

Final Business Case Evaluation Summary

Chatswood Education Precinct



March 2022

About this report

The purpose of this document is to summarise the final business case for the development of the Chatswood Education Precinct (the project). The project has been initiated to maximise existing infrastructure whilst expanding teaching spaces and providing teaching areas that can support modern pedagogy.

The project involves new building works and refurbishment works at Chatswood Public School and Chatswood High School. The final business case outlined the following project scope:

- Provision of new future focused learning and teaching spaces.
- Removal of existing demountable teaching spaces.
- Provision of a new school hall/communal gathering space.
- Provision of new administration/staff space.
- Upgrade to Core 35 facilities and amenities to the primary school.
- Upgrade to Stream 12 facilities and amenities to the high school.
- Relocation of the Intensive English Centre (IEC) to a permanent location.
- Reclaim outdoor play and learning space, which is currently occupied by demountable classrooms, and provide additional play space for primary school students.

The business case for the Chatswood Education Precinct has been prepared by the Department of Education (the Department) in line with NSW Treasury Guidelines for Capital Business Cases and was submitted to Government in February 2020. This business case summary has been prepared by Infrastructure NSW, the Government's independent infrastructure advisory agency.

Strategic context

The Chatswood Education Precinct is situated in a rapidly growing subregion of Sydney

Chatswood Primary School and Chatswood High School lie within the North District asset cluster identified in the metropolitan strategy *A Plan for Growing Sydney* (2014). The Greater Sydney Commission's Draft North District Plan identifies a requirement for 92,000 new dwellings to accommodate the forecasted population growth of 196,000 people by 2036. Additionally, the plan has identified the need for new and existing schools to “respond to demand in innovative ways such as more efficient use of land, contemporary design, greater sharing of spaces and facilities, and flexible learning spaces”.

A number of Education Principles form part of the strategic context for change

The Department has 5 Educational Planning Principles which are to be considered in the planning, design and use of all major capital works. These were considered during the planning process of the project:

- **Educational Principle 1** – Focus on the needs of learners and learning.
- **Educational Principle 2** – Build community and identity and create a culture of welcome, inclusion and belonging that reflects and respects diversity within the school's community.
- **Educational Principle 3** – Be aesthetically pleasing.
- **Educational Principle 4** – Provide contemporary, sustainable learning environments that:
 - promote learning for students and teachers through collaboration, social interaction, and active investigation
 - encourage learner self-management and self-direction
 - support a full range of teaching strategies from direct explicit instruction to facilitation of inquiry and authentic project and problem-based learning
 - be integrated into, and maximize the use of the natural environment
 - enable aspects of the buildings, building design and outdoor spaces to be learning tools in themselves – for example, learning from the ecologically sustainable features of the design and associated energy management systems
 - are “age and stage” appropriate.
- **Educational Principle 5** – Embed the potential for re-configurability, both in the present for multi-purpose use and over time for changing needs.

The project aligns with a number of NSW Government strategies

In addition to the Education Principles, the project aligns with the following NSW Government strategies:

- NSW 2021 State Plan.
- NSW State Infrastructure Strategy.
- *NSW Education Act 1990*.
- School Assets Strategic Plan, 2017.

Project need

Enrolment projections will increase demand for educational facilities

The Chatswood Education Precinct is within the Northern Schools cluster¹, which lies in the Ku-ring-gai, North Sydney and Willoughby LGAs. An estimated 5000 additional high-density dwellings will be built within the Chatswood CBD over the next 20 years, according to Willoughby City Council. This will have an effect of an additional 758 primary school and 385 high school students from 2026.

Whilst the opening of the Lindfield Learning Village in 2019, together with changes to the Mowbray Public School boundary, are expected to alleviate some of the enrolment pressure, primary school enrolments are projected to increase to 1450 students by 2031. Demand for high school enrolments are projected to increase from 1141 to 1960 by 2031.

Existing building facilities are of a varying quality and a high percentage of temporary teaching spaces

Chatswood Public School

The majority of schools within the Northern Schools cluster are operating at 100% or more of the permanent teaching space utilisation rate. In 2017, Chatswood Public School was operating at 176% capacity of permanent teaching spaces, with the shortfall of permanent spaces being addressed by demountable buildings. The Chatswood Public School site is only 1.3ha and due to heritage buildings, opportunities to extend upwards or outwards to cater to increased demand are limited.

Whilst 2 of the buildings on the public school site (Blocks A and B) are heritage listed and are in excellent condition, other buildings are not (Block C – not in use due to fire damage in 2017). Additionally, the school fails the 10sqm per child of passive and active play space, as required by the Department of Education Educational Facilities Standards & Guidelines.

Chatswood High School

Chatswood High School was operating at 150% capacity of its permanent teaching spaces in 2017. All high schools within 5km of Chatswood High School (with the exception of 3 selective high schools) were also operating at or over 100% capacity of their teaching spaces.

The facility conditions on the high school are generally in excellent condition, due to major development in the 1960s and in the 2000s. However, as a result of the school's rapid growth and expansion, the layout and building stock are in a variety of architectural styles and typologies.

Accessibility and Work Health and Safety

Chatswood Public School, located on the Pacific Highway, has several accessibility issues due to the heritage nature of the existing buildings as well as sloped nature of the site. The heritage buildings do not contain lifts or elevators, and therefore no equitable access to the upper floors of the buildings. External playgrounds have slopes and ramps that are not compliant with accessibility regulations.

¹ The Northern Schools cluster consists of 13 primary schools, 9 high schools and 1 K-12 Learning Village.

Chatswood High School has multi-storey buildings that are accessible via a single lift in Block M and connecting walkways, except for the upper levels of the western portion of buildings.

The age of the existing facilities meant that the staff amenities and support facilities are not to required standards, and therefore pose a work, health and safety (WHS) issue. A lack of toilet facilities at Chatswood Primary School is a growing issue for teaching and administrative staff. Additionally, the increasing amount of demountable buildings meant that the available outdoor play areas for children decreased, making it more problematic for staff to supervise children.

Project objectives and design

The objectives of the project are reflected in the following key drivers:

- Meet future projected enrolment growth to 2026.
- Remove demountable buildings and replace with permanent teaching spaces.
- Provide passive and active play space of 10sqm per student.
- Meet the educational planning principles.
- Improve performance of existing assets.
- Improve learning outcomes of students.

The Project Reference Group also developed 7 Educational Planning Principles specific to the project.

1. Chatswood Education Precinct caters for the educational needs of existing student populations, future populations, and cultural demographics.
2. Chatswood Education Precinct supports future focused learning and the next iterations as they develop.
3. Chatswood Education Precinct is a multi-campus precinct with clear, simple, and safe connections between campuses providing learning and teaching for K-12.
4. Chatswood Education Precinct seeks to maintain and enhance its creative arts focus.
5. Chatswood Education Precinct responds to the multi-cultural population of students, staff, and the wider community.
6. Chatswood Education Precinct encourages and supports community engagement and seeks opportunities for community use of facilities.
7. Chatswood Education Precinct respects the built, cultural, and environmental heritage nature of the campus.

The design response considered the project-specific Education Planning Principles, in addition to the following factors:

- Scale of the school, overall, and the individual buildings.
- Design of the new build – so that it is sensitive and complimentary to the heritage listed buildings.
- Environmental factors including northern orientation, solar access, circulation pathways as well as the direction of hot and cool breezes.
- Enhancing the school's identity by strengthening the main entry.
- Providing a variety of flexible spaces to support students, staff, and community, taking into consideration all weather conditions.
- Ensuring new spaces integrate with and enhance existing facilities and link ways across the school sit.

Options identification and assessment

A number of options were developed and assessed to determine the most appropriate way forward for addressing the service delivery and facility requirements for the Chatswood Education Precinct in relation to education outcomes for students.

The base case and each of the options were assessed against the General Education Principles as well as the 7 Educational Planning Principles specific to the project.

Base Case – Do minimum

The base case option suggests supporting increasing student population through the provision of additional demountable structures. To cater for projected growth to 2026, 38 additional teaching spaces at Chatswood High School and 7 at Chatswood Primary School would be required, as well as demountable amenity facilities.

Option 1 – Preferred option

The preferred option is the redevelopment of both the primary school and high school on their existing respective sites. This option maximises play space and includes an indoor sports court at both schools. It allows general learning and modern facilities to enable a 'centre for excellence' with focus on specialty streams such as maths, science, music and art. Buildings H, M, and K on the current high school site will be refurbished.

Option 2

Option 2 is similar to Option 1. This option also maximises play space and includes an opportunity for an indoor sports court, as well as an additional oval. Like Option 1, this option also allows general learning and modern facilities to enable a 'centre for excellence' with focus on specialty streams such as music and art. Unlike Option 1, all buildings and demountable buildings on the current high school site would be removed and replaced.

Qualitative assessment

The options were rated against each of the Project Specific Educational Principles. Option 1 was found to be the best performing option, and therefore the preferred option. The base case scored the lowest due to limitations with addressing a future focused environment and meeting current and future population needs. Option 2 was a lower performer than Option 1 as it has a weaker cost/benefit analysis.

Economic evaluation

A Cost Benefit Analysis (CBA) of the short-listed options has been conducted in line with NSW Government Guidelines for Economic Appraisal. Costs and benefits were analysed over a 40-year timeframe (based on the expected useful life of the asset) and discounted at 7%, with sensitivities done at 3% and 10%.

The CBA for Option 1 (incremental to the base case) was undertaken which indicated a Benefit Cost Ratio (BCR) of 0.63, when a 7% discount rate is used. When discount rates of 3% and 10% were applied during sensitivity testing, the BCR was 1.23 and 0.40, respectively.

While the economic appraisal results find that benefits do not outweigh the costs of the project, this is largely because the high capital costs of the project case, compared to the base case, to service the same number of students. The benefits from the improved learning outcomes under the project case are not enough to outweigh the higher costs at a 7% discount rate.

Deliverability

Procurement

The Department has well-established procurement and implementation models for capital works that are based on the its Educational Facility Standards and Guidelines.

The procurement model under consideration for these projects is Design, Development and Construct (DD&C) using the NSW Government default procurement system for construction.

Under the Government procurement system, a panel of best practice contractors is maintained and these contractors are accessed for the procurement of these projects. Contractors are continually assessed and monitored for performance and management of statutory obligations.

Key risks and mitigation

The Project Reference Group has undertaken an initial risk assessment as part of the preparation of the business case. These risks have also been assessed and incorporated into a risk register for consideration and assessment of the impact on the establishment of an appropriate project contingency. The majority of the identified risks have been assessed as having no impact on capital cost and contingency amounts.

Risk identification, assessment, response planning and monitoring is an interactive process and will form part of the routine project meetings and reviews. The risk register will be developed and updated throughout the life of the project. Key identified risks being managed include complexity of site and constraints impacting design, site conditions and latent conditions, stakeholder management and safety of construction workers and third parties.

The Infrastructure NSW view

Consistent with the NSW Government's Infrastructure Investor Assurance Framework, Infrastructure NSW routinely assesses business cases and provides advice to Government on the efficacy of their findings.

Infrastructure NSW has found that need for the investment in this project has been clearly demonstrated, with the service need and educational benefits of the project being well articulated.

The final business case has identified a BCR of 0.63 in its economic analysis. Although the BCR is below 1.0, Infrastructure NSW notes the base case scenario, which provides additional demountable classrooms, does not provide a realistic long-term solution and has many disadvantages.

Infrastructure NSW notes the preferred option delivers a range of qualitative benefits, including catering for the educational needs of existing and future students, developing a multi-campus precinct that has clear, simple and safe connections between campuses, maintaining and enhancing the precinct's creative arts focus and that it responds to the multicultural population of students, staff and the wider community.

Infrastructure NSW has concluded the project is being effectively developed and delivered in accordance with Government's objectives.