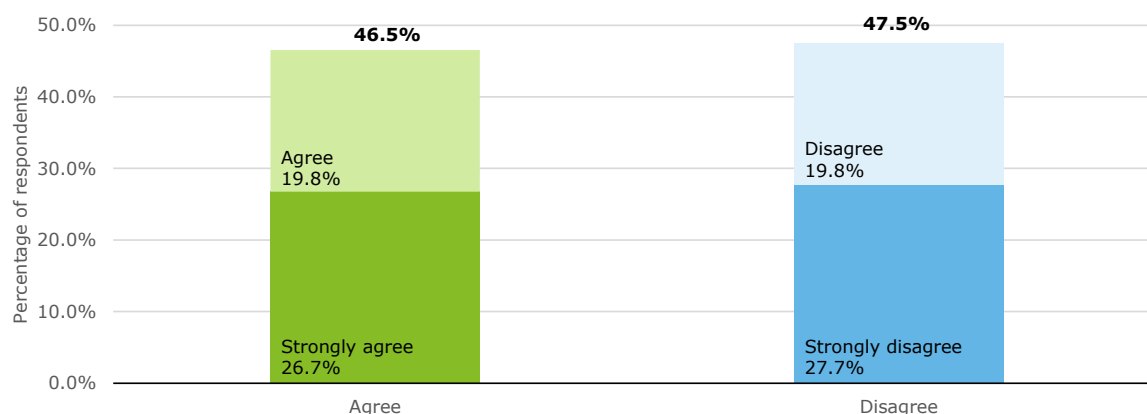
Source: Deloitte Access Economics analysis of NT Effective Enrolment Review School Survey (2022)
Notes: N = 101 participants, representing 85 schools

More broadly, available evidence on whether attendance-based funding models are effective as incentives to boost attendance is limited. One exploratory study that focused on jurisdictions in the United States found that states with high incentive student count methods across 2006-2009 tended to have lower repeated absence rates.[62] However, the

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[60] Ernst & Young, *Review of the Global School Budgets Funding Model* (report commissioned by Department of Education Northern Territory Government, September 2017) <https://education.nt.gov.au/__data/assets/pdf_file/0005/464792/Report-from-the-Review-of-the-Global-School-Budgets-Funding-Model.pdf>.

[61] Minister for Education Peter Chandler, Media release (25 June 2013) <https://territorystories.nt.gov.au/10070/582896/0/0>.

[62] Ely, Todd L., and Mark L. Fermanich. *Learning to Count: School Finance Formula Count Methods and Attendance-Related Student Outcomes.* Journal of Education Finance 38, no. 4 (2013): 343–69. <http://www.jstor.org/stable/23597241>.

study was not able to demonstrate a causal link, as a number of contextual factors were at play which might have impacted absence patterns.

Although it is difficult to establish empirically a causal link between the introduction of effective enrolment and improved attendance, and noting that attendance has featured as a component of the allocation of school funding in the NT for many years, overall attendance rates in the NT government schools have been stagnant (e.g., Darwin, East Arnhem, Top End) or declining (e.g., Central, Barkly, Big Rivers) since the introduction of the SRM in 2015 (see Table 3.4). However, it is important to note that no link can be drawn between the school funding model and attendance patterns as there are several factors that could have contributed to the declining attendance rates over time, including political and environment dynamics separate to the school funding model.

Table 3.4: Average attendance rates for government schools by region (2015-2020)

Region	2015	2016	2017	2018	2019	2020	2015-2020 % points change
Central	76%	76%	74%	74%	71%	70%	-6 ppt
Darwin	90%	90%	89%	88%	88%	88%	-2 ppt
Barkly	66%	63%	58%	57%	55%	48%	-18 ppt
Top End	83%	83%	83%	82%	81%	80%	-3 ppt
Big Rivers	72%	71%	66%	67%	66%	64%	-8 ppt
East Arnhem	54%	56%	54%	56%	57%	53%	-1 ppt
NT	**80%**	**80%**	**78%**	**78%**	**77%**	**76%**	**-3 ppt**

Source: Deloitte Access Economics analysis of NT DoE enrolment and attainment data.

3.2.3 Effective enrolment is believed to negatively impact incentives and behaviours

Despite mixed perspectives on whether the effective enrolment measure is an effective incentive to encourage schools (Chart 3.10) to focus on addressing student attendance issues, most schools surveyed perceived the measure to incentivise behaviours that are unhelpful to improving student engagement over the long-term (Chart 3.11).

Chart 3.11: Thematic survey responses to the question '*To what extent do you believe that the usage of effective enrolment in the funding model encourages schools to focus on addressing student attendance issues? – free response*'
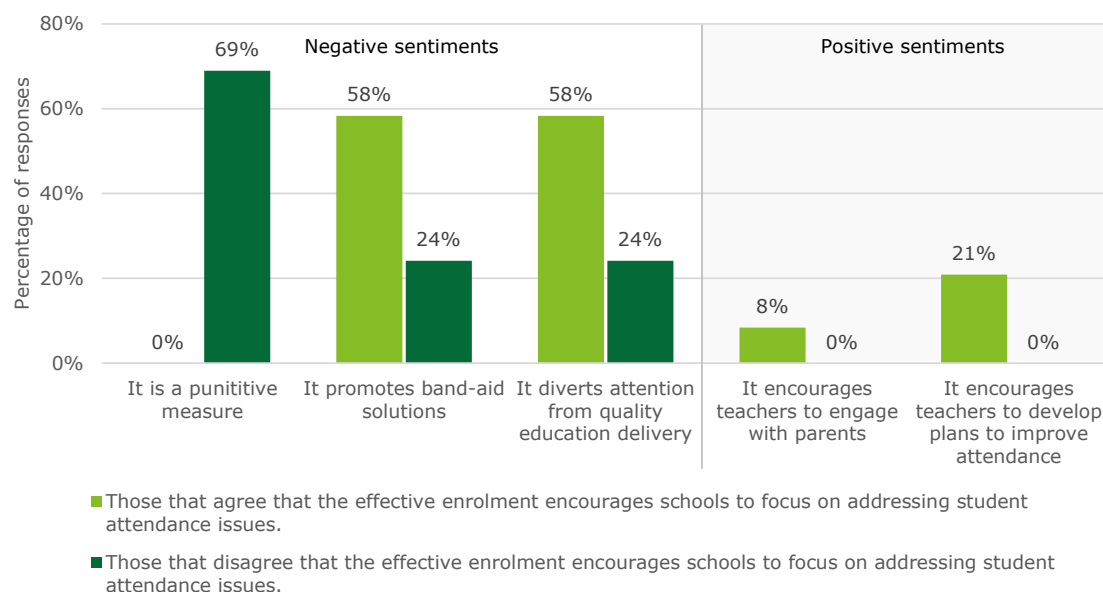
Source: Deloitte Access Economics analysis of NT Effective Enrolment Review School Survey (2022)

Notes: N = 101 participants, representing 85 schools. Survey respondents can respond to more than one theme.

Specifically, insights from survey responses and consultations with schools and peak body organisations on the incentives signalled by the effective enrolment measure can be summarised under four themes:

1. The methodology is perceived as a punitive mechanism targeted at socio-economic factors that are often seen as outside of schools' control.
2. The methodology is seen to encourage 'band-aid' solutions to boosting attendance, rather than investments in engagement which is complex and often requires long-term commitment. This can take attention away from investing in quality education delivery and can disincentivise schools to engage at-risk disengaged students.
3. When in conjunction with other systemic barriers to attendance, the potential incentives related to attendance-based funding cannot be realised.
4. Some schools agree that the effective enrolment measure encourages positive behaviours, such as building community relationships. However, the majority of schools identified that they had insufficient resources to do this effectively.

1. The methodology is seen as a punitive measure.
Approximately two in five schools that participated in the School Survey believed that the effective enrolment methodology implicitly punishes schools in low socio-economic areas, as they will likely have lower attendance and therefore funding levels, even if this is not within a school's control. As one principal of a small remote school summarised, *"Sometimes I feel like I'm punished for the demography of students."*

2. The methodology is seen to encourage 'band-aid' solutions.
Approximately three in five principals that participated in the School Survey identified that the effective enrolment measure is ineffective in incentivising schools to address attendance issues that achieve meaningful engagement in the longer term, as it focuses on short-term 'band-aid' solutions. Some stakeholders described it as a perverse incentive which focuses on getting students into schools, but not necessarily engaging them with education and addressing the issues behind dis-engagement.

> *"The budget is so heavily reliant on effective enrolment that incentives, such as a prize for attending, are used to coax families and to improve our attendance for one week. This money could be used for teaching and learning however if we don't [incentivise attendance], we lose money long term."*
>
> - *Survey respondent*

In addition, some school principals expressed concerns with resources being directed toward quick and superficial attendance-boosting solutions and away from core education delivery.

> *"Students who regularly attend are forgotten about in the race to re-engage as many students as possible so we can finally get some funding to put towards the regular attenders. It is a vicious cycle."*
>
> - *Survey respondent*

Several school leaders described this 'vicious cycle' of low attendance and under investment in student engagement. When low attendance levels drive reduced final budgets, it becomes even harder for schools to undertake activities to re-engage students or deliver high-quality teaching to existing students to maintain or improve future attendance levels. The existing attendance-based funding system was frequently described as self-reinforcing, making it more challenging for schools that are struggling to improve their attendance levels:

> *"This sets up a cycle of failure because the school is not resourced to have 100 per cent of students attending so the school is unable to meet the needs of the students who have been engaged (briefly) and so their attendance declines."*
>
> *School Principal (remote, medium size)*

Further, stakeholders, including school leaders and peak body organisation representatives, were concerned about instances of students not being admitted to school as a result of a history of behaviour issues and absences. Given the sensitivity of this topic, stakeholders did not share specific school names, as such this evidence is anecdotal. Due to the limited available evidence to support this claim, this Review encourages the Department to consider investigating the extent to which this behaviour occurs across the schooling system to understand the degree to which this behaviour is a systemic issue related to the effective enrolment measure.

3. When in conjunction with other systemic barriers to attendance, the potential incentives related to attendance-based funding cannot be realised.

School leaders noted that an inability to access resources to support a school to address attendance issues restricts the effectiveness of positive incentives of the effective enrolment measure, in some cases. Specifically, student absences are sometimes a result of the school's inability to access the additional supports required to help vulnerable students engage with the system. A frequent example raised related to additional support required to assist students with special needs in remote locations. For example, as one school principal noted:

> *"We have school students with high, high needs - attendance is very low because we aren't funded to have one-to-one support for them, and we can't find the people"*
>
> *School Principal (remote, medium size)*

The limited labour markets in remote communities can mean that remote schools struggle to access the non-school based support measures that are required to support students with high needs, such as psychologists or speech therapists.

Costs related to improving student engagement place further pressure on school resources, detracting from the quality of education on offer to students who do attend. Funding for student re-engagement officers and other programs is available centrally through the

Department, but consultations found that many stakeholders believe that the existing system provides inadequate resources for improving engagement.

4. Some schools agree that the effective enrolment measure encourages positive behaviours, such as building community relationships.

Finally, approximately one in ten school leaders did perceive the effective enrolment measure to encourage positive behaviours, such as improvements in engagement with teachers and community members, as well as taking the time to develop strategies to improve student attendance.

However, the majority of schools surveyed identified that, while they did perceive there to be some incentive to address attendance issues, many schools had little capacity to do so, particularly small schools who had limited teaching staff.

3.3   Alternative enrolment-based methodology considerations

Key finding 3: Although enrolment-based student count methodologies would be better aligned to system strategy and objectives, defining enrolment for the purposes of funding allocation in the NT context is not straightforward.

   i.   The intent of the effective enrolment measure is in dissonance with the Department's policy goals, notwithstanding the fact that there are programs funded outside of the SRM that support schools to engage with students.

   ii.   Capturing an accurate picture of enrolments in NT schools is not straightforward due, for example, to student mobility and attendance by students at multiple schools. It therefore requires careful design and consideration. Further work would be required to develop enrolment count criteria with integrity and accuracy.

3.3.1   The intent of the effective enrolment measure is in dissonance with the Department's policy goals.

As explained in 2.3.2, the effective enrolment model has been positioned as a way to distribute and prioritise a finite pool of resources to "*schools with children attending and in front of the teacher*."[63] Funding allocated by the effective enrolment methodology accounts for approximately 60% of government funding allocated to schools each year. Other funding received by schools, such as targeted and grants funding, and NCCD funding are allocated via other mechanisms unrelated to the effective enrolment methodology.

The intent of the effective enrolment measure – to prioritise variable funding towards attending students – is in dissonance with its other policy goals. It implicitly presumes that the responsibility of schools for non-attending students is limited.

The NT Government has a specific objective to deliver public education that '*ensures equity and gives every child the opportunity to engage, grow and achieve'.*[64] The NT Education Engagement Strategy (2022-2031) recognises the important role of engagement in improving education outcomes across all of the NT, and the specific impact that will have in reducing inequalities in Aboriginal children, who are most impacted by low engagement in education. The Strategy has, at its centre, the role of communities and families in working with and supporting schools to foster positive educational outcomes, irrespective of the background of students and their families and regardless of their socio-economic situations. Initiatives and additional efforts to re-engage students disengaged (or at risk of disengaging) from education and create safe, supporting and inclusive learning environments are

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[63] Ernst & Young, *Review of the Global School Budgets Funding Model* (report commissioned by Department of Education Northern Territory Government, September 2017) <https://education.nt.gov.au/__data/assets/pdf_file/0005/464792/Report-from-the-Review-of-the-Global-School-Budgets-Funding-Model.pdf>.
[64] Northern Territory Department of Education, *Education Strategy 2018 – 2022*. (2017)

foundational to achieving the vision set out in the NT Education Engagement Strategy (2022-2031).

Department grants, targeted funding, and central supports provide an additional investment in student engagement, largely allocated based on need. However, as mentioned in Section 3.1.3, despite significant investment, there is no current evidence that these supports are sufficient to improve student engagement across the NT. In their evaluation of stage one of the Indigenous Education Strategy (2015-2017), ACIL Allen Consulting found that a majority of schools reported little improvement in attendance thus far as result of new attendance-related initiatives: [65]

> *"Most schools reported no clear evidence as yet that attendance initiatives are having an impact, underscoring the challenge of measuring the effectiveness of policies in this area. This is supported by administrative data on attendance which indicates that attendance rates have remained relatively consistent for both Indigenous and non-Indigenous students over the period 2011-2017."*

Further, quantitative analysis suggests that additional targeted funding sources are not sufficient to counter the impact of the effective enrolment measure on reducing needs-based weightings. For example, as shown in Chart 3.12, an Aboriginal student on average attracts 1.07 times the funding of a non-Aboriginal student when looking at variable funding alone. This figure increases to 1.11 when targeted funding is accounted for – still significantly lower to the ratio of 1.32 if funding was enrolment-based. It is estimated that to completely offset the average impact of the effective enrolment measure on funding received per-enrolled Aboriginal student across the system, approximately $32 million of additional funding would need to be allocated to all enrolled Aboriginal students.[66]

Chart 3.12: Ratio of funding per-enrolled student by specific demographics to funding per-enrolled non-Aboriginal student
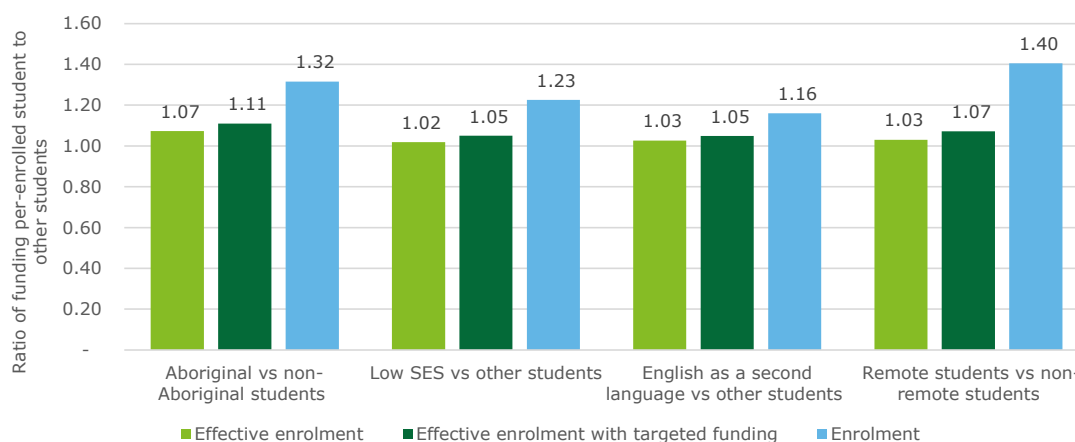
Source: Deloitte Access Economics analysis using NT education data
Notes: Per student values were calculated at a school-level first and then apportioned to demographic characteristics based on the student profile of each school. This includes the small schools grant. Per student rate was calculated by dividing total allocation (under the two methods) by the August Age Grade Census 2020 enrolment count.

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[65] ACIL Allen, *Indigenous Education Strategy Evaluation* (report commissioned by NT Department of Education, 25 April 2018) <https://education.nt.gov.au/statistics-research-and-strategies/indigenous-education-strategy>.

[66] $32 million represents the additional amount of funding needed to ensure that the ratio of funding per-enrolled Aboriginal student is 1.32 times greater than funding received per-enrolled non-Aboriginal student. This would reflect the difference between per-student needs weights between Aboriginal and non-Aboriginal students. However, this analysis does not consider the cost of closing the gap between other characteristics.

3.3.2 Capturing an accurate picture of enrolments in NT schools is not straightforward and therefore requires careful design and consideration.

Challenges with conducting a representative student count

Due to the complicated nature of mobility and attendance patterns across schools within the Northern Territory, enrolment for the purposes of funding allocation is difficult to measure. The key challenges related to conducting a student count that's reflective of schools' resourcing requirements include:

- **Determining the right channels of support** – some stakeholders argued that students who are not attending school and cannot be located for an extended period of time (e.g., more than four weeks) should not necessarily attract the same level of resourcing as attending students. Once a school has done everything in its power to engage the student, the appropriate channel of support for that student may not be through a school setting (e.g., through a targeted program instead). The extent to which per student funding these students attract should be allocated to a school versus invested by the Department through alternative channels of support is unclear. However, regardless of the policy position on the channels of support, students enrolled in the government schooling system (as per the Enrolment Policy) should be funded and supported to access quality education. It is acknowledged that funding for flexible education arrangements is not in scope of the Review and that the Department is presently undertaking work on this topic.

- **Allocation of funding for highly mobile students** – if students change schools multiple times a year it may not be practical for funding to exactly follow the student. In these situations, it is not always clear which schools should receive how much funding to support the student.

- **Determining a point in time to count students** – schools in the NT face seasonal enrolment patterns. Generally, enrolments are higher in Term 1 and then gradually decline throughout the rest of the year. However, these patterns can differ across schools. While some schools reported experiencing peak enrolments at the beginning of Term 1, others reported peak enrolments and attendance at other points in time.[67] Any point in time selected for the purposes of student count will inevitably be a more or less accurate estimation of resourcing requirements for certain schools.

- **Enrolment duplications** – duplication of enrolments can occur in some instances due to reasons such as students enrolled in more than one school at the same time, such as for distance learning.

- **Students no longer enrolled without notifying schools** – schools reported instances where they had difficulties contacting families of a non-attending students and later finding out that these students moved interstate or to a non-government school. In these instances, students should be moved to a former roll, but they would remain on the current roll for longer than needed.

The magnitude of the first challenge listed above is significant and should be unpacked further, as it is particularly relevant to the NT context. Although all other jurisdictions in Australia fund based on enrolments, enrolment counts for the purposes of funding allocation usually also must meet some basic attendance criteria (although much weaker than effective enrolment).

For instance, only students attending school in the four weeks ahead of the August Age Grade Census are eligible to be reported in the August Age Grade Census used by the Australian Government to determine funding entitlement for the NT government schools.

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[67] Approximately 18 per cent of schools consistently did not experience peak enrolments during Term 1 (over the period 2018 to 2020). Of these, 42 per cent are categorised as small and remote schools.

Enrolments at Government-funded schools in the NT tend to be between 400 to 1,000 enrolments lower than peak average enrolments during the period during which the August Age Grade Census is conducted.[68]

Considerations regarding student count design for the purposes of funding allocation

If the Department's SNBF formula was to become enrolment-based, enrolment count eligibility for the purposes of school funding allocation needs to be clearly defined alongside procedures supporting the integrity of that count.

This definition should **align with the system's expectations of the role of schools** in supporting these students. As outlined in Section 2.1.1, this includes (but is not limited to) expectations of the role of schools in achieving the following goals:

- providing quality education for all children and young people in the Territory
- promoting excellence and equity, and in particular improving outcomes of Aboriginal and Torres Strait Islander students
- assisting parents to meet their responsibility of ensuring that their children attend school (unless alternative education settings are agreed)
- recognising that student engagement in education is critical to supporting positive learning outcomes and that this extends beyond student attendance at school.

The starting point for the enrolment count eligibility for the purposes of funding allocation should be the **Department's Enrolment Policy and associated guidelines**. This includes (but is not limited to) assessing whether a student is eligible to enrol in a government school and determining whether a student is enrolled full-time or part-time (i.e., fraction of full-time equivalents (FTEs)).

To include an enrolment in the count of funded students, some **additional eligibility criteria** might be required to ensure that the student count aligns well with the expected resourcing requirements of a given school. This could include criteria based on student circumstance (e.g., illness, eligibility to enrol in a specialist school) and attendance criteria (e.g., regularity of attendance). For instance, for the purposes of the August Age Grade Census conducted by the Australian Government, enrolled students who have not attended school for twenty school days leading up to the Census are excluded from the count (unless special circumstances should be accounted for).

Selecting the **timing of the student count** requires a number of considerations. Given the seasonal mobility and attendance patterns in NT government schools, no single point-in-time enrolment count will perfectly capture schools' resourcing requirements throughout the year. On the other hand, monitoring and updating student counts continuously for the purposes of funding is not practical. Accuracy of the count needs to be balanced with simplicity and continuity, so that schools can easily understand and predict the student count, as well as make longer-term staffing and operations decisions.

Finally, **procedures that support the integrity of the count** need to be established to ensure that the student count is a valid representation of the student cohort size a school's is expected to support with its resources. These procedures should ensure that there is a consistency between expected enrolment and the funding allocation – that student numbers are not inflated for the purposes of the count; that schools only count students if there is a genuine intent to keep the enrolment; that students are not double counted where it is not appropriate; and that schools are able to share time fractions fairly (i.e., allocate fractions of FTE).

Variability in student count across the year

Currently, the system is familiar with a student count process for the purpose of funding allocation at two points in time – at Week 4 of Term 1 and during the August Age Grade Census. There is a difference between these two points in the number of active enrolments,

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[68] Northern Territory Department of Education, *Review of Passive Enrolment – Draft Report* (2018)

i.e., enrolled students who have attended school at least once in the four weeks preceding the count (Chart 3.13).

Chart 3.13: Average active enrolment per half-term (2018 to 2020)
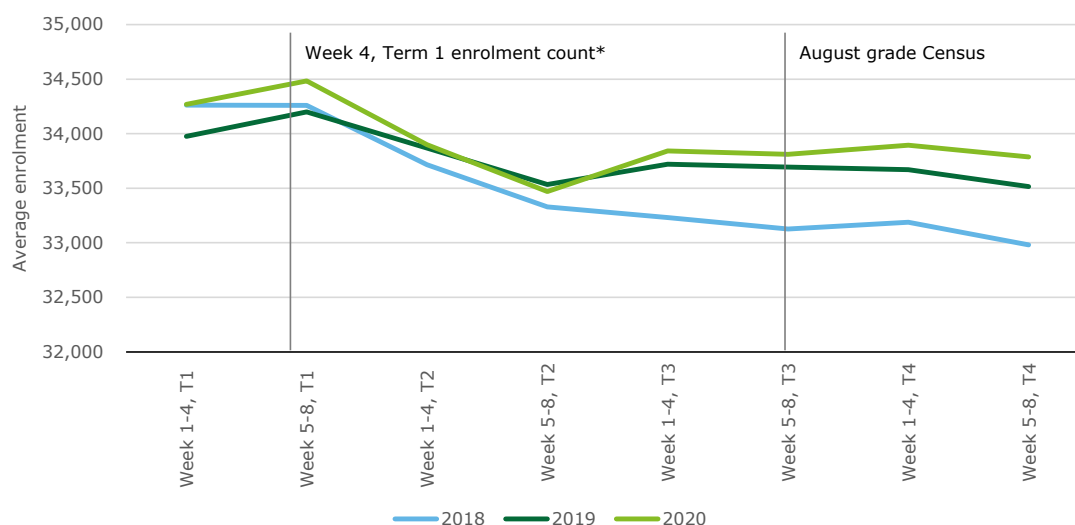
Notes: The enrolment count in week 4, term 1 is not accurately captured here as this chart presents an average of active enrolments over four weeks, whereas the enrolment count is a cumulative total enrolment count as at week 4, term 1.

Enrolments tend to peak across schools during Term 1 but decline as the year progresses. Specifically, in 2020, approximately 34,200 enrolments were counted on average across the weeks 5-8 in Term 1, and approximately 33,700 enrolments during Week 5-8 Term 3, typically when the August Age Grade Census occurs.

Due to these discrepancies between the two counts, there are several concerns about the integrity of point-in-time enrolment counts across the school year, specifically:

- **The integrity of the student count measures across the year:** Stakeholders identified concern about the integrity of the student count at week 4 term 1 and August Grade Census due to the discrepancy in enrolment numbers between those dates. Some respondents to the School Survey identified that use of the week 4, term 1 enrolment count in the effective enrolment methodology incentivises schools to increase enrolments early in the year for the purposes of increasing school funding. This may contribute to the elevated number of enrolments at week 4, term 1 compared to the remainder of the school year. However, further investigation is required to determine if this incentive is driving increased enrolments at week 4, term 1. Clarifying the guidelines on conducting the student count and data verification processes (e.g., system data analysis; verification based on visits to a sample of schools) can mitigate these risks.
- **Point-in-time enrolment counts do not account for seasonal variation in enrolment across schools:** Stakeholders pointed out that seasonal enrolment patterns need to be accounted for to prevent a situation where certain schools with consistent enrolment peaks later in the year (e.g., due to wet season) are systematically underfunded. Indeed 20% of schools experienced peak enrolments consistently at a later time of the school year over the past three years. For these schools, point-in-time enrolment count measures are not an appropriate measure of their student count throughout a year. This risk could be mitigated by allowing school principals to negotiate how the resourcing could be shared if a student transfers schools (e.g., based on full-time equivalent shares spent in each school), as well as by identifying these schools and providing special allowance funding. In addition, the Department may consider adjusting the enrolment count inclusion criteria to reflect mobility patterns.

These concerns highlight that more work is required to strengthen the integrity of enrolment counts throughout the year, in particular to reduce the discrepancy of the enrolment counts at week 4, term 1 and August Age Grade Census. To support a movement to an enrolment-based measure, enrolment counts will need to be strengthened with appropriate supports to ensure the integrity of the process. This includes (but is not limited to):

- specifying any attendance and student circumstance criteria for inclusion in student count
- detailing how dual enrolments are treated for the purposes of funding
- clarifying how time fraction is determined (if funded on full-time equivalents) and shared across schools
- ensuring that any changes to the enrolment policy are embedded in the funded students count
- developing appropriate guidelines and supports for schools
- processes for case-by-case recognition of unique circumstances
- data validation and potential audits (e.g., through physical visits to a sample of schools).

Recommendations related to improving equity

There is significant opportunity to improve the way that variable funding for government school is allocated in the Northern Territory, particularly in the manner that aligns to the Department's strategic objectives and empowers schools to respond to local needs.

The following recommendations are proposed in response to the findings in this section of the Review:

Finding	Recommendation	Priority
Theme 1: Appropriateness of the effective enrolment measure within the SRM Recommendations that impact the effective enrolment measure include replacing the current effective enrolment measure of student count with an enrolment-based measure. This recommendation will take time to implement due to its fiscal implications and the range of interdependencies, both occurring currently and scheduled to occur in the future, that will impact the evidence based, and eventual structure of the enrolment-based measure of student count.		
Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy. • Higher levels of educational need is strongly linked with low school attendance. • On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM. • Effective enrolment measure does not align well with schools' resourcing needs.	**Recommendation 1: Communicate the intent to move towards an enrolment-based, rather than attendance-based, methodology as the basis for allocating needs-based funding to schools.** The department should be clear and effectively communicate that it intends to implement an enrolment-based methodology as the basis for allocating needs-based funding to schools. Further, the Department should outline an indicative timeline for when milestones of implementation will be reached, such as when the methodology of the enrolment-based methodology will be released.	Immediate / Ongoing

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Supporting evidence: While outside of the scope of this Review, there is clear evidence that the remit of funding allocations provided through targeted funding programs, and grants and programs funded outside of the SRM will need to change under an enrolment-based model.	**Recommendation 2: Identify and implement opportunities for the inclusion of targeted funding, and other grants and programs into the SRM.** The objective of this process would be to determine if funding allocated through these mechanisms would be more appropriately allocated via the student-needs based funding model of the SRM, under an enrolment-based methodology. The outcome of this would inform the projected budget envelope to be allocated through an enrolment-based methodology, alongside outcomes from the future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department. **Interdependencies:** The implementation of this recommendation is dependent on the following: • Review of homeland learning centres • Review of funding for students with a disability • Review of senior secondary education funding.	Short term
Supporting evidence: Although enrolment-based student count methodologies would be better aligned to system strategy and objectives, defining enrolment for the purposes of funding allocation in the NT context is not straightforward. • The intent of the effective enrolment measure is in dissonance with the Department's policy goals and programs funded outside of the SRM.	**Recommendation 3: Develop detailed enrolment count procedures and eligibility criteria for inclusion in the count for the purposes of school funding allocation.** This should include (but is not limited to): • clarity on whether and how potential time fractions are determined (if students are enrolled part time or dual enrolled) • procedures supporting the integrity of the student count. Over the long term, the Department should continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more	Short term

- Capturing an accurate picture of enrolments in NT schools is not straightforward due to for example student mobility and attendance by students at multiple schools therefore requires careful design and consideration. Further work would be required to develop enrolment count criteria with integrity and accuracy.

sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the recently revised Enrolment Policy.

Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

- Higher levels of educational need is strongly linked with low school attendance.
- On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
- Effective enrolment measure does not align well with schools' resourcing needs.

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Recommendation 4: Develop a detailed methodology of the enrolment-based funding approach.

The development of the methodology of the enrolment-based measure will include (but is not limited to):

- the enrolment count method
- the timing of funding allocation (such as preliminary and final funding)
- the base rate funding amount to be allocated to schools
- detailed description of additional school supports provided to support budget management
- detailed impact modelling of the implementation of an enrolment-based measure on individual schools
- providing clearer guidance on the expectations regarding the type of expenditure and supports that are provided by the Department outside of the SRM. This guidance should align with the system's expectations of the role of schools in supporting students with different needs.

The Department should ensure that the methodology is explained clearly and in a way that allows schools to replicate it for the purposes of their internal planning. This includes ensuring that the naming convention reflects the nature of the methodology and is interpreted correctly by schools.

Once established, this methodology should be made accessible to all schools and stakeholders across the sector. In particular, the impact of the transition to the revised funding model should be clear to all school

Short term / medium term

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the projected fiscal environment (informed by Recommendation 2 and future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department)
- NT Education Engagement Strategy (2022-2031)
- Review of homeland learning centres
- Review of funding for students with a disability
- Review of senior secondary education funding.
- Recommendations 6 to 10.

Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

- Higher levels of educational need is strongly linked with low school attendance.
- On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
- Effective enrolment measure does not align well with schools' resourcing needs.

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Recommendation 5: Transition over time fully to a methodology based on enrolment count, as part of SRM (i.e., without attendance components), alongside any additional school supports to assist the transition to the revised funding methodology. Monitor and adjust this model over time.

The Department should completely transition to an enrolment-based measure of enrolment for funding purposes. This includes:

- develop and deliver budget planning tools to support schools to plan resources with the enrolment-based funding model
- continue to monitor how the revised methodology impacts individual schools and identify potential areas for improvement and further calibration to avoid systematic under- or over-funding of schools
- continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

The Department should continue monitoring schools' perceptions of the model and whether it results in any unintended incentives.

Interdependencies:

The implementation of this recommendation is dependent on the following:

Medium term / long term

- Recommendations 1 to 4.

It should be noted that without an increase in the overall budget envelope, and/or the re-allocation of funding from other sources, these changes could result in an overall decrease in a base rate of funding per FTE enrolment and/or a substantial re-distribution of funds away from schools with current higher rates of attendance. In this context, it is important to note that, despite the impact of the effective enrolment measure on the equitable distribution of school funding across student demographic characteristics, there is no evidence to suggest that particular Government schools in the NT (including schools with high rates of attendance, and low levels of disadvantaged) are systematically overfunded in absolute terms (including with reference to the Commonwealth SRS, or comparable funding for similar schools in other jurisdictions).

The Review acknowledges that the proposed changes cannot be implemented in isolation to other reforms and elements in the broader SRM. Revisions to funding of small schools, senior secondary provision, homeland learning centres, and students with disability will all be critical to ensuring that the funding model meets the needs of schools and students. Any changes to the funding model will need to be supported by policy developments that ensure that the additional funding is spent on supports and initiatives that make a difference to student outcomes in different contexts, including contexts of high disengagement.

Section 4 | Application of the effective enrolment measure within the SRM

This chapter considers the way the effective enrolment measure is applied within the SRM, including:

- contribution of the effective enrolment methodology to funding variability
- impacts of budget uncertainty on quality education provision
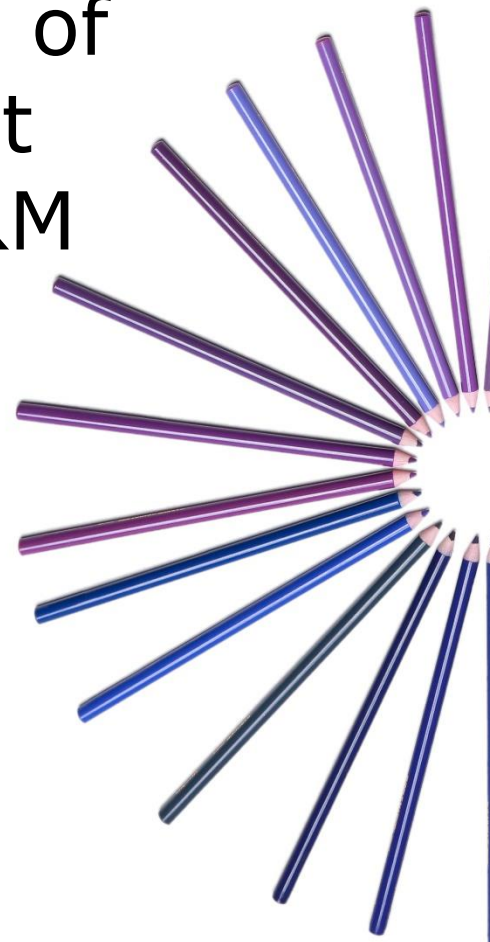
4 Application of the effective enrolment measure within the SRM

This section examines the size and impacts of student needs-based funding variability, and the contribution of the effective enrolment methodology to this.

This chapter examines the current methodology to apply effective enrolment within the SRM and its impacts on funding volatility. It also considers how the effective enrolment methodology interacts with other components of school operations, such as workforce planning and school improvement initiatives.

4.1 Contribution of the effective enrolment methodology to funding variability

Key finding 4: Funding variability, primarily driven by enrolment fluctuations, combined with a poor understanding of how effective enrolment works, leads to budget uncertainty for schools.

   i. *Government schools in the NT can experience fluctuations in their year-on-year funding, which is mainly driven by fluctuations in enrolments each year.*
   ii. *The effective enrolment student count method contributes to, but is not the primary driver of, variability in SRM variable funding.*
   iii. *In many instances, year-on-year variability in final funding cancels out over time. This means that final funding fluctuates around a more constant average trend of enrolments over time, potentially due to student mobility in remote regions. This indicates that schools could be supported to manage their budgets over time to reduce the impact of volatility on school resource planning.*
   iv. *The effective enrolment methodology does not have a mechanism that establishes a minimum funding standard for education delivery. Therefore, there is no effective limit to the amount that funding can decline on a year-on-year basis for most schools (outside of the small school supplement). However, it is acknowledged that the Department provides supports to schools through an early school support program, which supports schools in circumstances where education delivery is negatively impacted by factors such as declines in funding.*

Government schools in the NT can experience substantial fluctuations in their year-on-year funding. While variation in school funding occurs across jurisdictions throughout Australia, the unique context of the NT results in specific and unpredictable drivers of school funding variation. Factors such as student mobility and variable attendance levels are a significant driver of variation in attendance and enrolments over time, and therefore contribute to fluctuations in per student funding. As a result, some schools within the NT operate under uncertain budgets.

Each year, one in ten NT Government schools (10 per cent) see their final funding vary by more than +/- 25 per cent of previous year; for one in three (38 per cent) it is a variation of more +/- 10 per cent (see Chart 4.1). Although 10 per cent may not appear as high, such fluctuations have impacts on school resourcing, ranging from $45,000 for smaller schools to $1.3 million for larger schools (equivalent to between 0.5 FTE and 16 FTE classroom

teachers Level 2 respectively).[69] To compare with other jurisdictions, NSW and Queensland, which have schools with broadly similar characteristics, do not experience as material issues with variability, as schools are directly allocated FTE staff allocations based on ranges of school size.

Chart 4.1: Year-on-year change in NT government school final funding (2018-21)
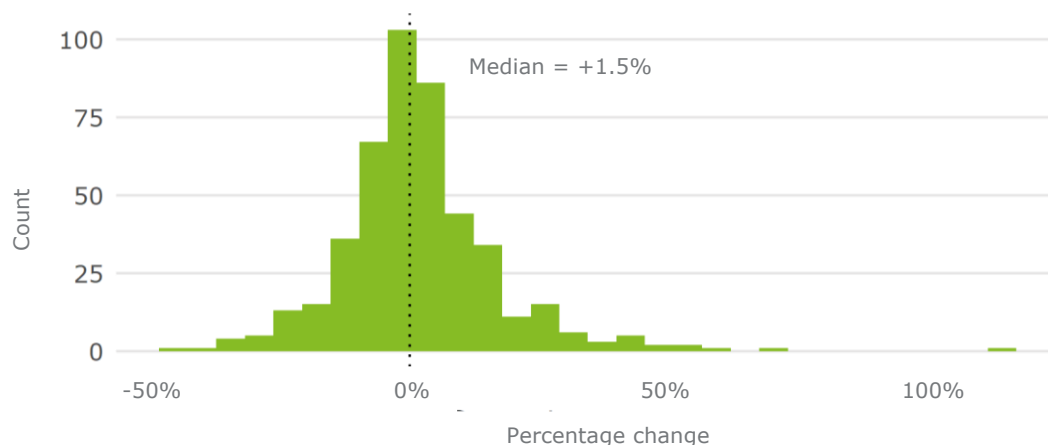
Source: Deloitte Access Economics (2022).

A number of student and school characteristics related to higher educational need are also positively correlated with funding variability (see Table 4.1). For example, schools with higher proportion of Aboriginal students, students from low socio-economic backgrounds and students that speak English as a second language are associated with higher levels of funding variation across schools. Further, school characteristics, such as school size, schools located in remote areas and schools that provide secondary education tend to be associated with higher levels of funding variability.

Table 4.1: Relationship between equity weights characteristics and funding variation

Variable	Correlation with funding variation
SES	+0.34
EAL	+0.32
Indingeous	+0.36
Indigenous concentration	+0.34
Distance education	+0.15
Smaller schools	+0.38

Strongly positive	Moderately positive	No / very weak relationship	Moderately negative	Strongly negative

Source: Deloitte Access Economics (2022).

It is interesting to note that funding variability appears to still be an issue for very small schools, despite the SRM providing a small school supplement to schools with less than 52 effective enrolments. This relationship is illustrated in Chart 4.2.

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[69] Assuming an annual salary of for CT Level 2 of $80,911 from the Northern Territory Office of the Commissioner for Public Employment.

Chart 4.2: Year-to-year variation in final funding by average school enrolments (2017-2020)

The small school supplement ensures that variable funding does not drop below approximately $260k. However, stakeholders reflected that even with that additional support, per student funding in very small remote schools is very volatile. Combined with fluctuations in enrolments throughout the year, it can be particularly challenging for smaller schools to manage:

> *"Being a small school in a very remote geolocation, in a community with a highly mobile population, student attendance is difficult to reduce to a small number of 'funded students' e.g., '19'. In 2021, (…) over 50 unique students attended the school during the year for some period of time. The funding (…) masks the complexity of student attendance and the work this generates from administrative, financial and pedagogical perspectives."*

> *Survey Respondent (small, remote school)*

4.1.2 The effective enrolment student count method contributes to, but is not the primary driver of, variability in SRM variable funding.

The Review recognises that effective enrolment measure is only partially contributing to funding variability, and that moving to another measure will not remove budget uncertainty even to a modest degree. A variety of other factors can drive total school funding variability including (but not limited to) the base level of funding per-student, the composition of student needs profile, eligibility for targeted funding, the level of external grants a school receives.

Chart 4.3 illustrates the contribution of the key drivers of funding variability individually (enrolment count, peak attendance and student characteristics). Week 4 Term 1 enrolment count is the top driver of variability in funding variability received by schools each year, regardless of a school's ICSEA quartile. However, funding for schools in the bottom ICSEA quartile are particularly move responsive to movements in enrolment counts each year, likely because these schools tend to be smaller in size than schools in the top ICSEA quartile. This finding implies that there is an inherent level of variability in school funding within the

NT linked to enrolment movements across schools and over time. This variability cannot be eliminated by moving from effective enrolments to another measure of funding distribution.

The analysis further found that the effective enrolment measure of student count is contributing to a modest level of funding variability across schools. Overall, changes in peak attendance (as measured by changes in calendar year effective enrolments at schools) contributed to approximately 6 per cent of average funding variability across schools in schools located in the bottom ICSEA quartile. This finding implies that by moving from effective enrolments to another measure of funding distribution, funding variability will decline by a modest amount. This is consistent with the findings summarised in Chart 4.3 below, which shows how different methods of student count impact variability in student count numbers over time.

Finally, school and student profiles (as determined by changes in the per-student rate over time) were identified as the third largest driver of funding variability over the period 2019 to 2021. However, the impact of changes in school and student profiles on funding variability was relatively low, likely due to the stability of student needs profiles across schools, over time.

Chart 4.3: Contribution of select variables to funding variability, by ICSEA ranking (2019-2021)
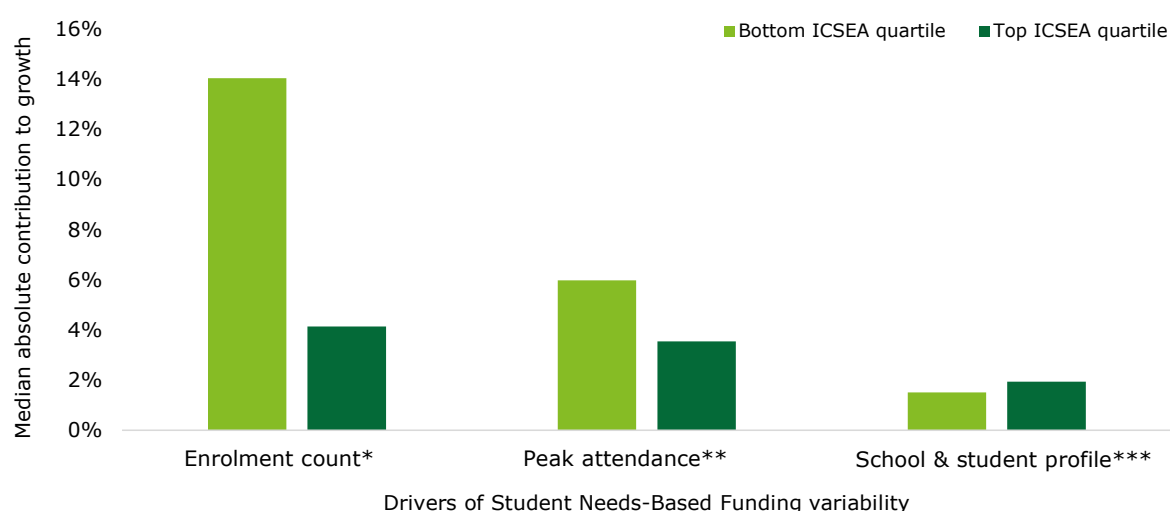
Source: Deloitte Access Economics (2022).
Notes: Each column represents the median impact of each funding component, in absolute terms, year-to-year final funding variability, across government schools in 2019-2020, and 2020-2021.
Drivers of final funding variability reflect key individual components of final funding within the SRM and are defined as follows:
*Enrolment count - considers changes in Term 1 Week 4 enrolment between current and previous year
** Peak attendance - considers changes in the calendar year effective enrolment numbers year on year.
*** School & student profile – considers the per student rate, determined by the base rate per FTE and additional equity weights.
Other components of the formula, such as the small school supplement, were omitted as they have a negligible effect on funding variability. The analysis excludes schools that are not funded under variable funding within the SRM, as well as those with characteristics that were manually adjusted by the Department during the funding finalisation process.

Further, consultations with schools found that the impact of Week 4, Term 1 student count adjustments can be significant and not always reflective of longer-terms shifts in student population.[70]

> *"The impact of the 'scaling' based on enrolment in Week 4, Term 1 each year is a bit like a lottery. In 2019 there was movement into the community because of a large*

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[70] The Week 4 of Term 1 enrolment adjustment scaling is applied to the effective enrolment measure (calculated over the calendar year preceding the funded year). Effective enrolment student counts are scaled by the degree of change in week 4, term 1 enrolments in the current year compared to week 4, term 1 enrolments in the preceding year.

funeral and conflict in another community. That year my school received additional funding as a result of scaling and could employ an extra teacher from Term 2 to Term 4."

– survey respondent

Although removing the effective enrolment methodology and transitioning to an enrolment-based would remove some variability, it will not on its own address the funding variability issues experienced by schools. To illustrate this, Chart 4.4 compares variability in student counts under the effective enrolment methodology with the number of enrolments in Week 4 of Term 1 in a given year (without adjusting for attendance levels).

This analysis shows that, overall, the effective enrolment measure of student counts is associated with a higher level of variability over time than a method that just uses point-in-time enrolment. However, even once removing the effective enrolment measure, there still exists moderate variability in student counts across schools, which is inherent in the Northern Territory education system.

Chart 4.4: Comparison of variability in student counts under alternative student count approaches
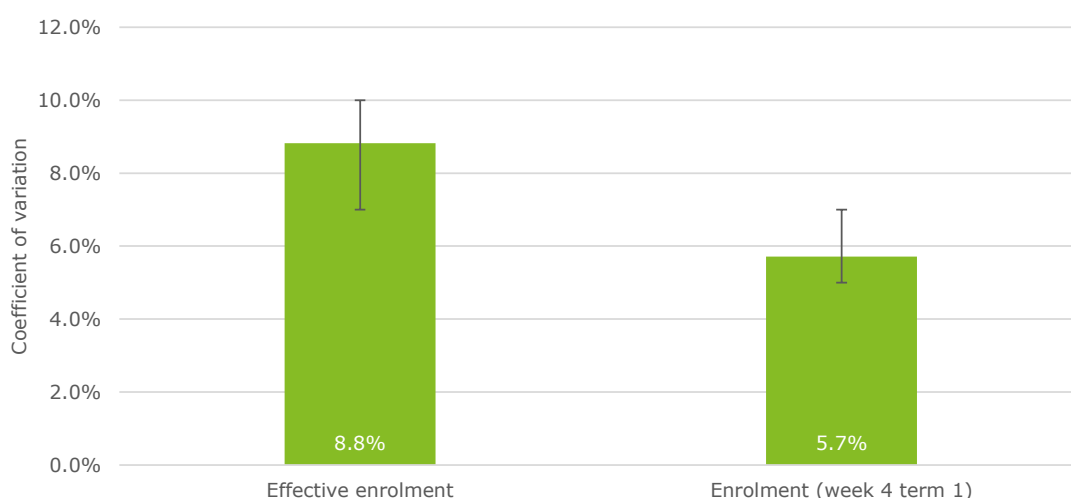
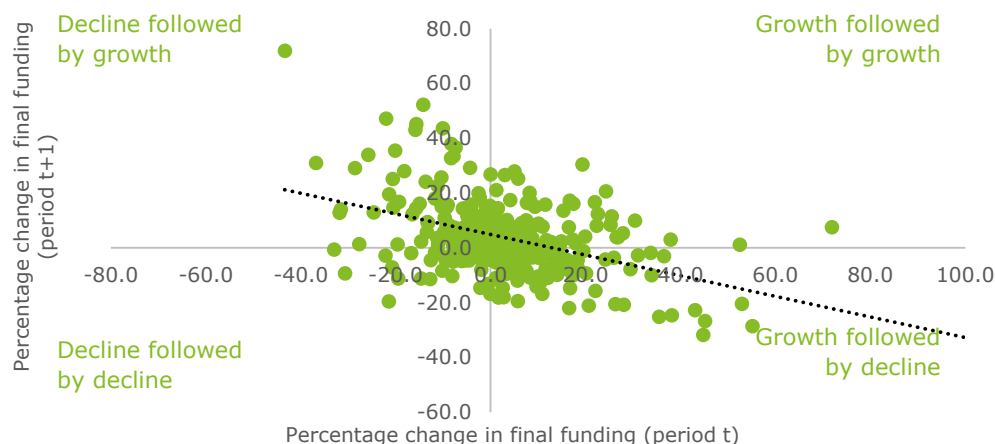Source: Deloitte Access Economics (2022).
Notes: This analysis estimates the coefficient of variation of funded students for each school over the period 2017 to 2021, for each methodology. Statistical analysis is then conducted to determine the median and binomial confidence intervals of coefficient of variations of funded students for each methodology. A higher coefficient of variation means that the median school experiences a higher variance of funded students between 2017 and 2021 under the specified methodology.

4.1.3 In many instances, year-on-year variability in final funding cancels out over time.

Analysis of school funding data suggests variability in funding over time is typically not part of a broader trend of a school's funding consistently either increasing or decreasing. In many instances, year-on-year variability in final funding cancels out over time. For example, from 2018-21, in 58 per cent of cases an increase in school funding in one period was followed by a decrease in the following period or vice versa.

This trend is illustrated in Chart 4.5 showing a slight negative correlation between the percentage change in final funding in one year, and the percentage change in the following year.

Chart 4.5: Annual change in school final funding (2018-21)

Source: Deloitte Access Economics (2022).
Note: $R^2=0.21$. The x-axis represents the percentage change in final funding from one year to next, while the y-axis represents the change in final funding in the subsequent year. For example, one data point may represent the percentage change in final funding between 2018-19 (x-axis) and 2019-20 (y-axis).

This suggests that the existing funding model may be responding to fluctuations in student numbers which do not reflect sustained changes in the number of students a school is servicing. As such, with the right supports, schools could potentially manage a portion of funding variability by undertaking over-time resource planning, with the expectation that funding variability will cancel-out over time.

Further, as stated, the effective enrolment methodology does not have a mechanism that establishes a minimum funding standard for education delivery across school contexts, other than for very small schools through the small school subsidy. Therefore, there is no effective limit to the amount that funding can decline on a year-on-year basis for most schools. Findings from consultations with school principals indicate that the inability to predict the severity of year-on-year funding variability causes schools to be more cautious with resource planning. However, it is acknowledged that the Department provides supports to schools through an early school support program, which supports schools in circumstances where education delivery is negatively impacted by factors such as declines in funding.

4.2 Impacts of budget uncertainty on quality education provision

Key finding 5: Budget uncertainty combined with schools' autonomy to manage aspects of their resources concentrates financial risk at a school-level and could lead to additional workforce attraction and retention issues, separate from supply-side constraints to workforce.

  i. *Combined with a poor understanding of how effective enrolment works, funding variability leads to additional budget uncertainty for schools.*
  ii. *Budget uncertainty can negatively impact schools' ability to effectively engage in long-term strategic workforce planning.*
  iii. *Budget uncertainty has been reported by schools to be a contributing factor to higher levels of staff turnover and a reliance on short-term contracts by school principals.*
  iv. *While existing budget policies grant schools a level of autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this. This is particularly impactful on small, remote schools.*

Improving budget certainty has a potential to provide schools with the confidence to plan for staffing and operations in the longer term. Although budget certainty is by no means sufficient to improve staffing continuity and performance, it is an important enabler of effective planning and implementation.

4.2.1 Funding variability combined with a poor understanding of how effective enrolment works, that leads to budget uncertainty for schools.

It is not the funding variability on its own, but rather funding variability combined with a poor understanding of how the effective enrolment methodology works, that leads to budget uncertainty for schools.

While most schools consulted for the purposes of this Review understood the effective enrolment methodology at a high level, very few school leaders consulted were confident in their understanding.

> *"Every time I think I understand the effective enrolment, something comes up. Last year I thought I really got it, but still the final numbers didn't make sense to me"*
>
> *School Finance Manager (medium size, remote school)*

Survey results indicate that only about half of school leaders feel that they understand usage of the effective enrolment methodology within the SRM. A combined 54 per cent indicated that the model was either non-transparent and/or not understandable (see Chart 4.6).

Chart 4.6: Survey responses to the question *'To what extent do you understand the usage of effective enrolment in the existing funding model, and believe it to be transparent?'*
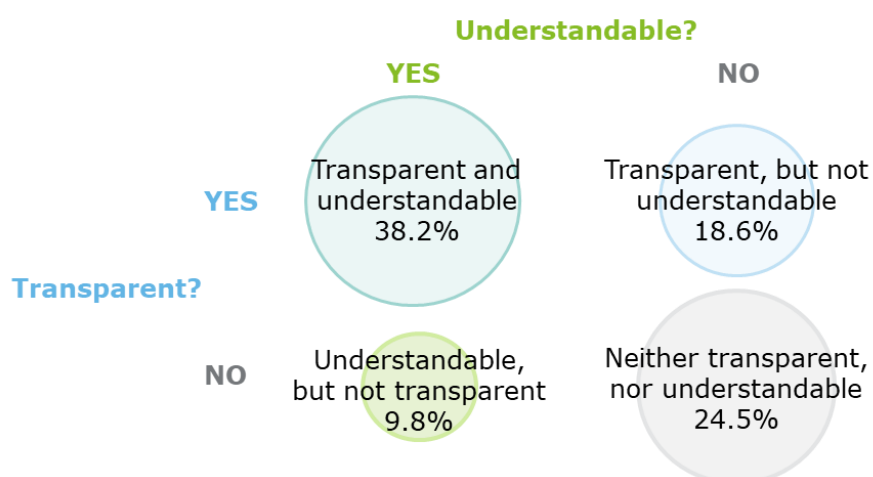
Source: Deloitte Access Economics analysis of NT Effective Enrolment Review School Survey (2022)

Notes: N = 102 participants representing 86 schools. 8.8% of respondents indicated 'Not sure'.

A driver of the low relative understanding of the effective enrolment methodology is associated with the complexity of the approach. Most jurisdictions throughout Australia base funding allocation on school enrolment measures, usually at a point in time.

There was a strong appetite from schools for a simpler formula that can be estimated by schools in house and be more easily explained to staff and families. When asked to elaborate on the lack of clarity in the current methodology, school leaders generally described it in the following ways:

- some principals did not understand the model beyond it being a method that combines enrolment and attendance; they asked for further upskilling on the methodology (e.g., annual sessions, and more training as part of principal induction process)
- principals and business managers who understood the mechanics of the model did not have sufficient clarity on how specific absence scenarios translate into effective

enrolment calculation (e.g., "*If a student is absent for the morning session, but joins later, what impact does it have on the calculation?*")

- it is difficult for schools to do their own reconciliation of the calculation and estimate what their effective enrolment might be (e.g., "*I asked my business manager, and my mentor to explain it. No one could tell me how much money my school was going to get, based on attendance data. There were always vague estimates.*")
- it is difficult for the members of communities and school councils (who often change), to understand the model and therefore make informed decisions (e.g., "*I understand it, but I have to repeatedly explain it families and staff*").

This inconsistent understanding of the funding formula and effective enrolment methodology has the capacity to undermine school leaders' ability to make effective decisions and fosters misconceptions and perceived inequities in the system.
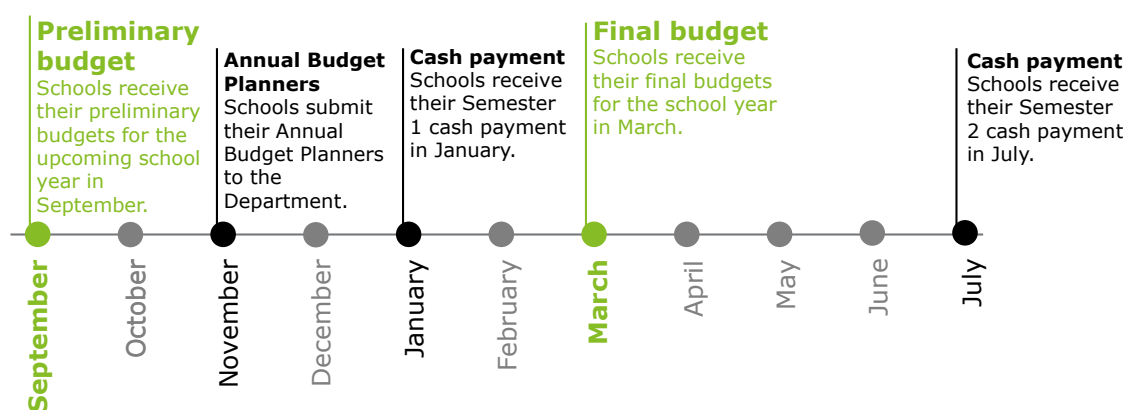
4.2.2 Budget uncertainty can contribute to schools' ability to effectively engage in short and long-term planning of a school's resources.

Short-term and long-term resource planning is impacted by the predictability of funding both, within a budget cycle, and across budget cycles (over years). Evidence form this Review shows that the current level of budget uncertainty in the short- and long-term is having impacts on how schools plan and allocate resources over time.

Short-term planning

In the short-term, resourcing decisions are impacted by the SRM Budgets timeline, which is a function of data reporting milestones and the upcoming school year schedule (Figure 4.1). Specifically, a school receives a preliminary budget for the upcoming school year in September of the previous school year. Variable funding within these budgets has been determined by the effective enrolment measure of the most recent financial year, but has since changed to be determined by effective enrolment of the previous calendar year.[71] Variable funding is then finalised in March of the following year, and is based on the effective enrolment measure of the most recent calendar year, as well as a *scaling factor*, intended to proxy for movements in students across the year.[72] The final budget allocation represents the funding schools can use on resourcing and planning over the upcoming school year.[73]

Figure 4.1: Approximate timelines of SRM

Preliminary budget
Schools receive their preliminary budgets for the upcoming school year in September.

Annual Budget Planners
Schools submit their Annual Budget Planners to the Department.

Cash payment
Schools receive their Semester 1 cash payment in January.

Final budget
Schools receive their final budgets for the school year in March.

Cash payment
Schools receive their Semester 2 cash payment in July.

September · October · November · December · January · February · March · April · May · June · July

Source: Department of Education (NT)

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[71] The Department has recently changed from using financial year effective enrolment measures, to using calendar year effective enrolment measures of the previous year. This has reduced some variability in budgets between preliminary and final budgets.

[72] The scaling factor discounts or inflates the effective enrolment measure by changes in week 4 term 1 enrolments from the previous year to the current year.

[73] Schools can use surplus cash reserves on school resourcing.

Consultations with school principals and business managers highlighted that budget variation between preliminary and final budgets inhibits school resourcing. Schools highlighted that resourcing decisions for the upcoming school year tend to be made in September of the previous year, to ensure that they are able to competitively offer attractive contracts to potential teaching staff. This process was highlighted as vital for schools in remote areas, where talent pools tend to be smaller, and attracting staff from other regions tends to be more difficult.

However, uncertainty in the amount of final funding that schools will receive impacts school decisions on how many teachers to recruit, as well as the structure of teaching contracts offered to staff. Evidence from consultations showed that schools that typically experienced variation in preliminary-to-final budgets employed more cautious recruitment practices, such as conservative resource planning, as well as the use of short-term contracts, such as recruitment of teachers for part of a school year.

Schools identified that this process did not encourage efficiencies in resource planning. Instead, it leads to under-resourcing across school grades, particularly with regards to student supports, leads to high teacher turnover, and the recruitment of less-experienced teachers in challenging environments with a high proportion of students with high needs. Further, any unexpected funding gains that schools receive as a result of the budget finalisation process is difficult to spend by schools because of the smaller pool of available teachers in March of a school year.

Quantitative analysis of variation in preliminary-to-final budgets highlights that many schools experience variability in their funding within a budget cycle. Over the period 2018 to 2021, an average of 52% of schools each year experienced a decline in funding from preliminary-to-final budget confirmation, due to underlying declines in student count measures. The majority of schools that do experience funding variability tend to be remote (77%) and small schools (36%). Further, the effective enrolment methodology is not the cause of this variation as it largely relates to variation in enrolment reporting across the school year, which is inherent in the NT public education system (see section 3.3.1 for a discussion on enrolment movements over a school year). Therefore, there needs to be considerations of mechanisms to support schools to adequately plan from the moment that they receive preliminary budgets.

Long-term planning

Most schools engaged as part of this Review commented that the unpredictable nature of their future effective enrolment and therefore funding levels means that they either do not attempt to complete longer-term planning exercises or have very little confidence in the plans that they do have. For example, as part of the survey process, schools commented:

> *"How can I plan 3-5 years in advance when I DO NOT KNOW* [sic] *how many students will be enrolled, how many will attend, what is the funding for each year."*
>
> *Survey Respondent (medium, remote school)*

Survey results suggest that only about 29 per cent of schools have a longer-term (3-5 years) budget and/or workforce plan (see Chart 4.7). Most schools that indicated 'other' specified that while they undertook some form of planning exercise, it was generally short-term and not detailed in nature.

Chart 4.7: Survey responses to the question *'Does your school have a longer-term (3-5 years) budget plan and/or a workforce plan?'*
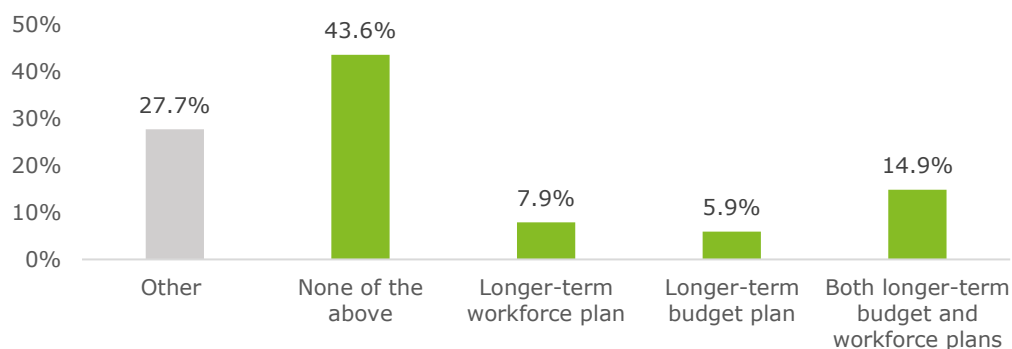
Source: Deloitte Access Economics (2022).
Notes: N = 101 participants representing 85 schools.

While some consultations revealed a small number of instances where schools did have greater confidence in their planning exercises, this appears to be a result of their own initiative and capability (e.g., predicting student numbers based on projected population forecasts, land use plans). Some school leaders identified opportunities for greater cross-government collaboration to generate better insights on future enrolments to support schools with planning:

> *"Education doesn't seem to work with housing at all. I can't tell from one month to the next what government programs are going on around us, and they have a massive impact on the number of students we get"*
>
> *School Principal (medium, remote school)*

Funding unpredictability limits schools' ability to engage in the four-year school improvement cycles in a meaningful way as set out in the Department's Accountability and Performance Improvement Framework. Schools reported not being able to engage in long-term strategic planning as a result of not being able to predict their future budgets.

4.2.3 Budget uncertainty has been reported by schools to be a contributing factor to higher levels of staff turnover and a reliance on short-term contracts by school principals.

Schools consistently highlighted that funding unpredictability is a major barrier to effective workforce planning and management.

Most survey participants believed that workforce planning is affected by variability in student attendance and mobility (Chart 4.8). Unsurprisingly, schools outside of the greater Darwin area are substantially more likely to report being impacted by funding variability than schools in Darwin.

Chart 4.8: Survey responses to the question '*How is your school's workforce planning affected specifically by variability in student attendance and mobility?*'
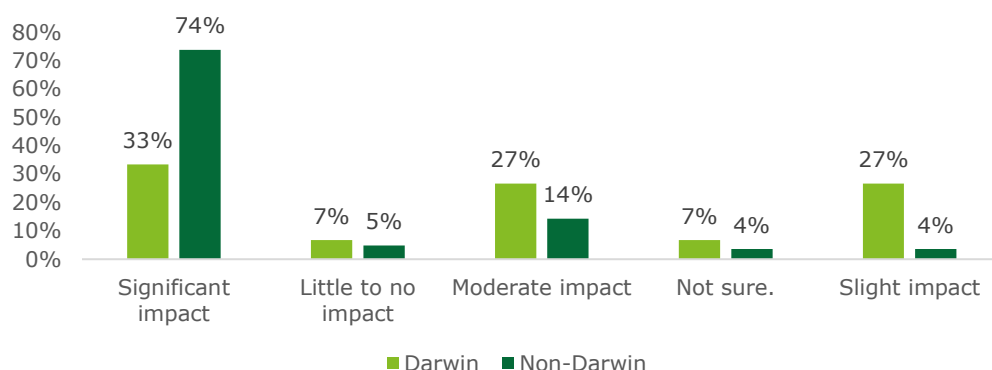
Source: Deloitte Access Economics analysis of NT Effective Enrolment Review School Survey (2022)

Notes: N = 101 participants representing 86 schools.

School leaders frequently commented on the challenges of ensuring that they have sufficient staff members to accommodate peaks in student attendance, while also seeking to avoid hiring too many staff who may subsequently be let go if attendance levels decline.

Workforce attraction

Schools have expressed concerns with the fact that final funding is not confirmed until Term 2 which means that temporary staff cannot have their contracts extended and sometimes need to wait for contract finalisation until April or May. This also means that it is much harder for schools to recruit talented candidates.

> "*Often we cannot begin to recruit until confirmed budget- meaning we are trying to hire staff during the term with minimal available applicants and disruption to the school program.*"
>
> *School Principal (small, remote school)*

Similarly, another school principal noted that being unable to offer staff permanent positions makes it even more difficult to attract new teachers to remote regions:

> "*How can I attract any young teacher if I can only give them a contract for a few months in a very remote location? It's just not attractive for anyone.*"
>
> *School Principal (small, remote school)*

Workforce attraction issues are made more difficult by current workforce supply issues, including a shortage of teacher recruits looking for work, as well as government housing shortages in remote areas to support teacher recruits.

Workforce retention

The inability to offer longer-term or ongoing contracts has been flagged as a contributor to workforce and turnover (as candidates decide to seek employment interstate or in the independent or Catholic sectors), for example:

> "*The only way I can keep good staff is by offering them a permanent position, but I'm frightened to make them permanent because I don't know if my funding will sustain it over time...I've lost at least three amazing teachers to the Catholic education system because I couldn't maintain funding levels. This is a loss to the entire public education system.*"
>
> *School Principal (small, remote school)*

School leaders frequently noted that the lack of budget certainty (both across years and between preliminary and final budgets) means they are risk averse in their hiring decisions, driven by the fear of having to let staff go. Although it is difficult to assess whether this risk aversion is justified, schools engaged in this Review generally preferred to 'play it safe':

> *"I am often asked by the Department to offer more permanent positions for teachers, but cannot, because attendance may drop off one year and we would struggle to pay them the next year."*

> *Survey Respondent (medium, remote school)*

Quantitative evidence suggests that there is a weak positive relationship between the level of funding variability a school experiences and its level of staff turnover (Chart 4.9). While this relationship does appear to be positive, there are likely a wide range of factors impacting both variables, and further econometric analysis is required to validate this relationship.

Chart 4.9: Relationship between school funding variability and staff turnover (2018-21)
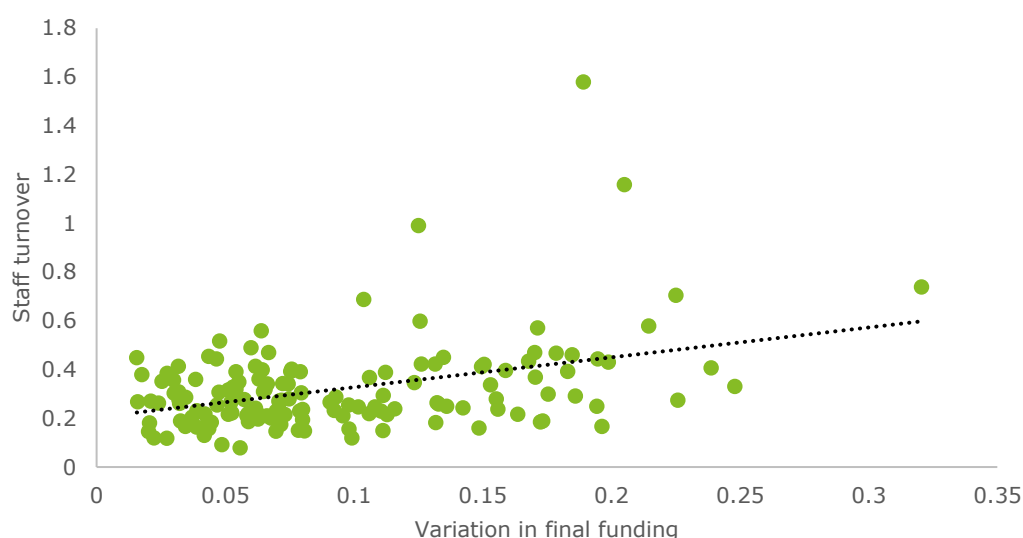
Source: Deloitte Access Economics (2022). Note: The 'variation in final funding' is defined as the coefficient of variation in final funding for each school over time, while 'staff turnover' is defined as the total number of staff divided by the average number of staff during the time period.

These findings are also consistent with the Nous Group's *Insights from engagements with Territory schools on the targeted use of resources* which highlighted the workforce challenges that schools in the Territory can have in effectively attracting and retaining staff members. While these issues are not necessarily unique to the NT, it is the prevalence of small, remote schools that serve culturally diverse students in areas with limited housing options that is unmatched in other schooling systems in Australia.

4.2.4 While existing budget policies grant schools a level of autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this. This is particularly impactful on small, remote schools.

Under existing budget policies individual schools are given autonomy to manage their resources, workforce requirements and strategic planning, within the constraints of the funding that they are allocated.

While this approach empowers school leaders and enables them to respond to the unique circumstances in which they operate, in a context of budget uncertainty, it also means that schools bear a substantial amount of financial risk. Many school leaders reported that they

do not always feel that they have the support required to manage this, particularly given the high levels of budget uncertainty. For example, as one school leader summarised:

> "I do love the flexibility of the current model. (…) However, the Department always tells us that we are responsible for our budgets - but it doesn't really sound like they're there to help. As a principal, it feels like we're out on our own".

> School Principal (medium, remote school)

Cash reserves

Further, consultations indicate that in response to this financial risk, schools often engage in precautionary saving to build-up their cash reserves to protect themselves against a potential future funding decline. This is particularly an issue for small remote schools, who tend to have higher levels of funding variability. Correlation analysis between cash reserves levels and school characteristics confirms that there is a moderately positive association between the level of funding variability a school records over time, and the level of cash reserves they accumulate (see Table 4.2). However, reasons for cash reserve accumulation are many and appear to also be related to school and student context. For instance, very remote school in socio-economically disadvantaged locations may be struggling to fill vacancies.

Table 4.2: Relationship between school characteristics and cash reserve levels

Variable	Correlation with cash reserves
Remoteness	0.61
SES	0.58
EAL	0.58
Indingnous	0.56
Indigenous concentration	0.59
Distance education	-0.09
Funding variation	0.26

Strongly positive | Moderately positive | No relationship | Moderately negative | Strongly negative

Source: Deloitte Access Economics (2022).

Sometimes cash reserves accumulation may be strategic if schools are saving on a larger investment. However, often a build-up of cash reserves is not necessarily desirable, as it indicates that schools are not spending their financial resources to support enrolled students.

In 2020 the Department introduced a new School Resourcing Fund Policy relating to schools' accumulation of cash reserves.[74] The policy sets out the minimum level of cash reserves a school should seek to hold, and a threshold level at which cash reserves are considered excessive. Excessive cash reserves can be repurposed into the School Resourcing Fund for the Department to distribute to other in-need schools. The minimum level of cash reserves (i.e., the Cash Benchmark) is defined as the average of two months of the school's previous 12-months operational expenditure, while the level of excess reserves (i.e., the Ability to Contribute percentage) is a function of the school's Consolidated cash position, future year projections and the cash benchmark. The exact share of a school's excess funds a school is required to contribute is then determined by the Ability to Contribute percentage and the school's number of effective enrolments and varies between 0-20 per cent.

The impacts of this new policy are at this stage unknown as schools are still adapting to the new guidelines.

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[74] NT Department of Education, *School Resourcing Fund Policy 2.1*, (2021) TRM number: 50:D19:85856

Budget deficits

Finally, it appears that some of the drivers of risk aversion and precautionary savings are related to the rules around submitting budgets in deficit or incurring deficits (in instances where the school does not have sufficient cash balances to cover the deficit). Schools consistently agreed that submitting a budget projecting a cash deficit is not allowed. Further, the Department has an early school support program to assist schools in managing budget shortfalls. However, despite this, there was some confusion regarding what schools can expect if they do incur a budget shortfall.

There were generally three approaches to navigating budget deficits:

- *Avoid budget (and actual) deficit at all costs* – most school leaders appeared to be anxious about incurring a deficit and the consequences of that. They saw the build-up of cash reserves as a solution to navigating budget uncertainty.

  > *"We've always been told we can't have a deficit, and that you just need to make it work"*
  >
  > - *School Finance Manager (medium, remote school)*

- *Submit a budget projecting a deficit to make a case for additional funding* – some schools reported submitting a budget projecting a deficit to flag to the Department that the current funding levels are not meeting the necessary expenditure requirements.

- *Count on the Department stepping in* – under some circumstances where schools had no choice but to incur a deficit, school leaders fully rely on the Department to fill the funding gap. While the Department has an early support program to assist schools in managing budget shortfalls, there is a degree of confusion among the school principals with respect to the transparency of this process.

  > *"The Department has always had our back, last minute. When we've really needed it in the past, we've received the funding last minute. But I'm never sure if this will happen again, and it feels like a band aid solution sometimes – we just need more funding consistently"*
  >
  > *School Principal (medium, remote school)*

There is scope for the Department to further clarify and formalise the rules that govern cash reserves accumulation, deficit recovery planning, and potential deficit write off.

It appears that even if this information is already available to schools, it is not readily understood, which creates a risk of perceived inequity within the system. Providing schools with this transparency would promote greater fairness across the system and establish a clear framework around when flexibility would or would not apply (along with the conditions attached to this additional flexibility).

Additional supports

School funding plays a critical role in ensuring schools have adequate resources to meet the needs of their student community in their local context. However, the funding model design itself is not sufficient to drive improvement in educational outcomes. It is one of many system levers that are being used to respond to the challenges identified by school and system leaders.

In the NT's context, central, regional and place-based solutions often support resourcing of small remote schools. For instance, the Remote Schools Support Unit (RSSU) in the Central Region is a buy-in model through which teaching principals can access financial, teaching and learning and leadership support (e.g., administrative staff, relief staff, stores facility and travel supports). Another example is the Finance Bureaus Services established as a financial management option for remote schools to receive Business Manager services. In the past, some schools operated under the Group School model with shared leadership positions and

other resource sharing arrangements. There also continue to be numerous resource-sharing arrangements between individual schools without a formal oversight by the regional or central Department teams. These models have been highlighted for their potential utility in supporting schools to spend their funding effectively.

As part of this Review, school leaders suggested a number of ways in which the model (current and potential new) can be better supported. While it is acknowledged that the Department provides training and support to school leaders to inform budget and resource planning (e.g., budget projection tools), the implementation of the funding model can be further strengthened to meet its objectives. This includes (but is not limited to):

- provision of an updated budget projection tool that allows principals to estimate their budget under a new methodology
- clear communication strategy, including principal newsletter updates, updated fact sheets, and other accessible guidance for school representative bodies to support the roll-out of a new methodology and any future iterations of the model
- ensuring that finance reports are provided to school leaders and school representative bodies consistently (e.g., monthly) and in an accessible, easy to understand format
- greater support provided to schools with estimating their projected enrolments to inform long-term strategic resource planning (e.g., drawing on inter-governmental insights such as housing plans, migration projections, industry developments)
- improved finance training as part of induction period for principals, with a consideration of compulsory training modules on budget management
- spreading the budget impact of a new methodology over a couple of years through transition arrangements for schools that see a decrease in funding.

4.3   Impacts of budget uncertainty on the measurement of enrolment

Key finding 6: Point-in-time measures of enrolment tend to be more variable over time and are less representative of resource needs of a school over a school year. The preferred approach to applying a measure of enrolment for the purposes of funding is one that balances the need for funding to be responsive to school needs while minimising exposure to excessive funding variability and being practical to administer.

Throughout jurisdictions across Australia, resourcing needs for an upcoming school year are based on enrolment counts at the start of a school year (usually between week 2 to 4 of a school year).[75] However, reviews of education systems across Australia find two drawbacks with this method, including:[76]

- Enrolment counts at the beginning of the school year are poor measures of resource needs for schools with highly transient populations (particularly an issue in remote schools in WA)
- Enrolment counts at the beginning of the school year are not conducive to school resource planning, which primarily occurs over the period October to December in the prior year (and even commences earlier in some schools).

These issues are particularly relevant for the context of the NT, which is categorised by a large proportion of small, remote-located schools with a highly transient population. As shown throughout this Review, a large proportion of schools tend to experience significant unexpected funding variability which impacts resource planning within schools. Further, many schools experience peak enrolment post week 4, term 1 due to student mobility.

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[75] Some jurisdictions also incorporate enrolment projections for upcoming terms, such as South Australia.
[76] Nous. (2018). Evaluation of the Student-Centred Funding Model

There is a careful balance to be struck in the determination of how enrolments are measured for the purposes of allocating funding. Funding allocations should be contemporary, to reflect the needs of students facing schools at a point in time, while also minimising exposure to excessive funding variability and support effective budget planning.

In this regard, options for the determination of the enrolment count sit on a spectrum of timing (i.e., the extent to which the count is leading or lagging), and whether the count is determined at a single point of time or averaged over time.

- At one extreme is an option which is fully contemporaneous, with funding allocated based on week 4, term 1 enrolments at the start of year, with the potential for funding to be revised based on enrolments at the August Age Grade Census in that year.
- At the other extreme is a lagged, over-time, model based on historical enrolments, which could be constructed to predict, as best as possible, expected future enrolments (for example, a weighted three-year average calibrated to minimise funding variability).
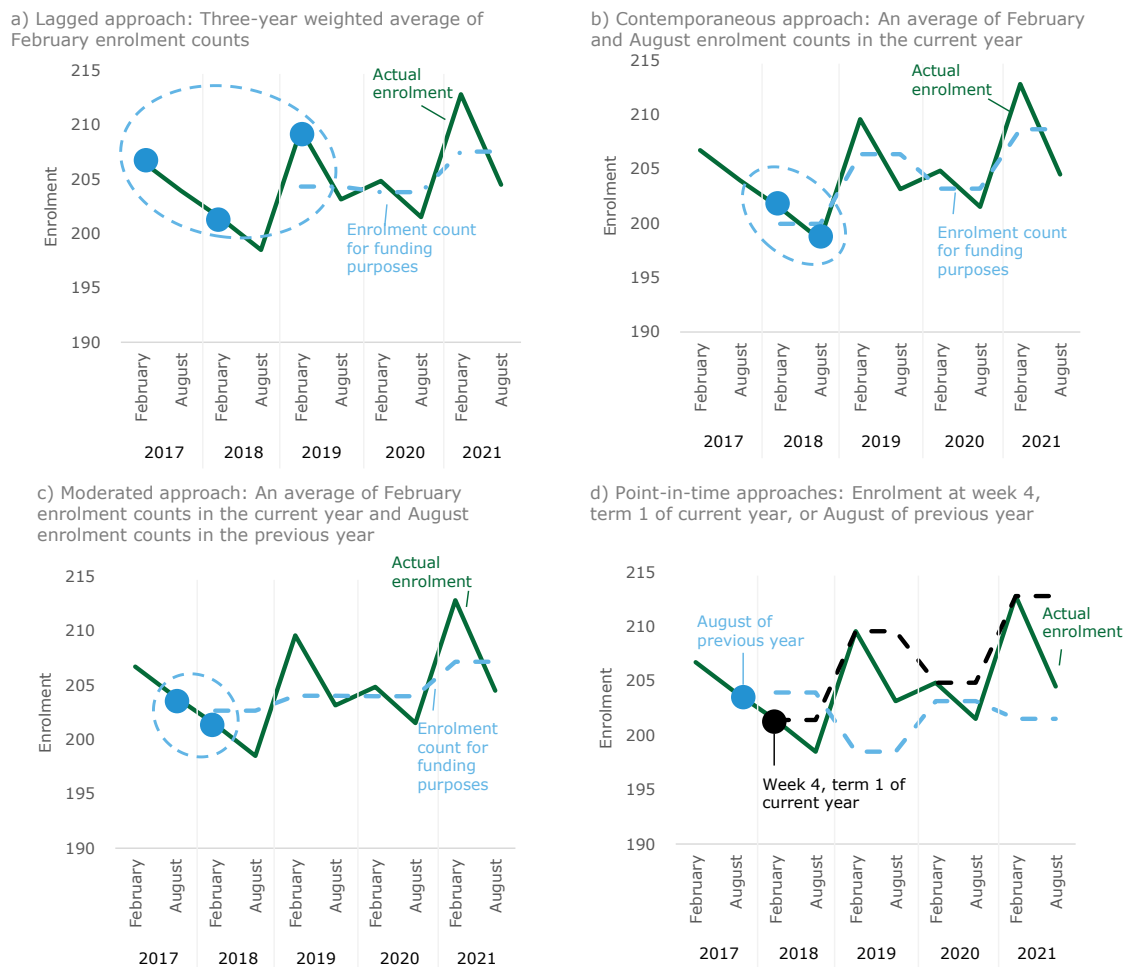
These options of approaches and their impacts on the enrolment count are shown in Chart 4.10. This chart shows how the enrolment count for funding purposes would differ for the average school (taking an average of enrolment across all schools), based on different measures of enrolment count across the spectrum of options. Overall, the average school tends to experience fluctuations in enrolments over time, which tend to offset each other (as shown via the dark green line in each of the charts in Chart 4.10). A lagged approach, such as a three-year weighted average model smooths the enrolment count so to insulate schools from these offsetting fluctuations (Chart 4.10, a). However, this methodology is considered to be more complex than other methods and may not reduce budget uncertainty as it is likely more difficult for schools to interpret and adopt into their budget planning.

An example of a contemporaneous approach is shown in Chart 4.10, b. This enrolment count method funds schools based on the enrolment count in February (week 4, term 1), which is then adjusted for the enrolment count at August Age Grade Census. This method allows for school funding to respond to fluctuations throughout the year. However, this method is not conducive to school planning, as schools are exposed to unexpected changes in funding throughout the school year.

Examples of enrolment counts using point-in-time approaches are shown in Chart 4.10, d. These methods tend to expose schools to greater year-on-year enrolment vulnerability than other methods. Further, these methods may not be representative of enrolment counts across a school year.

Finally, Chart 4.10, c shows an example of a moderated approach, where enrolment counts are based on an average of August enrolment counts in the previous year, and enrolment counts in February (week 4, term 1). This method tends to expose schools to a lower degree of enrolment variability than point-in-time approaches, while supporting school planning by giving schools an indication of their enrolment count in August in the previous year.

Chart 4.10: Overview of enrolment count options to measure enrolment for funding purposes

a) Lagged approach: Three-year weighted average of February enrolment counts

b) Contemporaneous approach: An average of February and August enrolment counts in the current year

c) Moderated approach: An average of February enrolment counts in the current year and August enrolment counts in the previous year

d) Point-in-time approaches: Enrolment at week 4, term 1 of current year, or August of previous year

Source: Deloitte Access Economics (2022)

The preferred approach represents a trade-off between the principles of sufficiency, effectiveness, practicality and transparency, and will depend on the nature and effectiveness of the other mechanisms and supports that exist around the implementation of the SRM.

Through this Review, stakeholders (especially those in more remote and small schools) significantly preference the certainty, transparency and practicality of the funding model, over its responsiveness/contemporaneity. On this basis, an over-time and partly lagged measure of enrolment is considered preferable for the purposes of allocating variable funding under the SRM (the Moderated approach - Chart 4.10, c).

While a weighted three-year average is considered to be the most effective in limiting funding variability, this approach is considered to be overly complex. At the same time, it is noted that other supports can be put in place to assist with budget management in the face of enrolment and funding variability (as previously discussed). As such, the Review has identified a preferred approach to determining enrolment, which builds on the current approach to determine school funding and changes which have been made to support school planning and budgeting in recent years. This would comprise the following calculations for the preliminary and final funding determinations:

- **Preliminary funding:** The average of enrolment at week 4, term 1 in the previous school year and the Department's measure of enrolment at the time of the August Age Grade Census of the previous school year.

- **Final Funding:** The average of enrolment at week 4, term 1 in the current school year and the Department's measure of enrolment at the time of the August Age Grade Census of the previous school year.

With this approach, any changes to funding between preliminary and final funding are due to changes in week 4, term 1 from the previous to current year. This measure of student count is considered to be the most effective because it:

- **Improves a school's ability to plan compared to point-in-time measures:** The measure is more conducive to school planning than simply using a point-in-time measure at week 4, term 1 of the current school year as it provides schools with some certainty on the funding levels in August (when the majority of school planning occurs). Further, an average of week 4, term 1 and August Age Grade Census enrolments reduces year-on-year funding variability compared to point-in-time measures of student count (Chart 4.11).
- **Improves the measure of student count over the course of a school year:** Using an average of week 4, term 1 and August Age Grade Census enrolments allows for a measurement of student count over two points throughout a school year (term 1 and term 3). Analysis shows that this measure of student count slightly improves the alignment of student count for funding purposes to average enrolment levels throughout the year, particularly for schools that experience enrolment surges later in the school year (Chart 4.11).
- **Improves alignment to school funding allocation received by the Australian Government:** Using August enrolment figures to partly inform funding levels improves the alignment of school funding distributed by the NT to schools, with funding received by the NT Department of Education by the Australian Government.

Chart 4.11: Comparison of enrolment count options across variation in enrolment counts over time, and alignment of enrolment counts to average enrolment levels across a school year; 2018 to 2021
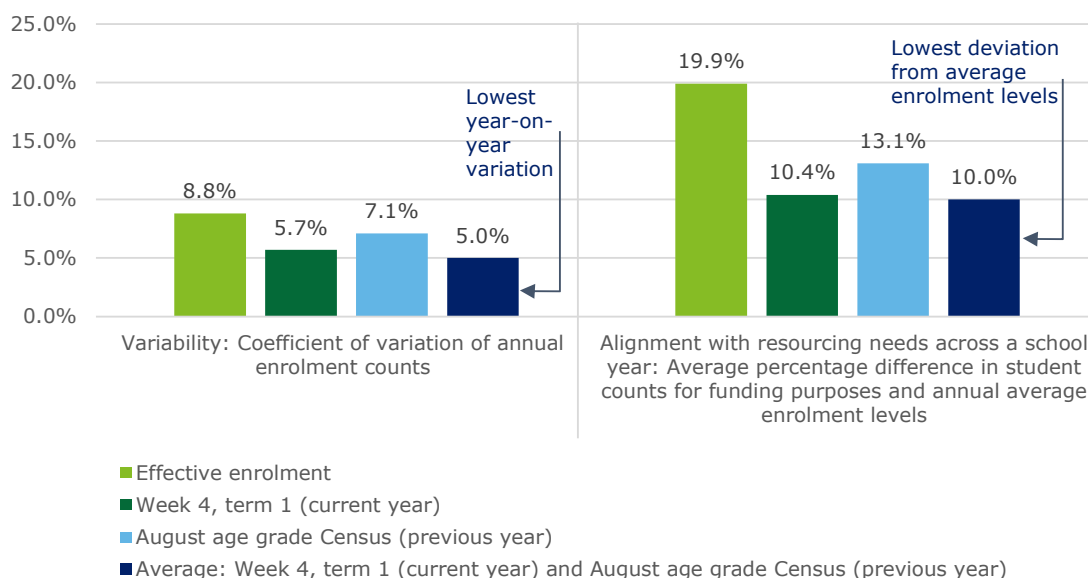
Source: Deloitte Access Economics (2022)

Recommendations related to improving budget certainty

There is significant opportunity to improve the SRM in a way that reduces excessive budget uncertainty and supports more effective planning.

The following recommendations are proposed in response to the findings in this section of the Review:

Finding	Recommendation	Priority
Theme 2: Application of the effective enrolment methodology within the SRM Recommendations that impact the broader effective enrolment methodology include the development of school supports to manage funding variability, a minimum funding guarantee and the review of the small school supplement with intent of re-designing the methodology to consider other contexts, such as a minimum funding floor for secondary schools, and larger remote schools. The majority of these recommendations can be made interdependently of recommendations within theme 1.		
Supporting evidence: The current methodology does not have a minimum and therefore does not recognise minimum provision requirements in different contexts, except for a small school supplement.	**Recommendation 6: Re-design the minimum funding floor** The Department should re-design the small school supplement to make it applicable across multiple school contexts, including secondary schools and larger remote schools. The objective of this minimum funding floor is to provide all schools with additional certainty on the minimum funding that they are guaranteed to receive each year, based on their enrolment levels and school context.	Short term
Supporting evidence: Budget uncertainty combined with schools' autonomy to manage aspects of their resources concentrates financial risk at a school-level and could lead to additional workforce attraction and retention issues, separate from supply-side constraints to workforce. • Combined with a poor understanding of how effective enrolment works, funding variability leads to additional budget uncertainty for schools.	**Recommendation 7: Develop and implement school supports that assist schools to manage budgets over time.** The Department should continue to administer the early school support program to assist schools in managing variation in student funding over time. The Department should develop practices and guidance related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy) to support schools in managing funding variability over time.	Short term

- Budget uncertainty can negatively impact schools' ability to effectively engage in long-term strategic workforce planning.
- Budget uncertainty has been reported by schools to be a contributing factor to higher levels of staff turnover and a reliance on short-term contracts by school principals.
- While existing budget policies grant schools a level of autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this. This is particularly impactful on small, remote schools.

The Department should develop and implement an allowance for schools experiencing an exceptional surge in student numbers (surge allowance). The development of this allowance should include:

- Develop eligibility criteria for a surge allowance for different types of schools based on quantitative (e.g., number of late enrolments) and qualitative evidence (e.g., written justification of a resourcing need).
- Determine the process for applying and obtaining surge allowance support. This should include automatic funding allocations instigated by the Department, as well as applications that schools can submit if they require additional funding.
- Model the likely demand for surge allowance based on the agreed criteria and historical data and determine the size of the surge allowance support pool.

Interdependencies:

The implementation of these recommendations is dependent on the following:

- the School Resourcing Fund policy
- Early School Support Program
- Recommendation 6.

Supporting evidence: Small, remote schools tend to be most impacted by funding variability and resource planning issues within the current funding model. This was largely due to the unique nature of the NT context, rather than the effective enrolment methodology.

While existing budget policies grant schools with autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this.

Recommendation 8: Explore the opportunity to improve the appropriateness of the funding methodology to small schools.

This should consider:

- actions that reduce barriers to spending faced by remote schools
- practices related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy)
- supports for budget planning and managing capability gaps
- supports for workforce recruitment and retention issues
- effective place-based resource sharing solutions, such as the Group Schools model.

Interdependencies:

The implementation of this recommendation is dependent on the following:

Short term

- the School Resourcing Fund policy
- Recommendation 6.

Supporting evidence: Budget uncertainty and variability within the budget cycle (i.e., from preliminary to final budgets) is viewed by schools as an inhibitor of effective resource planning for schools. While the Department has made changes to improve budget certainty, there is a need to strengthen school confidence in budget stability to support effective resource planning, particularly in remote contexts.	**Recommendation 9: Develop and implement a minimum funding guarantee** Any alternative methodologies include a funding guarantee provided as part of the preliminary budget to support more effective planning. The funding guarantee should cover at least a year. The development of the minimum funding guarantee should include: - Develop minimum funding guarantee levels for different school types by defining what constitutes a *significant variation* in funding between preliminary and final funding allocation. The definition of a *significant variation* should consider what level of negative funding variation is significantly disruptive to school planning and resourcing decisions, and what level of certainty would reduce excessive risk aversion practices by schools. - Determine how parameters that inform minimum funding guarantee levels are adjusted annually. Annual parameter adjustments should consider changes in variation of funded student counts over time, as well as changes in the index rate of the budget envelope. - Implement the minimum funding guarantee, with clear guidelines on minimum funding guarantee levels of each school each year, how levels are determined, and how levels are adjusted each year. **Interdependencies:** The implementation of this recommendation is dependent on the following: - Recommendation 6.	Short term
Supporting evidence: The largest driver of funding variability is caused by enrolment movements both within a school year, and over time, largely due to student mobility. Point-in-time measures of enrolment tend to be more variable over time and are less	**Recommendation 10: Move towards a student count methodology that is based on an average of week 4 term 1 in the current school year, and August Age Grade Census in the previous year.** This approach to enrolment count would balance the need for greater budget certainty for schools, with the inherent responsiveness of a student-driven needs-based resourcing model. The implementation of this approach to enrolment count could occur prior to, or in conjunction	Short term

|	
representative of resource needs of a school over a school year.	with, the recommended move away from effective enrolment to an enrolment-based methodology for the purpose of allocating variable funding through the SRM. **Interdependencies:** The implementation of this recommendation is dependent on the following: • the recently revised Enrolment Policy • Recommendation 3.

The above recommendations are designed to both reduce excessive funding variability and address budget uncertainty. The latter issue in particular is a result of a number of factors beyond the scope of this Review. These include (but are not limited to) poor financial literacy, risk aversion, limited ability to understand and predict future funding, limited flexibility to incur strategic deficits in the short-term, and a general lack of clarity around supports available to schools to help with various questions to do with budgeting.

It should also be noted that a similar process to the surge allowance already exists. Stakeholders noted that the approach cannot be purely formulaic, as it is impossible to capture the complexity of the contexts and models of provision in a single formula. At the same time, however, they flagged that a process that considers a more qualitative assessment needs to have clear guidelines that define what is considered to be an 'enrolment surge' and follow a transparent decision-making process with explanations provided in situations where funding applications are refused. Further work is required to consider how such allowance should be operationalised.

Section 5 | Conclusion
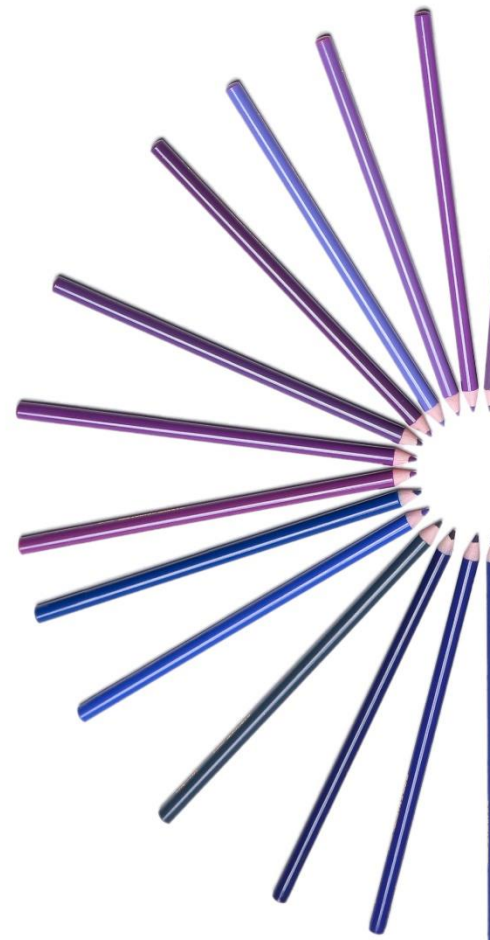
5 Conclusion

There is significant opportunity to improve the way that government school funding is allocated in the Northern Territory, particularly in the manner that aligns to the Department's strategic objectives, and the degree to which it supports and empowers schools to respond to local needs.

The findings from this Review demonstrate that the current effective enrolment methodology for allocating variable funding to schools has limitations, as part of a broader funding model, both as a resource prioritisation mechanism and an incentive. Further, the current methodology (including the new year scaling using Week 4 Term 1 enrolments) generates budget uncertainty, which impacts school planning and schools' ability to hire and retain adequately skilled teaching staff.

The proposed alternative methodology – one that's based on an enrolment measure with a minimum guarantee at preliminary budget time, and additional school supports to manage funding variation – is designed to address these limitations. The precise design and operationalisation of a funding allocation methodology that meets the recommendations outlined in this report is a matter for the Department to determine.

The proposed changes need careful costing. Without careful consideration of the funding envelope, these changes could result in a funding risk which could result in an overall decrease in a per student base rate and a re-distribution of funds away from schools with high attendance.

However, there is no clear basis to suggest that NT government schools with high attendance rates are presently overfunded. Using the SRS as a benchmark, there is some evidence to suggest that approximately twenty schools are funded at or above that standard (several of which are special schools or schools of distance education). However, the appropriateness of the SRS as a benchmark has not been assessed as part of the Review. Without an understanding of cost requirements for quality education provision in different NT contexts (i.e., a *minimum education provision standard*), it is difficult to assess funding sufficiency under the proposed alternative methodology and determine what level of re-distribution (if any) is appropriate.

It is also difficult to argue that the proposed change should be funded through changes to other components of the formula, such as a reduction in equity weights. The current relative level of weights in the model is not dissimilar to what can be observed in other jurisdictions. Even if a proportion of equity weights funding was to be used to fund enrolments, it would not be sufficient to mitigate funding decreases for certain schools with high attendance rates.

There are also legitimate concerns about some schools' ability to use additional funding effectively in the short term. Workforce shortages, exacerbated by COVID-19 pandemic and border restrictions, mean that schools are not always able to fill critical vacancies and operate under strain despite funding being available to them. Efforts need to be made to support more effective resource use systematically, including through mechanisms such as group schools models and other place-based resource sharing arrangements across schools, particularly for small schools.

More broadly, the proposed changes cannot be implemented in isolation to other elements in the broader SRM. Revisions to funding of small schools, senior secondary provision, homeland learning centres, and students with disability will all be critical to ensuring that the funding model meets the needs of schools and students. Any changes to the funding model will need to be supported by policy developments that ensure that the additional funding is

spent on supports and initiatives that make a difference to student outcomes in different contexts, including contexts of high disengagement.

Finally, it is important to acknowledge that the recommendations outlined in this report are not sufficient to solve the issues identified in this Review. School funding plays a critical role in ensuring schools have adequate resources to meet the needs of their student community in their local context. However, funding model design itself is not sufficient to drive improvement in educational outcomes. It is one of many system levers that are being used to respond to the challenges identified by school and system leaders, alongside more effective resource sharing arrangements, workforce attraction and retention strategies, alternative channels of support, and many others.

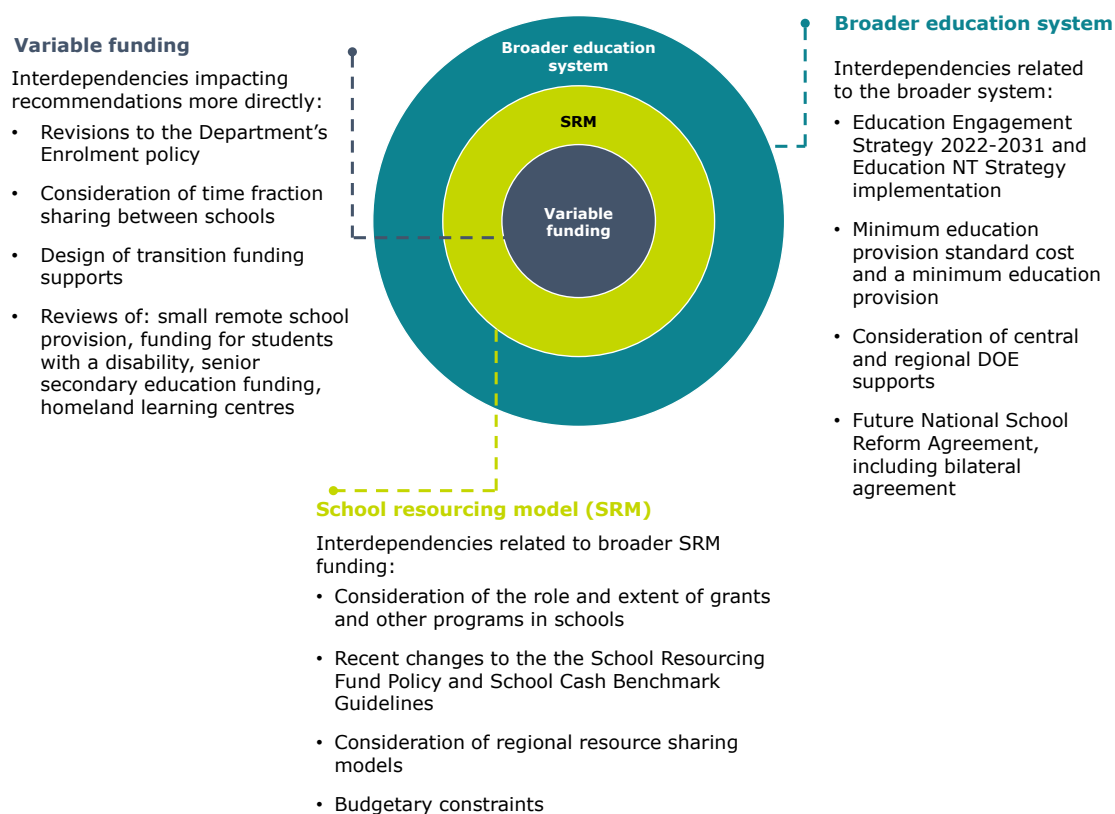## 5.1 Transition and implementation considerations

5.1.1 Considerations for interdependencies

Although the Review has focused primarily on the effective enrolment methodology component of the SRM, the proposed changes should not be considered in isolation to other funding components, reforms to service delivery models and other elements in the broader SRM and system. Many of the identified challenges with the current model stem from complex and often intertwined issues that extend beyond the funding model alone. Transitioning to a revised funding methodology will take time and require considerations of interdependencies with other:

- elements of the variable funding design
- components of the SRM
- broader system levers and policy reforms.

An overview of key interdependencies across these three areas is provided in Figure 5.1 and described in more detail below.

Figure 5.1 Policy and funding model factors that interact with a transition to a new funding model

Variable funding

Interdependencies impacting recommendations more directly:

- Revisions to the Department's Enrolment policy
- Consideration of time fraction sharing between schools
- Design of transition funding supports
- Reviews of: small remote school provision, funding for students with a disability, senior secondary education funding, homeland learning centres

Broader education system

Interdependencies related to the broader system:

- Education Engagement Strategy 2022-2031 and Education NT Strategy implementation
- Minimum education provision standard cost and a minimum education provision
- Consideration of central and regional DOE supports
- Future National School Reform Agreement, including bilateral agreement

School resourcing model (SRM)

Interdependencies related to broader SRM funding:

- Consideration of the role and extent of grants and other programs in schools
- Recent changes to the the School Resourcing Fund Policy and School Cash Benchmark Guidelines
- Consideration of regional resource sharing models
- Budgetary constraints

Several interdependencies have **direct impacts on variable funding allocation** and potential new model implementation and need to be considered and/or addressed concurrently with the recommendations outlined in this report.

- Transition to an enrolment-based model will require the development of detailed definitions, guidelines and criteria to specify when schools can include student enrolments in the funded student counts. The recently revised Enrolment Policy will have direct implications on this work.
- In addition, the Department should further explore recognising time fractions (i.e., FTE enrolments explored as part of the funding model in 2018) to support potential resource sharing between schools.
- Schools will need to be adequately supported to transition to the new model to ensure that education delivery is not compromised. This will require additional funding and policy decisions on the level of funding change that schools can be reasonably expected to absorb with reference to the expected education provision standards.
- A number of independent reviews are planned which are likely to result in changes to funding design for students with disability, funding of small remote schools, senior secondary education, and homeland learning centres. It is important that findings and recommendations of these future reviews are considered together, their impacts tested and assessed in a cumulative way, and implemented as a holistic work program.

In addition, **broader SRM considerations** may influence the transition pathway for the system to the recommended model:

- Recent changes to the policy that governs the accumulation and spending of cash reserves need to be considered as part of a transition to a potential alternative model. This is particularly important in the context of understanding challenges in core education provision in the system and identifying potential need for regionally deployed resourcing. In addition, the level of cash reserves should be considered when developing eligibility criteria for additional funding, such as the proposed surge funding allowance and transition support funding.
- A shift to a new funding model will also likely change the need for certain types of grants, programs and targeting funding. The Department should consider reviewing the appropriateness of current targeting and grant funding programs in the light of the proposed changes. This may include considering whether certain targeted funding allocation could be more appropriately distributed through the variable funding component of the SRM.

The above complexities relate directly to the design and operationalisation of the funding model and highlight that one element of the funding design cannot be changed in isolation of other elements. There are also several **broader system interdependencies** with more indirect, but still highly relevant implications on the SRM model design.

- This Review has identified that some remote small schools face challenges in recruiting and retaining sufficient resources to support the delivery of a diverse education curriculum. There is an opportunity for the Department to consider alternative channels of support for remote schools, such as regional resource sharing models which can improve the ability of schools to recruit and retain staff by offering more sustainable contracts which are facilitated by the ability of schools to share funding and staffing resources regionally. This will improve the ability of schools to deliver quality education within their budget allocations.
- Implementation of the recently developed NT Education Engagement Strategy (2022-2031) will likely result in changes to the way the Department, schools, communities, students and their families work together to improve engagement with schools. The Department should ensure that any changes made to the funding model are aligned with the intent of this strategy and in harmony with any initiatives and programs under the strategy.

- This Review has identified an opportunity for the Department to improve its understanding of the expected minimum education provision standards across different contexts. Such standards have the potential to improve the way the funding model is calibrated to school needs by providing benchmarks for decision making and informing the design of funding thresholds (e.g., for the small school supplement).
- Finally, the current National Schools Reform Agreement is due to expire in December 2023, alongside the associated bilateral agreement between the Northern Territory Government and the Australian Government. Future agreement negotiations can impact the budget envelope available to support the delivery of education across the NT.

5.1.2 Considerations for the sequencing of this Review's recommendations

Table 5.1 below outlines this Review's recommendations and the associated implementation considerations, organised according to the two themes of findings adopted above. At the heart of these recommendations is recognising that schools should be funded to align with drivers of school resourcing needs (including those related to student engagement), with allocations that are more certain and predictable, and which bring the funding model in line with the broader policy and strategy of the Department.

In this regard, a first step for the Department would be to articulate the intention to move away from the current attendance-based methodology to an enrolment-based methodology, acknowledging the complex interdependencies that need to be addressed and the steps that will be taken to transition to an enrolment-based model over time.

The steps that would support this transition are outlined below and summarised in Table i, organised by Review theme. Each recommendation is graded by its priority in terms of when it could occur across four levels:

- **Immediate:** within the next 6 months
- **Short term:** 6 months to 2 years
- **Medium term:** 2 to 5 years
- **Long term:** 5 years or more

In planning for the implementation of these recommendations, prioritisation should not merely be guided by what is easiest. Consideration must be given to the sequence of actions that will maximise the likelihood of achieving the end of goal of transitioning to a more equitable and effective model of school funding.

In this context, it is notable that this Review recommends a range of additional policy review and research be undertaken to lay the foundations for the transition to a new model based on an alternative measure of enrolment (as outlined under Theme 1). This includes assessment of funding and programs outside of the SRM that support student engagement, as well as the development of minimum service delivery standards and funding levels for small schools (with a focus on secondary schools). This further research and policy design work will take time but is necessary to the successful final design and implementation of a new model.

Notwithstanding this, it is clear that schools would benefit significantly from reforms that improve budget certainty and planning in the near term (for example, through the implementation of a minimum funding guarantee). As such, there is an opportunity to implement more immediate changes to the way the funding model is implemented that drive greater certainty (as outlined under theme 2), ensuring that in doing so, the transition to final end-state enrolment-based model is not undermined. These changes are expected to be less dependent on other policy designs and reviews that are required to be undertaken.

Further detail on the **steps required to implement the recommendations** under the two themes are summarised below.

5.1.2.1   Theme 1: Appropriateness of the effective enrolment measure within the SRM

Recommendations that impact the effective enrolment measure include replacing the current effective enrolment measure of student count with an enrolment-based measure. This recommendation will take time to implement due to its fiscal implications and the range of interdependencies, both occurring currently and scheduled to occur in the future, that will impact the evidence based, and eventual structure of the enrolment-based measure of student count.

1. Move towards an enrolment-based measure as a methodology to distribute variable school funding within the SRM

In the short term, the Department should signal its intent to move towards an enrolment-based measure as a methodology to distribute variable school funding within the SRM (Recommendation 1). In doing so, the Department should clearly communicate the reasons for this action, as well as an indicative timeline on when the funding methodology will be fully implemented.

2. Determine funding envelope to support implementation of an enrolment-based measure

Alongside this, the Department should identify the projected funding available over the medium term to support the implementation of, and transition to an enrolment-based measure. This will include a review of targeted funding, and grants and program funding outside the SRM that support student engagement and attendance, to determine funding that is more appropriate to be allocated through the variable funding component of the SRM under an enrolment-based measure (Recommendation 2).

Projected funding available for the delivery of the enrolment-based funding model will be dependent on future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department. Further, the review of targeted funding, and grants and program funding outside the SRM will be dependent on ongoing reviews of homeland learning centres, funding for students with a disability, and senior secondary education funding.

3. Develop the methodology and systems to guide the implementation of the enrolment-based measure

The next phase of implementation of recommendations associated with the effective enrolment measure includes the development of the model methodology and enrolment count procedures. The Department should develop and implement detailed enrolment count procedures and eligibility criteria for inclusion in the count for the purposes of funding, to improve the confidence in and integrity of enrolment counts at week 4, term 1 and August Age Grade Census (Recommendation 3). The recently revised Enrolment Policy will have direct implications on this work.

The development of the methodology of the enrolment-based measure will include the establishment of key parameters, including how preliminary and final funding are determined, the base rate of funding per student needs-weight, the measurement of enrolment for funding purposes (based on an average of enrolment at week 4 term 1, and August Age Grade Census - as per Recommendation 10), and the timeline and structure for implementation (Recommendation 5). The development of this methodology is dependent on the projected fiscal environment, as well as ongoing reviews of homeland learning centres, funding for students with a disability, and senior secondary education funding. Once established, this methodology should be made accessible to all schools and stakeholders across the sector.

As part of the development of the methodology of the enrolment-based measure, the Department should develop transition supports to ensure that negative impacts of the model transition are limited. This would be informed by detailed impact modelling of the implementation of an enrolment-based measure on individual schools. The exact structure of transition supports should align with Department goals around the willingness to impact schools during the transition, and the timeline and approach to implementation of the

enrolment-based measure. Impacts of the transition to an enrolment-based measure should be clearly communicated to schools in advance of the implementation of the enrolment-based measure.

4. *Develop school supports to optimise the implementation of the enrolment-based measure*

Prior to implementing the enrolment-based measure, the Department should ensure that schools have sufficient supports in place to optimise the implementation of the methodology. This Review recommends that the Department consider the following steps in this regard:

- Explore the opportunity to improve the appropriateness of the funding methodology to small schools. This should consider barriers to spending faced by remote schools, practices related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy), budget planning and management capability gaps, workforce recruitment and retention issues, and examples of effective place-based resource sharing solutions (recommendation 8)
- Develop and implement a minimum funding guarantee, supports for schools to manage funding variability over time, and a re-designed minimum funding floor, as per recommendations 6, 7 and 9.

5. *Implement and monitor the enrolment-based measure*

In the medium term, the Department should completely transition to an enrolment-based measure of enrolment for funding purposes, alongside any additional school supports to assist the transition to the new funding methodology (Recommendation 5). The student count methodology employed in the SRM should be based on an average of week 4, term 1 in the current school year, and August Age Grade Census in the previous year (Recommendation 10). The Department should continue to monitor how the new methodology impacts individual schools and identify potential areas for improvement and further calibration to avoid systematic under- or over-funding of schools.

Over the long term, the Department should continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

5.1.2.2 Theme 2: Application of the effective enrolment methodology within the SRM

Recommendations that impact the broader effective enrolment methodology include the development of school supports to manage funding variability, a minimum funding guarantee and the review of the small school supplement with the intent of re-designing the methodology to consider other contexts, such as a minimum funding floor for secondary schools, and larger remote schools. The majority of these recommendations can be made immediately, and potentially independently of recommendations made under Theme 1.

1. *Review and re-design the minimum funding floor*

In the short term, the Department should review the small school supplement with the aim of re-designing a minimum funding floor that is applicable across multiple school contexts, including secondary schools and larger remote schools. The objective of this minimum funding floor is to provide all schools with additional certainty on the minimum funding that they are guaranteed to receive each year, based on their enrolment levels and school context (Recommendation 6).

2. *Develop and implement school supports that assist schools to manage budgets over time.*

The Department should develop and implement supports that assist schools to manage budgets over time (Recommendation 7). This should include a range of factors, including:

- continue to administer the early school support program to assist schools in managing variation in student funding over time (Recommendation 7.a)

- develop practices and guidance related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy) to support schools in managing funding variability over time (Recommendation 7.b)
- develop and implement an allowance for schools experiencing an exceptional surge in student numbers (Recommendation 7.c).
- Explore the opportunity to improve the appropriateness of the funding methodology to small schools (Recommendation 8).

3. Develop and implement a minimum funding guarantee

Alongside the development of school supports, the Department should develop and implement a minimum funding guarantee to improve certainty of final funding levels within a funding cycle. This will include the development of parameters of the guarantee, and how they are adjusted annually to reflect changing budgets. The methodology of the minimum funding guarantee should be made accessible to stakeholders throughout the sector (recommendation 9).

4. Monitor and adjust the school supports over time

Over the medium to long term, the minimum funding guarantee, surge allowance allocation, and a re-designed minimum funding floor should continue to be monitored and adjusted over time. Specifically, the supports should be adjusted to align to the implementation of the enrolment-based measure.

5.2 Conclusion

While the recommendations presented in this report represent a significant departure from the current approach and have the potential to cause disruption to schools during implementation, the benefits from their implementation stand to be significant. The benefits will arise from a more equitable distribution of resources that is aligned to the Department's strategic goals; that provides greater certainty and stability for schools; and, ultimately, supports improved student outcomes.

The Government has a clear strategy to improve student attendance, engagement in learning and learning outcomes. By moving from the current model of effective enrolment to a model based on enrolment, there would be greater alignment of funding to educational need – i.e., towards students and schools that require the greatest level of support to drive the outcomes sought by Government.

It is clear that this cannot be achieved in a budget neutral way as there is not a strong case from the evidence available to this Review that schools with higher levels of attendance are over-funded. The redistribution of funding that would be required to maintain budget neutrality therefore has the potential to risk undermining service delivery and outcomes in settings that currently experience higher levels of attendance.

Finally, it should be emphasised that the model of funding distribution alone is not sufficient to drive improvements in attendance and student engagement. Rather, it is the strategies and practices that are put in place around it – and the extent to which funding enables these to be effectively implemented.

While there is evidence that funding constraints are a barrier to some schools implementing more effective strategies for student engagement, this does not mean that greater investments guarantee improved outcomes. Additional strategies and improved practices will be required if the potential benefits of a more equitable distribution of resources are to be realised. The outcomes of these strategies and practices would extend beyond just attendance at school, but also towards meaningful engagement in learning more generally, as well as higher rates of achievement of sustainable pathways from school.

Table 5.1: Summary of recommendations

Finding	Recommendation	Priority
Theme 1: Appropriateness of the effective enrolment measure within the SRM		
Recommendations that impact the effective enrolment measure include replacing the current effective enrolment measure of student count with an enrolment-based measure. This recommendation will take time to implement due to its fiscal implications and the range of interdependencies, both occurring currently and scheduled to occur in the future, that will impact the evidence based, and eventual structure of the enrolment-based measure of student count.		
Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy. • Higher levels of educational need is strongly linked with low school attendance. • On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM. • Effective enrolment measure does not align well with schools' resourcing needs. However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.	**Recommendation 1: Communicate the intent to move towards an enrolment-based, rather than attendance-based, methodology as the basis for allocating needs-based funding to schools.** The department should be clear and effectively communicate that it intends to implement an enrolment-based methodology as the basis for allocating needs-based funding to schools. Further, the Department should outline an indicative timeline for when milestones of implementation will be reached, such as when the methodology of the enrolment-based methodology will be released.	Immediate / ongoing
Supporting evidence: While outside of the scope of this Review, there is clear evidence that the remit of funding allocations provided through targeted funding programs, and	**Recommendation 2: Identify and implement opportunities for the inclusion of targeted funding, and other grants and programs into the SRM.**	Short term

grants and programs funded outside of the SRM will need to change under an enrolment-based model.

The objective of this process would be to determine if funding allocated through these mechanisms would be more appropriately allocated via the student-needs based funding model of the SRM, under an enrolment-based methodology.

The outcome of this would inform the projected budget envelope to be allocated through an enrolment-based methodology, alongside outcomes from the future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- Review of homeland learning centres
- Review of funding for students with a disability
- Review of senior secondary education funding.

Supporting evidence: Although enrolment-based student count methodologies would be better aligned to system strategy and objectives, defining enrolment for the purposes of funding allocation in the NT context is not straightforward.

- The intent of the effective enrolment measure is in dissonance with the Department's policy goals and programs funded outside of the SRM.
- Capturing an accurate picture of enrolments in NT schools is not straightforward due to for example student mobility and attendance by students at multiple schools therefore requires careful design and consideration. Further work would be required to develop enrolment count criteria with integrity and accuracy.

Recommendation 3: Develop detailed enrolment count procedures and eligibility criteria for inclusion in the count for the purposes of school funding allocation.

Short term

This should include (but is not limited to):

- clarity on whether and how potential time fractions are determined (if students are enrolled part time or dual enrolled)
- procedures supporting the integrity of the student count.

Over the long term, the Department should continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the recently revised Enrolment Policy.

Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

- Higher levels of educational need is strongly linked with low school attendance.
- On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
- Effective enrolment measure does not align well with schools' resourcing needs.

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Recommendation 4: Develop a detailed methodology of the enrolment-based funding approach.

The development of the methodology of the enrolment-based measure will include (but is not limited to):

- the enrolment count method
- the timing of funding allocation (such as preliminary and final funding)
- the base rate funding amount to be allocated to schools
- detailed description of additional school supports provided to support budget management
- detailed impact modelling of the implementation of an enrolment-based measure on individual schools
- providing clearer guidance on the expectations regarding the type of expenditure and supports that are provided by the Department outside of the SRM. This guidance should align with the system's expectations of the role of schools in supporting students with different needs.

The Department should ensure that the methodology is explained clearly and in a way that allows schools to replicate it for the purposes of their internal planning. This includes ensuring that the naming convention reflects the nature of the methodology and is interpreted correctly by schools.

Once established, this methodology should be made accessible to all schools and stakeholders across the sector. In particular, the impact of the transition to the revised funding model should be clear to all schools.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the projected fiscal environment (informed by Recommendation 2 and future National Schools Reform Agreement and subsequent bi-lateral negotiations with the Department)
- NT Education Engagement Strategy (2022-2031)
- Review of homeland learning centres
- Review of funding for students with a disability
- Review of senior secondary education funding.
- Recommendations 6 to 10.

Short term / medium term

Supporting evidence: The number of effective enrolments is not an accurate measure of activity or effort required from schools to support students in line with the Department's objectives and strategy.

- Higher levels of educational need is strongly linked with low school attendance.
- On average, across the system, the effective enrolment measure largely offsets the effect of student needs-based weightings within the variable funding component of the SRM.
- Effective enrolment measure does not align well with schools' resourcing needs.

However, this Review does acknowledge that there are other resources and supports provided to schools outside of the SRM. These resources and supports were not considered in-scope of this Review.

Recommendation 5: Transition fully over time to a methodology based on enrolment count, as part of SRM (i.e., without attendance components), alongside any additional school supports to assist the transition to the revised funding methodology. Monitor and adjust this model over time.

The Department should completely transition to an enrolment-based measure of enrolment for funding purposes. This includes:

- develop and deliver budget planning tools to support schools to plan resources with the enrolment-based funding model
- continue to monitor how the revised methodology impacts individual schools and identify potential areas for improvement and further calibration to avoid systematic under- or over-funding of schools
- continue to invest in enhancing the understanding of the relationships of student mobility to educational outcomes and consider whether this more sophisticated understanding of student mobility can be used to refine the enrolment count procedures, definition and eligibility criteria.

The Department should continue monitoring schools' perceptions of the model and whether it results in any unintended incentives.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- Recommendations 1 to 4.

Medium term / long term

Theme 2: Application of the effective enrolment methodology within the SRM

Recommendations that impact the broader effective enrolment methodology include the development of school supports to manage funding variability, a minimum funding guarantee and the review of the small school supplement with intent of re-designing the methodology to consider other contexts, such as a minimum funding floor for secondary schools, and larger remote schools. The majority of these recommendations can be made interdependently of recommendations within theme 1.

Supporting evidence: The current methodology does not have a minimum and therefore does not recognise minimum

Recommendation 6: Re-design the minimum funding floor

Short term

provision requirements in different contexts, except for a small school supplement.	The Department should re-design the small school supplement to make it applicable across multiple school contexts, including secondary schools and larger remote schools. The objective of this minimum funding floor is to provide all schools with additional certainty on the minimum funding that they are guaranteed to receive each year, based on their enrolment levels and school context.	
Supporting evidence: Budget uncertainty combined with schools' autonomy to manage aspects of their resources concentrates financial risk at a school-level and could lead to additional workforce attraction and retention issues, separate from supply-side constraints to workforce. • Combined with a poor understanding of how effective enrolment works, funding variability leads to additional budget uncertainty for schools. • Budget uncertainty can negatively impact schools' ability to effectively engage in long-term strategic workforce planning. • Budget uncertainty has been reported by schools to be a contributing factor to higher levels of staff turnover and a reliance on short-term contracts by school principals. • While existing budget policies grant schools a level of autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this. This is particularly impactful on small, remote schools.	**Recommendation 7: Develop and implement school supports that assist schools to manage budgets over time.** The Department should continue to administer the early school support program to assist schools in managing variation in student funding over time. The Department should develop practices and guidance related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy) to support schools in managing funding variability over time. The Department should develop and implement an allowance for schools experiencing an exceptional surge in student numbers (surge allowance). The development of this allowance should include: • Develop eligibility criteria for a surge allowance for different types of schools based on quantitative (e.g., number of late enrolments) and qualitative evidence (e.g., written justification of a resourcing need). • Determine the process for applying and obtaining surge allowance support. This should include automatic funding allocations instigated by the Department, as well as applications that schools can submit if they require additional funding. • Model the likely demand for surge allowance based on the agreed criteria and historical data and determine the size of the surge allowance support pool. **Interdependencies:** The implementation of these recommendations is dependent on the following: • the School Resourcing Fund policy • Early School Support Program • Recommendation 6.	Short term

Supporting evidence: Small, remote schools tend to be most impacted by funding variability and resource planning issues within the current funding model. This was largely due to the unique nature of the NT context, rather than the effective enrolment methodology.

While existing budget policies grant schools with autonomy, they also concentrate financial risk at a school-level, without always providing schools with the support needed to manage this.

Recommendation 8: Explore the opportunity to improve the appropriateness of the funding methodology to small schools.

This should consider:

- actions that reduce barriers to spending faced by remote schools
- practices related to managing funding deficits and surpluses (including the impacts of the School Resourcing Fund policy)
- supports for budget planning and managing capability gaps
- supports for workforce recruitment and retention issues
- effective place-based resource sharing solutions, such as the Group Schools model.

Interdependencies:

The implementation of this recommendation is dependent on the following:

- the School Resourcing Fund policy
- Recommendation 6.

Short term

Supporting evidence: Budget uncertainty and variability within the budget cycle (i.e., from preliminary to final budgets) is viewed by schools as an inhibitor of effective resource planning for schools.

While the Department has made changes to improve budget certainty, there is a need to strengthen school confidence in budget stability to support effective resource planning, particularly in remote contexts.

Recommendation 9: Develop and implement a minimum funding guarantee

Any alternative methodologies include a funding guarantee provided as part of the preliminary budget to support more effective planning. The funding guarantee should cover at least a year.

The development of the minimum funding guarantee should include:

- Develop minimum funding guarantee levels for different school types by defining what constitutes a *significant variation* in funding between preliminary and final funding allocation. The definition of a *significant variation* should consider what level of negative funding variation is significantly disruptive to school planning and resourcing decisions, and what level of certainty would reduce excessive risk aversion practices by schools.
- Determine how parameters that inform minimum funding guarantee levels are adjusted annually. Annual parameter adjustments should consider changes in variation of funded student counts over time, as well as changes in the index rate of the budget envelope.
- Implement the minimum funding guarantee, with clear guidelines on minimum funding guarantee levels of each school each year, how levels are determined, and how levels are adjusted each year.

Short term

Interdependencies:

The implementation of this recommendation is dependent on the following:

- Recommendation 6

Supporting evidence: The largest driver of funding variability is caused by enrolment movements both within a school year, and over time, largely due to student mobility. Point-in-time measures of enrolment tend to be more variable over time and are less representative of resource needs of a school over a school year.	**Recommendation 10: Move towards a student count methodology that is based on an average of week 4 term 1 in the current school year, and August Age Grade Census in the previous year.** This approach to enrolment count would balance the need for greater budget certainty for schools, with the inherent responsiveness of a student-driven needs-based resourcing model. The implementation of this approach to enrolment count could occur prior to, or in conjunction with, the recommended move away from effective enrolment to an enrolment-based methodology for the purpose of allocating variable funding through the SRM. **Interdependencies:** The implementation of this recommendation is dependent on the following: • the recently revised Enrolment Policy • Recommendation 3.	Short term

Deloitte Access Economics.

Appendices

Appendix A

Objectives and scope of requirements as described in the NT Department of Education Request for Quotation Q21-0348

A.1.   Objectives

The recommendations provided by the consultant will support the Department in refining its School Resourcing Model to ensure that the model meets the needs of schools and students and that the model allocates funding in an equitable, transparent and efficient manner. In particular, the recommendations will improve funding certainty for schools to provide schools with the confidence to plan for staffing and operations in the longer term. This is important as continuity of staffing is a key enabler of student outcomes.

A.2.   Scope of requirement

The Department is seeking an external consultant to perform an independent analysis of the current effective enrolment methodology used in the Department's School Resourcing Model. The consultant will work with the Department to provide options on a methodology to allocate the school funding pool to schools based on student numbers that would ensure equity, funding certainty, stability and transparency while aligning to the Australian Government's needs-based funding arrangement requirements under the *Australian Education Act 2013*.

Feedback received is that the current effective enrolment measure and its application within the funding model has resulted in budget volatility for some schools, especially small remote schools. Coupled with the process of releasing preliminary funding around October of the preceding year and finalised funding at the end of March of the relevant year, has resulted in schools being unable to undertake longer term planning for staffing and their operations. It is expected that the review would include evidence-based confirmation of these observations, including identification of any other factors that contribute towards budget volatility and any recommendations would also take this issue into consideration, identifying options to support the Department's objectives.

This engagement would involve performing research which would inform potential alternative methodologies, recommendations and options. This research would include understanding:
- the current effective enrolment measure, and the appropriateness of use of this measure to allocate a funding pool, that is subject to budget parameters, equitably
- the current methodology to apply effective enrolment within the SRM and how this methodology interacts with other components of the SRM such as the various weightings for equity factors in the Student Needs Based Funding Model,
- best practice school funding allocation models from other Australian jurisdictions and the schooling resourcing standard, while considering the Northern Territory context and the current SRM Student Needs Based Funding Model,
- all relevant available financial and student data or other data as identified by the consultant, such as enrolment and attendance data and year on year school funding trend analysis of student and funding volatility,
- analysis of system data to provide insights into school funding generally by school type, size of the school, region and geolocation,
- impacts of the SRM methodology on small schools and homeland learning centres, including current minimum funding settings, factors that may impact on budget volatility and overall funding levels in comparison to expenditure needs in light of their context and consideration for the small school supplement and previous effective enrolment floor funding,
- information obtained from consultations with key stakeholders. These stakeholders include government school leaders such as principals and business managers, Department representatives and potentially stakeholder bodies such as Council of Government School

Organisations (COGSO), Northern Territory Principals' Association and the Australian Education Union. It is expected that any anecdotal feedback obtained through consultations would be verified by the consultant.

The Department would expect the consultant to provide three to four potential alternative methodologies that are within the funding parameters to be provided at the entry meeting.

Potential alternative methodologies recommended by the consultant will need to have consideration for:
- ensuring school funding is being distributed based on need,
- equity (including interaction with equity factors currently in the funding model),
- transparency,
- transition arrangements,
- budget certainty through the reduction of funding volatility; and
- practicality in its implementation.

The recommended alternative methodologies would outline the benefits and risks associated with the methodology and be supported with:
- Research conducted by the consultant, especially in relation to best practice,
- Financial modelling to show the overall impact for the Department from an overall budgetary perspective, an overall school distribution perspective and a school-by-school impact basis and;
- Case studies against a cross section of schools.

Appendix B

Table B.1: Description of guiding principles of the Review

Principle	Description	Implications for the Review
Effectiveness	The funding model should be needs-based and calibrated to support the system in achieving its overarching equity and excellence goals.	Funding should support all students to achieve outcomes, recognising that expenditure requirement to support that may vary depending on need. Any incentives created explicitly or implicitly by the formula should align with the Department's strategic objectives. This will be assessed by the degree to which funding per student aligns with need. Incentives will also be considered to assess the degree to which a funding model may result in unintended and undesirable practices.
Sufficiency	The funding model should ensure that funds are sufficient to provide an acceptable level of quality education for all learners.	Funding model options will be assessed against the degree to which each school is provided with an amount per student that is no lower than funding that: • represents the recurrent resources required to support a student with minimal educational disadvantage to achieve expected educational outcomes; and • takes account of efficiencies that can be realised while improving educational outcomes Aligning to subsection 78(5) of the Australian Education Act 2013.
Practicality	The funding model should facilitate effective school resourcing and planning, while being responsive to changing school needs.	Each funding model option will be assessed against the degree to which it minimises funding sudden or drastic variability and therefore enables greater budget certainty. This assessment will be balanced against the degree to which a funding model option is responsive to changing school needs.
Continuity	Any changes to the funding model should be implemented in a way that minimises disruptions to existing effective practice.	Funding model options will consider the impact of a change in methodology of school funding on individual schools, regions and schools with high-need demographics. Where significant disruptions occur, mitigation methods will be proposed (e.g., transition funding) and tested to reduce disruptions across schools, regions and demographics.
Transparency	The funding formula is accessible, clear and simple to understand for stakeholders.	Funding model options will be co-designed with stakeholders to ensure that the funding model formula is transparent and clear to understand by school principals and business managers.

Appendix C

Excerpts from the NT Education Act (2015) and the Australian Education Act (2013)

C.1. Selected subsections from the Northern Territory Education Act 2015

The objects of the NT Education Act (2015) are:

- to provide education programs that are appropriate for all children and young persons in the Territory; and
- to ensure that education programs are responsive to the individual needs of children and young persons; and
- to facilitate the effective transition of young persons to employment or further education through the flexible delivery to them of education programs; and
- to facilitate the operation of schools as safe and supportive learning environments; and
- to provide for the involvement of parents and communities in the governance of Government schools; and
- to provide for the registration and ongoing assessment of non-Government schools.

The Act sets out seven principles that all educators and education administrators must apply when they carry out their work.

Everyone involved in the administration of this Act, or in the education of children or young persons in the Territory, must apply the following guiding principles in performing functions in that regard:

- all students are entitled to an education of a quality that is capable of enabling them to reach their potential and so maximise their achievements and contribution to the community;
- education provides the foundation for the social and economic advancement of the Territory;
- students and staff of schools are entitled to a safe environment;
- parents play a vital role in the education of their children;
- the best educational outcomes for students are achieved by parents, schools, communities and   non-government organisations working together;
- learning environments should be culturally appropriate and reflect the diversity of the Territory;
- the social and family context and general wellbeing of students play an important role in their engagement with education and achievement of outcomes.

C.2. Selected subsections from the Australian Education Act 2013

78 Ongoing funding requirements for approved authorities

1) This section sets out the ongoing funding requirements for an approved authority for a school for the purposes of subparagraph 73(1)(b)(iii) and paragraph 81(1)(a).
2) The ongoing funding requirements for all approved authorities are the following:
   a. the approved authority deals, in accordance with the regulations, with financial assistance that is payable under Division 2 of Part 3 (funding formula for schools) or Division 2 or 3 of Part 5 (capital funding and other funding for schools) to the authority;
   b. the approved authority complies with requirements prescribed by the regulations in relation to monitoring the authority's compliance with this Act.

3) An ongoing funding requirement for an approved authority for more than one school is to distribute all financial assistance received in accordance with Division 2 of Part 3 in accordance with a needs-based funding arrangement determined by the approved authority that complies with subsection (4) or (5).

Funding arrangement based on Division 2 of Part 3

(4) A needs-based funding arrangement that complies with this subsection distributes to each school for which the authority is approved the amount of financial assistance worked out for the school under Division 2 of Part 3.

Funding arrangement based on other factors

(5) A needs-based funding arrangement that complies with this subsection:

(a) provides an amount per student that:

(i) represents the recurrent resources required to support a student with minimal educational disadvantage to achieve expected educational outcomes; an

(ii) takes account of efficiencies that can be realised while improving educational outcomes; and

(b) in addition to the amount per student mentioned in paragraph (a), provides loadings to students and schools with additional needs in order to support student achievement, including loadings for the following:

(i) students with disability;

(ii) Aboriginal and Torres Strait Islander students;

(iii) students with socio-educational disadvantage;

(iv) students who have low English proficiency;

(v) schools based on location;

(vi) schools based on size; and

(c) is publicly available and transparent.

(6) An approved authority that distributes financial assistance in accordance with subsection (5) is an approved system authority.

Appendix D

Standard metrics used in Australia-wide funding policy design are likely to be limited in the context of the NT

The effectiveness of needs-based school funding in the NT is predicated on the availability and use of measures that can identify varying levels of student educational need and school resourcing requirements. Standard Australia-wide metrics have limited applicability in the case of unique and challenging jurisdictions like the NT. Definitions of 'small' and 'remote' schools illustrate this challenge, in addition to varying definitions of 'enrolment'.

For example, Centralian Senior College, a secondary school in Alice Springs, and Titjikala School, a combined school in a small Aboriginal community 130km south of Alice Springs, are both labelled as 'remote' according to the ABS remoteness classification. Yet Titjikala School is more likely to struggle to provide resources, like school counselling, or attract and retain teaching staff, with a local population of approximately 200, compared to Alice Springs, which is home to more than 25,000.[77]

Another example is the definition of a 'small school' which varies across different jurisdictions within Australia. For the purpose of calculating the Commonwealth's share of school funding in reference to the School Resourcing Standard (SRS), the Australian Education Act 2013 defines school size by the upper and lower limits in Table D.1. Schools in each category are entitled to varying amounts of additional 'small school loading' funding.

Table D.1: School size categorisation for the purposes of the SRS calculation

School type	Very small	Small	Medium	Large
Primary	0-15 students	>15-200 students	>200-300 students	>300 students
Secondary	0-100 students	>100-500 students	>500-700 students	>700 students

Source: Australian Education Act 2013, Part 3, Division 3, Section 43.

In contrast, the NT's SRM includes a "small school supplement" for schools with 51 or less effective enrolments. In 2021, 36 per cent of the 146 government schools that received funding under the variable funding component of the SRM received scaled amounts of additional small school funding. However, under the Commonwealth's formula, 74 per cent of NT government schools (twice as many) would meet the definition of "small" or "very small", highlighting the limited applicability of applying an Australia-wide metric to NT specific funding.[78]

These examples also highlight another weakness of the SRS; the sample of schools used to estimate appropriate funding amounts based on student and school characteristics did not include any government schools from the NT. This raises further uncertainty as to whether the SRS is an appropriate measure of school funding requirements in the NT, where geographic and socio-economic characteristics are significantly different from the rest of Australia.

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[77] In contrast to ABS regional classifications, Centralian Senior College and Titjikala School have different regional classifications within the current NT school funding model to reflect the different environments these schools operate in, despite being located in the same school district.
[78] Calculated based on 2020 August Census enrolments for 146 schools funded under the SRM during 2021. Secondary school threshold (500 students) used for all schools except those labelled as "Primary school".

Appendix E

Estimation of the offsetting effects of the effective enrolment methodology on student needs-based loadings funding allocation based on regression analysis (dependent variable = final SNBF allocation in 2021; student-level).

Reference student characteristics: Year 3-5; non-Aboriginal; low SES (1st quartile); urban location; non-ESL; non distance education

Loading category	(A) Approximate loading as specified by the SNBF formula	Linear approximation based on regression		Difference (B)-(C)	Approx. offsetting effect $
		(B) Enrolment-based model	(C) Effective enrolment-based model		
Year 1	0.10	0.11	0.10	-0.01	-$ 75
Year 2	0.10	0.11	0.09	-0.01	-$ 75
Year 3-5	0.00	0.00	0.00	0.00	null
Year 7	0.16	0.14	0.12	-0.02	-$ 125
Year 8	0.16	0.13	0.12	-0.02	-$ 100
Year 9	0.16	0.14	0.12	-0.02	-$ 150
Year 10	0.32	0.37	0.30	-0.06	-$ 450
Year 11-12	0.32	0.36	0.31	-0.05	-$ 350
Small secondary	0.38 (max)	0.22	0.15	-0.07	-$ 525
Small preschool	0.72 (max)	0.43	0.28	-0.14	-$ 1,025
Aboriginal status	0.30	0.33	0.30	-0.03	-$ 200
Aboriginal concentration 40-80%	0.025 (mid-point)	0.07	0.09	0.02	+$ 175
Aboriginal concentration >80%	0.05	0.16	-0.14	-0.31	-$ 2,202
SES (2nd quartile)	0.05-0.15	0.08	0.07	0.00	-$ 25
SES (3rd quartile)	0.15-0.3	0.18	0.17	-0.01	-$ 50
SES (4th quartile)	0.3-0.4	0.36	0.30	-0.06	-$ 400
Remoteness category 1	0.03	0.02	-0.08	-0.10	-$ 725
Remoteness category 2	0.03	0.06	-0.09	-0.15	-$ 1,100
ESL weighting 4th quartile	0.05-0.16	0.10	0.08	-0.02	-$ 150
Distance education	0.92-1.21	1.16	1.29	0.13	$ 950

Note: The table excludes loadings for school size and for students with a disability.

Appendix F

F.1.   Alberta, Canada

This case study focuses on the Alberta public school model, showcasing the employment of an enrolments-based funding model in a large and diverse jurisdiction.

The Alberta education system

Alberta is one of the more sizable and populous provinces in Canada. The public-school education system in Alberta supports approximately 700,000 students in public, separate, francophone and public charter schools across 2,000 schools, accounting for approximately 96% of all students in the province that attend provincially-funded schools.[79,80] The system supports a range of schools, from large metropolitan schools in Calgary and Edmonton, with school boards covering over 240 schools, to small remote schools in the northern parts of Alberta, with school boards covering as few as 10-12 schools.[81]

Schooling in Alberta is viewed as a high performing education system. Alberta has consistently ranked above national and international standards for student performance in Math, Science and Reading.[82,83] However, some inequities in student outcomes prevail, particularly as they relate to First Nations people. Evidence from census statistics in Alberta show that First Nations people tend to have lower levels of high school diploma completion and lower levels of attendance with higher rates of chronic absenteeism.[84]

Characteristics of the funding model

School funding in Alberta is distributed through a funding model that centrally distributes funding to school authorities, based on a 3-year weighted moving average (WMA) of enrolment rather than a one-year enrolment count after the school year has started to provide more predictability in funding.[85]

The three-year WMA enrolment is calculated as per Table F.1.

Table F.1: The three-year WMA enrolment used in the Alberta public education funding model

School Year	Weighted Factor	Enrolment Count (FTE)
2019/20	20%	Actual
2020/21	30%	Estimate
2021/22	50%	*Projection*

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[79] Student Population Statistics, Alberta CA, https://www.alberta.ca/student-population-statistics.aspx

[80] Alberta has one publicly funded education system that includes public schools and separate schools. The religious minority, either Protestant or Roman Catholic, have the right to establish a separate school district. This right is enshrined in the Constitution Act, the Charter of Rights and Freedoms, the Alberta Act and Alberta's Education Act.

[81] Alberta Schools and Authorities, Alberta Education, <https://education.alberta.ca/alberta-education/school-authority-index/everyone/alberta-schools/>

[82] PISA World Rankings, 2018, <https://factsmaps.com/pisa-2018-worldwide-ranking-average-score-of-mathematics-science-reading/>

[83] Information about Alberta's participation in large-scale Education Studies, Alberta Education, <https://www.alberta.ca/education-studies.aspx >

[84] Aboriginal Peoples: Fact Sheet for Alberta Statistics Canada, <https://www150.statcan.gc.ca/n1/pub/89-656-x/89-656-x2016010-eng.htm>

[85] K to 12 Funding Model, Alberta Education, <https://www.alberta.ca/k-to-12-education-funding-model.aspx>

An example of the WMA calculation of a **school jurisdiction** with a growing **student** enrolment is presented in Table F.2.

Table F.2: Example of the Alberta WMA calculation of a school jurisdiction with a growing student enrolment

School Year	Weighted Factor	Enrolment Count (FTE)
2019/20	20%	16,480
2020/21	30%	16,700
2021/22	50%	*16,850*
WMA FTE Enrolment	*(16,480x20%+ 16,700x30%+16,850x50%) =* **16,731**	

An example of the WMA calculation of a **school jurisdiction** with a declining **student** enrolment s presented in Table F.3.

Table F.3: Example of the Alberta WMA calculation of a school jurisdiction with a declining student enrolment

School Year	Weighted Factor	Enrolment Count (FTE)
2019/20	20%	5,460
2020/21	30%	5,400
2021/22	50%	*5,350*
WMA FTE Enrolment	*(5,460x20%+ 5,400x30%+5,350x50%) =* **5,387**	

The projected enrolment count used in the calculation of WMA for the budgeted **school year** is compared against the actual September 30th enrolment count in December of the **school year**. Funding adjustment is made in the **following** school year if the projected count is different from the actual count.

The use of a 3-year moving average of enrolments was established in 2020, replacing the use of annual enrolments to distribute funding.[86] The new methodology is intended to provide more predictability in the funding allocation process. Alberta Education provides school authorities with provincial funding commitments by the end of April each year, instead of September when the school year has already started. Using a weighted, moving, 3-year average minimizes the need for in-year adjustments to budgets and staffing, and gives boards more predictability in their planning and budgeting processes.

Using WMA also softens the funding effect of long-term declines in enrolment, allowing school authorities with less favorable medium-term demographic outlook to plan and prepare for the

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[86] Ibid

future impact of decreased funding. The WMA methodology fully funds enrolment growth but smooths out the cost over three years, rather than in one year.

Alberta's K to 12 funding model recognizes the unique challenges rural jurisdictions face in operating schools and delivering education services. Small rural schools are funded through a block-funding model to ensure long-term viability and make sure small rural schools have the money they need to offer educational programming.

The experience of this transition period and the years following have seen the utilisation of bridge/transition funding, allowing jurisdictions time to adjust to new levels of funding (initially over the first two years and then extended due to COVID-19 pandemic).

The COVID-19 pandemic resulted in a reduction in student enrolment for the many school authorities in the 2020/21 school year. Under the previous funding framework, these authorities would have had budget reductions after the school year started. The WMA methodology alleviated uncertainty around budgeting when a change in enrolment occurs due to unexpected circumstances, such as the COVID-19 pandemic. The impact of a suddenly reduced enrolment is smoothed out over three years, rather than in one year.

In addition to the student count method, other funding grants were reformed. Justifications for these reforms include:

- The new model reduces the number of grants and gives more simplicity and flexibility to school authorities to determine how best to invest taxpayer dollars
- The new model improves allocation of funding to vulnerable students by providing funding to support specialized learning needs or groups of students who may require additional supports from school authorities

One limitation of using a 3-year moving average is that it is a lagging measure. This is partially addressed by using projected enrolment for the year ahead as one of the three years. However, consistent enrolment growth for district will still see funding levels consistently below actual enrolments and consistent enrolment decline would see funding levels consistently above actual enrolments.

Implications for the Review

This experience of Alberta's public education funding model has raised several considerations for the Review, including:

- a 3-year weighted moving average of enrolment as a potential measure to smoothen funding variability
- importance of transparency and clarity of communications to school boards to ensure they are able to make informed strategic choices about future plans including staffing, infrastructure, and curriculum programs
- the recent transition period from single year enrolments to 3-year weighted moving average, including the transition/bridge funding used to reduce shock funding decreases.

F.2.   Manitoba

This case study focuses on the Manitoba public school funding model, showcasing the employment of an enrolments-based funding model in a large and diverse jurisdiction.

The Manitoba education system

Manitoba is a sizable and populous province in Canada, with around 40 per cent of this population living in non-urban areas. The public-school education system in Manitoba supports approximately 190,000 students across over 700 public schools within 36 school divisions (Manitoba Government). The system supports a range of schools, from large metropolitan schools in Winnipeg, with school divisions covering over 80 schools and around 36,000 students, to small remote schools in the northern parts of Manitoba. Schools in Manitoba range significantly in size between urban and rural areas, with one in four schools recording enrolments of 50 students or

less. Manitoba's Aboriginal population accounts for 10 per cent of the overall population, which is much higher than the national average of 2.8 per cent. Overall, Manitoba tends to rank among the lowest in standardised testing of Canadian provinces. Further, there are significant gaps between high school completion rates compared to indigenous and non-indigenous students in the region, with completions rates coming to 51 per cent and 91 per cent respectively (Manitoba Education and Early Childhood Learning (4-year high school completion rates)).

The funding model
School funding in Manitoba is distributed through a funding model that centrally distributes funding to school divisions. School divisions vary in size. The largest, Winnipeg School Division, serves over 36,000 students across nearly 80 schools. The Frontier School Division in Northern Remote Region is the most similar with respect to geographic dispersion to the Northern Territory, as it operates small schools in communities that are often only accessible by boat, air, or winter ice road.

School Divisions have autonomy over how they allocate funds to individual schools. Each division has a slightly different approach to funding allocation to schools.

Manitoba's base funding for instructional support is based current year's enrolment at the commencement of the school year (i.e., a per-student rate of funding on September 30th – about a month into the first Term). In addition, it includes supplements for small schools support, rural education delivery support, curricular materials, IT, library services, student services, building occupancy supports.

In addition to the base funding, there is a range of other categorical supports distributed to school divisions through several mechanisms to support school needs and provide flexibility for the divisions to spend this equitably. This includes funding to support transportation, special needs, and targeted curriculum changes.

School funding is largely supported by local property taxes, set at the local level. School districts that do not receive adequate levels of property taxes are supported by equalisation supports from the Department. However, schools that receive a surplus of tax revenue are able to invest to a greater extent in education.

Characteristics and limitations of the funding model
The current school funding in Manitoba was last reviewed in 2002-03. As of April 2022, the funding model is going through a review which will assess options to improve the equity and sustainability of the funding model over time. The current Manitoba funding model has several key limitations at the forefront of the review. The volatility of year-to-year enrolment data does not provide school divisions adequate time to make critical future planning, as the budget reacts to unforeseen fluctuations in enrolments. In addition, Manitoba is the only education system in Canada where school divisions supplement their funding through their property tax base. This is considered inequitable as it is based as regions with lower tax bases, such as lower socio-economic regions, and rural and remote regions tend to have less resources to invest in their education.

The aim of the review is to provide schools with a stable, predictable, and equitable budget, that promotes future facing planning.

Implications for the Review

This experience of Manitoba's public education funding model has several parallels with the Northern Territory context, including:

- **Equity** - The desire to equalise the differences in per student funding across the province that result from different socio-economic profile of local communities
- **Improving budget certainty** - The current experience with reviewing the single year enrolments, and the appetite for predictability for schools and divisions to make key future facing plans including staffing, infrastructure, and curriculum programs.

F.3. Using Average Daily Attendance (ADA) to distribute funding to districts in California

This case study focuses on the Californian government school model and showcases the application of an attendance-based funding model in a large and diverse jurisdiction.

The California education system

California is a large and populous state on the west coast of the United States of America. The public education system in California supports approximately 6 million students across 10,500 schools in approximately 1,000 school districts.[87] The system supports a range of schools – from large metropolitan schools to small remote schools (with approximately 5 per cent of Californian schools with 50 enrolments or less). Further, the public education is characterised by significant levels of student need with approximately 60 per cent of students classified as low income eligible for free and reduced-price meals, and 18 per cent English Learners.[88]

California public school funding is distributed through the Local Control Funding Formula (LCFF) a per-student, needs-based funding model. In addition to student-needs based funding, other targeted funding programs exist, including a Necessary Small School (NSS) Allowance, and a Concentration Grant to support schools with large percentage of disadvantaged students.[89] Funding is distributed to school districts, which then allocate funding across their respected schools.

Average Daily Attendance measure

The funding model distributes funding based on an attendance-based metric called Average Daily Attendance (ADA) defined as the total days of student attendance divided by the total days of the school year.[90] ADA is recorded three times a year and school funding is adjusted accordingly as new data become available.

While the funding model within the Californian public education system has been recently changed to a needs-based funding model (beginning in 2013-14), the use of attendance for the purposes of funding allocation dates back to mid-19th century when the ability to monitor student-level data comprehensively was limited. California is one of seven states that use ADA to this date.[91] The rationale behind continuous use of the ADA method to distribute funding to districts is to encourage schools and districts to increase attendance and comply with state attendance laws.

To reduce funding uncertainty, school districts are funded on the greater of the current or previous year ADA. As a result, districts will not experience the impacts of decline in enrolments until next year (if that decline is sustained), effectively setting a floor for the minimum amount of funding a district will receive over a two-year period. The funding floor mechanism is designed to reduce the impacts of one-off negative declines on district funding, and to facilitate longer-term planning within schools.

However, declining attendance rates pre-COVID-19, compounded with the impacts of COVID-19 on school attendance have highlighted limitations with the current funding model in aligning with costs faced by districts. This has prompted discussions with state policy makers on potential alternative methods, including discussions on using enrolments or a three-year rolling average of attendance.[92]

Implications for the Review

This experience of California's public education funding model raised several considerations for the Review, including:

- the use of a rolling 'floor', to support sustainable school planning

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[87] California Department of Education, Fingertip Facts on Education in California, https://www.cde.ca.gov/ds/ad/ceffingertipfacts.asp
[88] California Department of Education and National centre for education statistics
[89] Ibid
[90] Legislative Analyst's Office, Californian Government, https://lao.ca.gov/Publications/Report/4505
[91] The remaining six being Idaho, Kentucky, Mississippi, Missouri, New York, and Texas.
[92] Legislative Analyst's Office, Californian Government, https://lao.ca.gov/Publications/Report/4505

- an increase to a three-year 'floor' has been discussed to improve the transition of schools who are experiencing declining attendance rates, particularly during COVID-19
- attendance-based models can reduce the risk of double counting student enrolments across schools. However, attendance-based models may not be appropriate for environments with high volatility in attendance rates, such as during COVID-19.

Appendix G

Total responses: 100

Unique schools represented: 85

Chart G.1 Survey completions by region
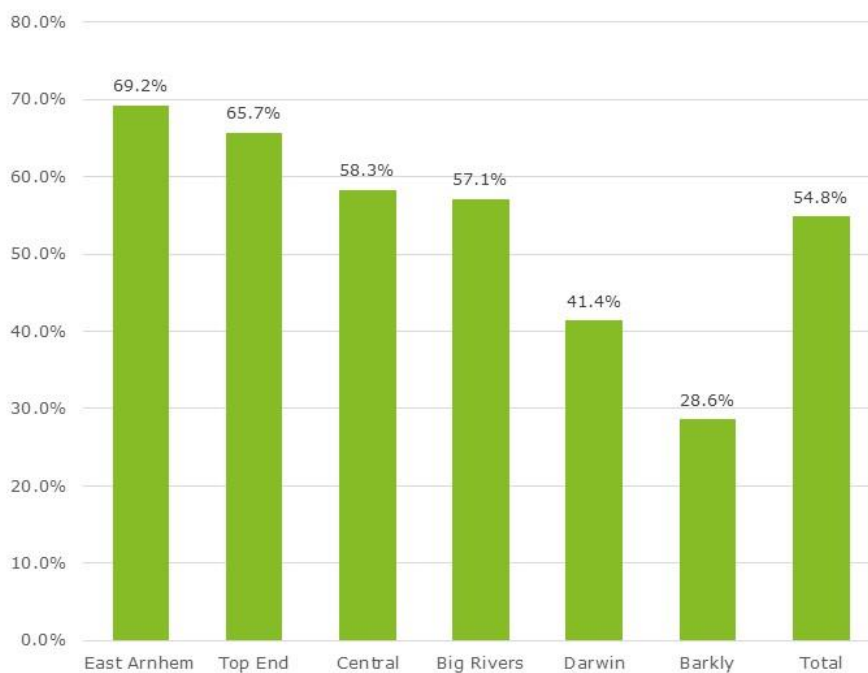
Limitation of our work

General use restriction

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